

**“The Substance of Self-Determination:” Language, Culture,  
Archives and Sovereignty**

by

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## **Abstract**

Everyday communication in minority languages continues to experience decline around the world, even given efforts to reverse these processes. As language shift progresses the products of language documentation, including the oral histories and the unique cultural information they contain, become increasingly important. Archives are commonly used to store these resources, but the design and functionality of archives often fails to address language community interests in protecting their capacity for self-determination and other core cultural beliefs. I find that most existing language archives examples lack sufficient controls to maintain culturally based sharing protocols, enable contextualization of resources, provide opportunities for local collaboration and support educational dissemination. Lack of capacity to manage use of and access to language resources in an archive can contribute to an erosion of sovereignty for the language community. Partially in response to the cultural incongruence of existing archive options, community-based and participatory archives are on the rise. In this dissertation I critically evaluate the capacity of endangered language archives to operate in concert cultural beliefs, including the maintenance of sovereignty and demonstration of indigeneity. The identification of language ideologies is a useful lens to determine the cultural compatibility of archives and their practices. I present research with people from Indigenous communities in Washington State, Alaska and California. In addition, I describe interviews with managers and directors from international language archives and small community based ones. My research makes use of the Mukurtu CMS archive platform to both test this tool and its applicability for language preservation. Control of language resources enables tribes to reassert their capacity for cultural resource management as part of their self-determination.

## **Preface**

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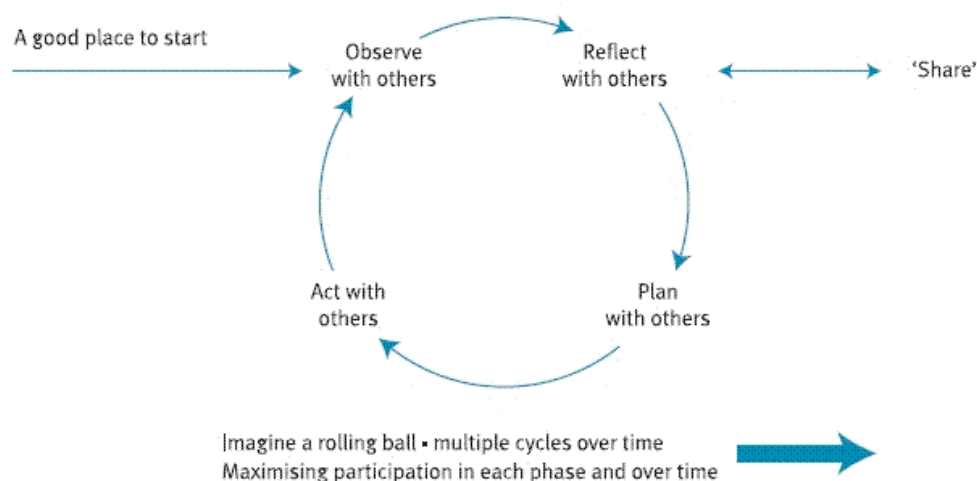
## **Dedication**

*To my parents, Bob and Gladys Shepard, for challenging me with high expectations, their continual support and belief in the importance of language*

## Chapter 1: Introduction and Scope

This dissertation continues a vein of inquiry I began while working for Northwest Indian College on the Lummi Nation (Washington State). After completing my B.A., I was employed to teach Native American college students the art of documentary video production for the purpose of recording elder biographies, cultural practices and important events. Some of these recordings also became *Xwlemi' Chosen* (Lummi language; ISO 639-3 str) educational lessons, making use of video, audio and on-screen text.

In the course of this work I became interested in Native language use and educational dissemination for the purposes of language revitalization. I noticed opportunities for creation of language education materials and expansion of language related educational efforts, but found work on this topic politically charged and culturally sensitive. In particular, I saw a striking discrepancy between the reverence many Native people display for their traditional language and its critical endangerment. This contradiction led me to both a Master's research project and, in part, this dissertation. My M.A. thesis research utilized the Participatory Action Research (PAR) methodology (Hall 1981; Hoare, et. al. 1993; Reason and Bradbury 2001), which encourages active community engagement in the research process and creates a cyclical cycle of research, analysis, evaluation and further investigation (Figure 1).



**Figure 1 Participatory Action Research cycle (Crane and O'Regan 2013)**

My thesis (Shepard 2007) and a subsequent publication based on its findings (Shepard 2009) documented community perspectives on the efficacy of current practices of Xwlemi' Chosen dissemination and beliefs about continuity of language use in the community. Research participants expressed clear expectations for the continuing vitality of Xwlemi' Chosen. I found this surprising given the critical endangerment of the language, but hopeful. Participant responses also described a deep concern for perceived lack of access to linguistic educational resources necessary for supporting dissemination. Lummi has little active master-apprentice (Hinton 1997) style direct instruction occurring in the home and predominantly relies on school-based instruction to disseminate their language. School based endangered language instruction has been successful in examples like Hawai'i (Warner 2001), but language instruction and use that is isolated to the classroom has mixed efficacy (Cantoni 1996:ix).

Technology that mobilizes language resources in educationally appropriate formats can enable in home or experiential use of language materials normally found in the classroom. In the Lummi community this level of access to language materials does not

currently exist, but has potential. While working and researching I developed an understanding that meaningful access to language education resources is critical for communities in advanced stages of language loss and that a complex web of culturally significant factors impact dissemination of these culturally based resources. My research also showed that my community partners believed current educational approaches were insufficient to alter the trend toward cessation of everyday communication in the language.

I found new interest in endangered languages and protocol surrounding access to cultural resources during the rise of Web 2.0 technologies on the Internet. Cultural protocol describes how, “in many indigenous communities, cultural knowledge is conferred and transferred based on systems of obligation and reciprocity” (Christen 2012:2847). The term Web 2.0 describes a significant change in the function and level of interactivity on the Internet starting in 2001 (Murugesan 2007). According to Bell et al. (2013:6), “Web 2.0 technologies [are] grounded in user-generated content and bottom-up exhibition and display technology [that have] produced a dynamic platform for sharing materials.” Web 2.0 technologies allow general Internet users to contribute or mobilize information to the Internet rather than passively using existing content. A commonly cited example of the transition between Web 1.0 and 2.0 is the difference between the Encyclopedia Britannica Online and Wikipedia (Flanagin and Metzger 2011). In the late 1990s Britannica Online provided a mainly static user experience of viewing content created by the Britannica company. Wikipedia is also an encyclopedia, but the content is user generated and editable. This characterizes the attributes of Web 2.0 technology.

The high level of interactivity on the Internet made me critically question relationship language origin communities have with archives, especially regarding access and

dissemination. Language archives preserve the products of documentation, such as recordings. These materials often represent highly significant cultural resources. The operation of these archives becomes increasingly important as everyday utilization of many Native languages continues to experience shift (Fishman 1991). If the design and operation of an archive supports the ideologies and goals within a language origin community there is greater chance of utilization. For example, there is a recognized lack of educational dissemination capacity in existing language archives (Huvila 2008; Mosel 2012). Educational dissemination is a primary objective of all the communities I researched with for this dissertation. Lack of ideological congruence between the community and the operation of an archive can lead to lack of effective utilization. In this dissertation I consider how and why the practice of archiving can present complex cultural, political and educational challenges for Native language communities. I have undertaken this dissertation project, in part, to take the next logical step in the participatory action research cycle – conducting further research based on evaluation of the needs identified in prior investigations.

Throughout this dissertation I use terms “Native,” “Indigenous” and “Aboriginal” to describe people who’s language, culture and habitation of the Americas (my research focus) predates European colonialism. These terms are powerful in their ability to command immediate associations and ideology, however the terms can also be misleading and under problematized. According to de la Cadena and Starn (2007:4), “indigenism has never been a singular ideology, program, or movement, and its politics resist closure. To assume that it possesses a unified much less predetermined trajectory is historically inaccurate, conceptually flawed, and simplistic.” Even prior to colonization, bound cultural groups in the Americas were not so cohesive and homogenous that universalizing statements about a

particular group were accurate. The issue is compounded by the tendency to generalize statements about Native people or communities on regional, continental and global levels. While there are many scholars (both Native and non-Native) discuss pan-Indigenous identities, politics and movements (Deloria 1984; Niesen 2003; Echo-Hawk 2010), there are others that problematize this notion (Guha 1989; Li 2000). General terms for complex groups of people can project an idea that there is a level of homogeneity and stability that is not accurate. Using these terms to describe people across regions and continents can be even less accurate or appropriate. The research presented in this dissertation (see Northern Chumash in Chapter 2 and Nooksack in Chapter 3) alludes to types of fractionalization that exist in some tribal groups and can impact the success of language preservation efforts. In many Native communities political conflict and power struggles are more common than not.

Another term I use throughout this dissertation is “community,” and as description for a Native group this term is also problematic. The term “community” confers notions of a harmonious relationship between people sharing a culturally bounded space. However, as my research shows and a long list of scholars have noted, the reality of many modern Native groups is divergent from the idea of a harmonious whole (Hobsbawm 1959; Asad 1973; O’Brien and Roseberry 1991). I recognize the important critique to this term, though I find its use still applicable. In most cases the Indigenous people I work with refer to themselves using encompassing terms like Native, Indian or Ahtna. They also generally term themselves as living in or associated with a community, no matter how imperfect. Use of this terminology is partially from habit and convenience (which I too am guilty of) but its use is also rooted in oppositional structuring of their experience as a marginalized and still

discriminated against people. One example from the Pacific Northwest is useful to provide context.

Miller (2003) describes the experience of the Samish and Snohomish (Coast Salish) people from the Pacific Northwest as they petitioned for federal recognition.<sup>1</sup> People in these communities had opportunity (and government pressure) to relocate to existing reservations and join those federally recognized tribes. Joining these reservations communities would have provided a range of benefits and services inaccessible to non-recognized tribes. However, the Samish and Snohomish largely did not merge, reflecting a situation seen throughout the U.S. The Nooksack tribe (Coast Salish) also experienced government pressure to resettle on the nearby Lummi reservation (Harmon 2007), though they were eventually successful in obtaining federal recognition in the 1970s.<sup>2</sup> Lack of land ownership and recognition resulted in greater cultural and linguistic assimilation for the Nooksack people and they struggled to maintain cohesiveness given the settler culture surrounding them (Amoss 1974; Harmon 2007). In part, this resistance to colonial culture and hegemony, may act as glue that is stronger than internal conflict. Miller (2003:52) states that “. . . a community that holds itself out to be indigenous, are thus considered indigenous (such a community can be regarded as indigenous because it seems to parallel another community so regarded).” How and why people are considered Indigenous and the methods people use to demonstrate their indigeneity are themes I will consider throughout this dissertation. This next section describes my research methodology and findings.

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<sup>1</sup> Samish won federal recognition in 1996. The Snohomish are still federally unrecognized.

<sup>2</sup> The Nooksack were also pressured by the government to become part of the Lummi reservation and community.

## Methodology and Findings

Research for this dissertation was undertaken in three main parts: First, I conducted participant observation with project stakeholders on both the Lummi and Nooksack reservations located in northern Washington State between 2012 and 2014. Each is or was responsible for Native language preservation in their community. Together, my tribal partners and I tested functionality of a new, Mukurtu<sup>3</sup>-based archive platform to determine usability and the cultural compatibility of the technology. The Mukurtu Content Management System (CMS) is an open source archive platform designed for preservation of digital cultural heritage by Indigenous communities. This platform is described in more detail later in this dissertation.

Second, I conducted interviews with directors of major international endangered language archives including DoBeS, ELAR, PARADISEC.<sup>4</sup> I also interviewed the director of the archive platform Mukurtu CMS. In addition, I interviewed staff at community-based archives in Alaska including Ahtna Heritage Foundation Archive, Alaska Native Language Archive, Regional Gwich'in Language Center and Archive, Sealaska Heritage Institute. Third, a series of interviews was conducted with a member of the Northern Chumash Indian Tribe of California about her community's experience with dissemination of language resources and maintenance of sovereignty. I performed this range of interviews to survey the breadth of approaches to endangered language archiving and explore the cultural significance

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<sup>3</sup> Mukurtu CMS: <http://www.mukurtu.org/>

<sup>4</sup> The Endangered Language Archive (ELAR) based in at the School of Oriental and African Studies at the University of London; Pacific and Regional Archive for Digital Sources in Endangered Cultures (PARADISEC) based at the Universities of Sydney and Melbourne, and the National University of Australia; Documentation of Endangered Languages or *Dokumentation Bedrohter Sprachen* (DoBeS) based at the Max Planck Institute for Psycholinguistics in Nijmegen, Netherlands.

of the access and dissemination strategies employed. This research enables me to evaluate diverse endangered language archiving practices and the cultural relevance of these efforts.

In this dissertation I find that the articulation of Native community interests governing the use and control of Native language, both through verbal performance and as a cultural resource in an archive, can be understood through application of Daniel Boxberger's historically grounded model of cultural and economic resource control. Boxberger uses this model to contextualize chronic economic underdevelopment at Lummi and in other reservation communities. This model for understanding implications of resource management was originally applied to Lummi Nation salmon fisheries participation from the period preceding contact to the era following the mid 1970s *United States v. Washington* trial, commonly known as the Boldt Decision. As explained in more detail later, Boxberger's model shows how control, historical participation, exclusion and marginal reintegration to salmon fisheries for the Lummi people, provides context for current practices of use and control of this resource (Boxberger 1987). Lummi capacity for self-determination can be seen in parallel to their participation and management in the salmon fisheries and there is an analogous experience with management of cultural resources, such as language. Boxberger (2007:62) describes the utility of applying his theory to Indigenous management of cultural resources, though he has not specifically published on the subject.

Indigenous capacity to manage linguistic cultural resources follows Boxberger's typology of control – to marginal reintegration. Due to global processes of Native language shift, many communities find that archives are increasingly important sites for the preservation and dissemination of their languages. The degree of control a Native community has over use and access to their language resources in an archive can determine the success

of preservation efforts and may affirm or erode ability for self-determination. Accordingly, Native communities make culturally mediated decisions about access to and use of Native language. These decisions processes make language archives a useful site for observation of theory and practice surrounding Native language use. Throughout this dissertation I will identify instances where ability, or lack thereof, to control use and access to language resources impacts capacity for self-determination.

Boxberger's model provides a context for viewing decisions about language archiving and the impacts of archiving on language communities. All of the Native groups described in this dissertation have experienced the stages of access and control described by Boxberger. While their responses are not identical, all those I worked with identified sovereignty and language dissemination as core interests and rationale for controlling their language resources. For this reason I contextualize why sovereignty and language are so closely linked, how archive practices fit into the complex tribal political and cultural framework, and review the capacity of selected archives in meeting these needs.

In the 2000 edition of Boxberger's book he finds that chronic economic underdevelopment at Lummi had not changed significantly and that reality has not likely shifted greatly today. Boxberger identifies the peripheral nature of Lummi's economy from the centers of economic capital as a fundamental cause of underdevelopment. In extrapolating his model to language as a resource, Native communities can also be pushed to the periphery of decision making and control of their language resources. This push to the periphery can occur if language origin communities are marginalized in their ability to determine how their cultural resources are utilized, especially in the context of the Internet.

In this dissertation I make the following claims supported by research and literature.

My claims are organized into two categories:

### **Political and Linguistic Self-Determination**

- Capacity for use, control and access to language resources (archival and performative) by Native groups can enhance or erode capacity for maintenance of sovereignty. If Indigenous groups do not define how their resources can be used on the Internet, they risk other people and groups defining this for them. To make this claim I draw on examples of how the existence or lack of Native language is used for providing or denying rights, territory and resources. I problematize how Native American groups must retain cultural alterity and why language endangerment and archive access further complicates this situation.
- Boxberger's theory for the cultural and economic impacts of resource access can be applied to management of linguistic cultural resources to contextualize decisions around access, control and use. The degree to which a language community was relegated to the periphery of decision making and control of their language during the period of colonial integration has unique capacity to determine current use practices. I make this claim by correlation of Boxberger's theory to management of language resources in communities including the Northern Chumash, Hawaiians, Lummi, Nooksack and Gwich'in.
- Members of some language communities are protecting their languages into dormancy by limiting access due to a complex legacy of colonialism, experiences with assimilation and a fundamental need for protection of treaty based rights to resources and territory. Beliefs about language protection are integrated into the language ideologies of many groups and are connected to maintenance of self-determination. I make this claim by identification of language ideologies at Lummi and Nooksack and drawing connections to the role of archiving and the public sphere.
- The divisive nature of tribal politics provides rationale for increasing the availability and cultural compatibility of language archives for endangered language communities. I make this claim through examination of political

challenges relating to language preservation at Nooksack, Lummi and Northern Chumash.

### **Language Archive Application and Functionality**

- Existing endangered language archives are primarily designed by linguists and do not sufficiently provide capacity for language communities to control access, use and dissemination of their languages. Archivists and local language practitioners are both working for language preservation, however substantial differences in their priorities exist. I make this claim through evaluation of the capacity of existing language archives in comparison to the needs expressed by members of Native language communities.
- There is insufficient mobilization of language archive collections to develop pedagogically (and andragogically) appropriate resources that facilitate application of archival language resources to language education. There is an important opportunity for greater collaboration between educators, curriculum developers, language practitioners and archive managers. I make this claim through identification of the importance of educational language dissemination and evaluation of that capacity in existing archive approaches.
- There is a need to build upon existing technological infrastructure to develop a language archive designed around the needs of endangered language communities. This platform must support development and application of technologies that mobilize archival language resources into people's everyday lives. I make this claim through review of successful practices in communities like the Gwich'in and consideration of the danger of stagnant and underutilized archive collections.

The next section provides an introduction to past, current and emergent approaches to archiving.

## **The Archive**

In this dissertation I present examples of how the archive as an institution and as a process is complicated for Indigenous communities. This section describes literature on archives and archiving. This dissertation is primarily concerned with endangered language archives and the language documentation resources they preserve and disseminate. These documentation collections are largely in digital formats, reflecting significant work to both migrate analog documentation into digital formats and enable preservation of a variety of “born digital” formats. Archives have differing levels of Internet-based accessibility and this dissertation describes both fully online archives and ones with little or no Internet access. Use of archives by Indigenous communities is complicated by the historical orientation of the archive as an instrument of colonialism, challenges applying cultural protocol to digital resources, the need for maintenance of sovereignty and desire for pedagogically based dissemination. This section will review archives in general, then through three eras of use.

The archive as an institution and tool occupies a contested discourse for scholars and members of language origin communities alike (Manoff 2004; Mawani 2012). According to Derrida (1995), the term archive stems from Greek etymology meaning a place of convergence where things commence and where authority is commanded. The archive is a convergence of disparate interests, conceptions and possibilities. Literature on the archive is teeming with contributions to the discourse from anthropology (Brown 2007; Hennessy 2012), archive science (Manoff 2004; Linn 2013), history (Ballantyne 2001; Attwood 2011), humanities (Christen 2005, 2012; Bell et al. 2013), law (Birrell 2010; Mawani 2012), linguistics (Thieberger 2012; Nathan 2010; Holton 2012), and philosophy (Foucault 1972; Derrida 1995) to only name a few. The archive was originally a location where law was set,

enacted and kept (Derrida 1995). Today, archives have become very diverse and items in the archive have complicated legal, cultural and political implications.

The role and function of an archive is infamously unclear in regard to what constitutes an archive, how one is expected to operate and what are the results of the process of archiving. In his influential *Archive Fever* publication Derrida (1995:57) states, “nothing is less reliable, nothing is less clear today than the word ‘archive.’” Conceptualization of the role archives have is complicated by a legacy of facilitating processes of colonialism (Richards 1993) and a recognition that some archives continue to replicate colonial power structures and mentalities (Cushman 2013). For many Indigenous groups, archives are uniquely complicated sites of cultural exploitation, continuity and renewal.

Archives, like those of the British Empire, were part of the control of people, land and resources (Richards 1993). Other archives have been associated with unethical removal of cultural property from Native people (Gulliford 1996). There remains an association with removal of cultural resources and archives, even as ethical protocols have been developed. Archives also preserve the products of cultural and linguistic documentation and have formed the basis for successful revitalization efforts, such as the revival of the Miami language (Baldwin 2003, 2015). For Native communities, especially in the U.S., the products of documentation in archives are significant for their role in the maintenance of sovereignty (Hagan 1978; Birrell 2010). These resources are valuable for communities as they assert rights to territory and resources. Bell et al. (2013:3) note that Native “communities have been using, and continue to use visual media to assert their sovereignty, challenge the terms and nature of representation, and create new intercultural dynamics.” Use of archives is one such site for visual (and auditory) demonstration and representation of culture.

Warren (1984) provides an example of how visual media resources in an archive can contain information that is used as legal evidence. Photographs of cultural activities like harvesting or farming may contain “critical, albeit subtle information” showing use of resources or territory (vii). This contextual information can, for example, “spell the difference in legal arguments over water rights.” Equal or greater conclusions could be drawn from an audio recording. Fleckner (1984) also identifies the value of archival resources and their relevance to legal and treaty law. He states, “Native American activities, such as hunting and fishing and the exercise of religious freedoms, are specially guaranteed by federal treaty and statute to the extent that they can be shown to follow traditional practices” (3). In the example by Fleckner, the value of archival resources is related to the unique requirement some Native groups have for maintenance of treaty rights through demonstration of cultural continuity (Sider 1993; Dombrowski 2001; Viatori and Ushigua 2007). Political and legal implications are especially, though not uniquely, relevant for treaty holding tribes in the U.S.

Hagan (1978) identifies the risk U.S. tribes face if they do not control use and contextualization of archival resources. In warning about the consequences of non-tribal control of archive resources, he states,

For the Native American this is more than just some intellectual game. What is at stake for the Indian is his historical identity, and all that can mean for self-image and psychological well-being. At stake also is the very existence of tribes, and the validity of their claims to millions of acres of land and to compensation for injustices suffered in earlier transactions with the federal and state governments (139).

Hagan articulates specific concerns about control of archival resources and their implications

for sovereignty. He encourages tribes to prioritize control and contextualization of their own archives. I use the term contextualization for the process of describing information or meaning associated with a language documentation resource. Contextualization in the archival process integrates the voice of the community into all aspects including: concept, design, and organization of the records (Linn 2013:60). Particularly for resources with significant cultural value, such as place names and oral histories, their contextual meaning extends beyond their word-by-word gloss. How material is contextualized, by whom and where are all relevant questions in relation to archiving cultural resources like language. Many questions about the role archives play in relation to information use and control stem from the colonial history of archives.

### **Colonial Archiving**

Richards (1993) authored a much-cited critique of colonial archive use, describing subjugation of colonized populations through control of data. In what he calls the “fantasy of the imperial archive,” the power of the empire was enhanced by control of data and what could be surveyed, counted and archived could be owned (4). According to Ballantyne (2001), the production and dissemination of knowledge is central to our conceptualization of the colonial encounter – something Said (1978) describes as the “power of representation.” According to Ballantyne (2001:90), the archive is “an important site of power, a dense but uneven body of knowledge scarred by the struggles and violence of the colonial past.” The complex position of the archive as a recognized “site of power” creates lasting negative associations for Native groups, like those Kim Christen works with in Australia.

Kim Christen, Director of Mukurtu and Professor of English at Washington State

University, acknowledges the complex feelings Indigenous communities have about archives, stating “archives have been this really strange place for Indigenous communities, they are something that are painful, but also very helpful. It is painful to see the way ancestors were described or listed in archival collections” (personal interview, March 20, 2014). In Australia, where Christen conducts fieldwork, Aboriginal people were counted and described alongside cattle and other livestock in archives, speaking to the status that colonial governments attributed to Aborigines. Current generations remember this offence today and have lasting concerns about the role of archives. In my conversations with Native managers of community-based archives in Alaska, I was struck by the close connections people there felt for the relatives who had been recorded and now archived. Whereas non-Natives may view archival resources as part of an abstract past, for many Native people their experience is just the opposite. Cultural resources found in an archive collection will often represent recordings of recent relatives, who are sharing culturally significant information. Recordings may frame a larger discourse (Ahlers 2006) that touches on experiences with colonialism, loss of language, and diminished cultural and political autonomy.

Richards (1993) identifies that, control of the archive is a form of political power and a display of sovereignty. For many Native communities sovereignty is the basis for all political power they have, accordingly they are sensitive to factors that can enhance or erode capacity to maintain their sovereignty. As described by Mawani (2012), writing about archives in the context of law, the archive is a site of ongoing struggle over the production and use of knowledge. She states,

The archive is not a repository of historical records and sources but a dynamic, incomplete and fiercely disputed site of knowledge production that carries profound implications for how we write history and approach and

understand the past . . . It is both a mode of articulation and a form of governance (339).

Archives are not neutral spaces for many Native communities. They have been a part of the process of colonization and have served as repositories for extensive collections of objects, including physical cultural resources, government records, images and later audio and video recordings. For some language origin communities there is a lingering conception that archivists, anthropologists and linguists commodify, reify and remove cultural resources from origin communities.

### **Institutional Archives and Discourse Development**

Throughout the 20<sup>th</sup> century the role of the archive shifted from a direct component of state power to an institutional organization focused on preservation of the products of documentation. Early 20<sup>th</sup> century archives preserved documentation efforts by prominent scholars, such as Franz Boas and others, working to preserve cultural knowledge of a population many expected to disappear (Barth, et al. 2010). This era, often referred to as salvage anthropology, produced vast amounts of documentation, but lacked systematic processes and ethical oversight (Henke et al 2015). During this era archive access was fairly restrictive outside of academic, especially for Native people. Throughout much of the 20<sup>th</sup> century many Native people had no conception of the amount of cultural material that was housed in archives about their history, ancestors and culture.

According to Aboriginal scholar Henrietta Fomile (1989), Native Americans are the most studied ethnic group in the world, closely followed by Australian Aboriginal people. However, access to and use of the products of academic research is insufficiently available to

each of these groups. Fourmile's statements were made prior to the Internet and networked archives, but her critique is still relevant. She finds that physical distribution of cultural resources, access to these resources and unresolved intellectual property questions disenfranchise Native people from their cultural heritage. Converging interests in self-determination, cultural revitalization and land title have led many Native groups to take greater control of their cultural resources. Tribal and community-based archives are two such examples. These examples of emergent archiving will be discussed after current definitions of archive discourse are reviewed.

According to Johnson (2004:143), an archive is a “repository created and maintained by an institution with a demonstrated commitment to permanence and the long-term preservation of archived resources.” The practice of documentation is distinct from related processes of description and preservation. According to Himmelmann (1998:166), the aim of language documentation is “to provide a comprehensive record of the linguistic practices characteristic of a given speech community.” The products that make up documentation may include a broader range of resources than may ever become part of a formal archive. As stated by Woodbury (2003:12), the products of good documentation should also be “preservable, ethical and portable.” Quality documentation is the result of “ongoing, distributed and opportunistic” corpus production that then can be put in the hands and ears of as many people as possible – especially from the language origin community. Woodbury identifies discipline tension over how to structure and disseminate documentation products. One competing interest seeks to structure documentation so that a linguist 500 years in the future has all information needed to understand a language. A desire to tailor documentation

products to the interests of living language origin community members represents another branch of efforts in the discipline.

According to Dobrin and Holton (2013) it is well recognized in the linguistics community that language documentation efforts with Native communities are fraught with complexity. One of those areas of complexity is determining appropriate use of recorded documentation. Documentation collected prior to Internet accessibility poses unique questions for archivists in determining the ethics of digital access and use. Those people were likely never asked if they consented to worldwide dissemination in a highly replicable media format. Retroactive consent is difficult or impossible to obtain, as the people who were recorded may no longer be living or known. In response, some linguists (c.f. Ladefoged 1992) have advocated that use of that documentation should continue regardless of community concerns, (Dobrin and Holton 2013:140). Sentiments such as these likely represent a minority in the discourse, but have lingering negative repercussions in Native communities. Determining appropriate use of intellectual property in the age of Internet sharing of digital resources has added another level of complexity to language preservation efforts.

Toward the end of the 20<sup>th</sup> century digital technology and language endangerment changed practices of documentation and preservation. Documentation in the field was increasingly produced in digital formats and these data required specialized preservation strategies. By the early 1990s global processes of language endangerment were also receiving heightened scholarly attention (Fishman 1991; Krauss 1992). In response dedicated endangered language documentation funding (e.g. DoBeS Programme and the Endangered Language Documentation Program) was made available (Drude, et al. 2012). The surge in

largely digital documentation efforts necessitated new data storage solutions. Between 2000 and 2005 three major digital archives (DoBeS, ELAR and PARADISEC) formed to preserve documentation, digitize analog recordings and facilitate linguistic research. According to Bird and Simons (2001:578), a digital archive in support of language documentation does the following:

implements digital archiving standards, provides offsite backup, migrates materials to new formats and media/devices over time, is committed to supporting new access modes and delivery formats, has long-term institutional support, and has an agreement with a national archive to take materials if the archive folds.

Numerous digital language archives around the world have formed in the past decade (see Chang 2010).

Digital language archives, as described above, have created industry standards, procedures, research funding and technology to support language preservation work. Large institutional language archives are well positioned to provide resources needed to awaken a dormant language (Himmelmann 1998). Sallabank (2012:121) describes that large international archives excel in the role as a “fall-back” for languages that have become dormant. However for many endangered language communities, like those I conducted research with, the efficacy of an archive is closely connected to improving current language use, not just following language dormancy. According to Huvila (2008:2), language archives have failed to respond to user interest in greater educational application of archive resources. Large international archives, like those reviewed in this dissertation, preserve the products of documentation, but do not necessarily facilitate use of those products for purposes of language education or revitalization.

One obstacle toward greater educational use of language documentation is that documentation materials are often ill suited for educational use (Mosel 2012). Many elicitations found in archive collections are less applicable to creation of educational materials than conversational recordings and stories. Still, given the amount of documentation in archives the lack of educational dissemination seems to reflect a shortcoming. According to Mosel (2012:111), “the production of educational materials does not seem to be a topic in linguistic debates.” Interests in educational dissemination of documentation products are one factor that language origin communities weigh when considering collaboration with an archive. In addition to educational use of language resources, I also examine political and cultural considerations that may impact use of archives by language communities. Dobrin and Holton (2013), acknowledge that language documentation projects occur in relation to complex cultural factors and this creates both short and long term preservation questions for researchers and communities. In response a number of emergent models of archiving have developed including community-based archives and participatory archiving.

### **Emergent Archiving**

In recent years the number of community-based and participatory archives have increased due, in part, to language origin community interests in greater control of language documentation materials (Dobrin and Holton 2013; Linn 2013). The emergence of community and participatory archives has occurred during a time when technology, like wikis, has made higher levels of user interaction and control of information on the Internet commonplace (Czaykowska-Higgins 2009). However, a participatory user experience is

largely not reflected in the functionality of language archives. Huvila (2008:2) states that linguistics and archive science have underappreciated the “relation between archival materials, users and usages.” In his view, many archives are too insulated from the interests of their users, especially language origin communities. The Protocols for Native American Archival Materials (First Archivist Circle 2007:9), describes how “questions of access, ownership, and control of Native American archival material can prompt philosophical and practical concerns . . .” These concerns cover issues including, “community sovereignty, associated legal rights, community ownership of original source information, initial community restrictions on information sharing and distribution . . .” Community and participatory archives are two responses to the critique of traditional institutional archives.

I use the term community-based archives to describe language archives that are operated by Native communities, rather than institutions like universities or the Library of Congress. Community-based archives may exist in a dual capacity with a tribal archive, but the term ‘tribal archive’ is U.S. centric and less specific. Tribal archives, as described by Fleckner (1984), share many similarities with community-based archives but have a broader scope of preserving tribal administrative records along with diverse cultural resources.

Fleckner cites three main objectives of tribal archives:

- Greater capacity to manage information and protect the legal rights of the tribe and its members,
- Preservation of cultural heritage and use of those materials for education, and
- Creating greater accessibility to archival materials for tribal members (1).

Many tribal groups have some form of an archive, though not all are equipped to handle the unique requirements of audio preservation.<sup>5</sup> Fleckner wrote at a time when reel-to-reel tapes were the industry standard for archival audio preservation. Since that time, storage and maintenance of digital files (including Internet accessibility) have increased the complexity of archival management of audio resources. Given interests in local control of language documentation and that many tribal archives are not equipped for preservation of audio resources, there has been growth in the number of community-based archives (Dobrin and Holton 2013). Extensive literature on community-based archives does not exist, but the C'ek'aedi Hwnax community-based language archive in the Ahtna community (Alaska) is a recognized model (Berez, et al. 2012).

Development of the C'ek'aedi Hwnax archive (see Chapter 6 for more detail) was guided by three overall goals:

- Increasing local awareness of and access to the recordings in their collection,
- Protection of fragile cassettes and their contents, and
- Respect for traditional Ahtna modes of transmission of knowledge (Berez, et al. 2012:243).

Interest in creating a language archive at Ahtna increased as members of the community became more aware of the existence of language resources at the Alaska Native Language Archive (ANLA). ANLA is managed at the University of Alaska Fairbanks, nearly 300 miles away from Ahtna. Even as, and maybe because, these resources began to have increased public accessibility on the Internet at ANLA, Ahtna people wanted greater local control of Ahtna recordings (Berez, et al. (2012). The C'ek'aedi Hwnax archive houses recordings

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<sup>5</sup> See the Open Languages Archive Community (OLAC) for industry standards on archival management and preservation of language documentation: <http://www.language-archives.org/>

originally at ANLA and continually adds to their collection.

Since 2009, five Native communities (including Sealaska and Gwich'in described in Chapter 6) have partnered with ANLA to transfer linguistic records and/or construct community-based archives in Alaska (Holton 2015). Community based archiving is an example distributed linguistic archiving, where management of language materials is decentralized from traditional institutional archives to other groups, like C'ek'aedi Hwnax (Berez, et al. 2012). An international example of community archiving is Ara Irititja, which is the oldest and largest community-based archive in Australia (Scales, et al. 2013). Founded in 2007, Ara Irititja plays a key role in development of language educational materials and software utilizing language resources in its archive. At Ara Irititj, like other community-based archives, desire for greater control of and access to language resources was a prominent reason for creating the archive. Participatory archive operation shares many similarities with that of community-based archives and there is potential for collaboration between the two models.

Like community-based archiving, participatory archives have developed due to increased desire for community control and use of language resources (Linn 2013). However, participatory archives have largely been developed within existing institutional archives, like the Sam Noble Oklahoma Museum of Natural History. Their implementation has greater reliance on Internet based accessibility and educational application of resources (Huvila 2008; Linn 2013). Participatory archiving is described by Theimer (2009:9) as “an organization, site, or collection in which people other than archive professionals contribute knowledge or resources, resulting in increased understanding about archival materials, usually in an online environment.” While Theimer states use of the participatory archive

occurs in absence of the archivist, Linn (2013) suggests that archivists and community members interact collaboratively. Some examples of participatory archive projects include the Portland Museum of Art Northwest Coast Indian Collection (Shilton and Srinivasan 2007), Saari Manor and Kajaani Castle (Finland) digital archives (Huvila 2008), Osage and Shoshoni language collections at the Sam Noble Oklahoma Museum (Linn 2013), and the Kotiria/Wa'ikhana (Brazil) Project (Stenzel 2014).

Participatory archiving is based in a theoretical framework that connects language documentation and dissemination practices with research models that support participatory community engagement, like Participatory Action Research (Czaykowska-Higgins 2009). Linn (2013:57-58) describes rationale for application of participatory archiving methods in language preservation. She cites three “classical” aspects of archiving that can benefit from greater community inclusion and control in the archiving process: appraisal, arrangement and description. Appraisal is the process of selecting what documentation products are included in an archive. Arrangement and description deal with the presentation of information and the contextualization of those resources. Participatory archive design produces a user-centered approach, rather than the traditional “linguist-centered approach,” according to Linn (2013:58). Greater capacity to direct the visual representation of cultural resources and their contextualization creates uniquely accountable demonstrations of cultural identity (Shilton and Srinivasan 2007).

Huvila (2008:25) cites three characteristics of participatory archiving: “decentralized curation, radical user orientation and contextualization of both the records and the archiving process.” According to Linn (2013), Huvila’s theorization represents a significant departure from traditional archiving by advocating a fully decentralized approach to resource

management where an archivist expert has no more decision making responsibility than anyone else. This is what Huvila means by decentralized curation. In this model technology professionals maintain the functionality of the site, but community members collectively develop content in the archive with archive professionals. Radical user orientation describes how the appraisal and arrangement of content in a participatory archive reflect the evolving needs and interests of the use community – what Huvila (2008:26) describes as being “orientated and reorientated to its users all the time.” Application of participatory archives theory to language archiving in Native communities is emergent and not without its own challenges (Stenzel 2014).

Many Native communities have pre-existing groups or people with special authority to make decisions about access to cultural materials. Additionally, access to the Internet and ability to navigate an online archive will further over represent certain groups or people. While acknowledging these challenges, Linn (2013) finds that participatory archives provide an entry point for younger members of a community to have increased input in decisions about language representation and use. Building pathways for youth to become decisions makers and users of Native languages is an elusive obstacle for many revitalization programs (Meek 2010). Archiving of endangered language resources has a range of challenges (described throughout this dissertation), however participatory archives address some particularly complex issues associated with community control of resources. My research builds upon archive science critiques describing lack of user/community access, use, interaction and control of language resources in archives. My contribution brings an anthropological perspective that considers the unique cultural implications for archival storage, dissemination and management of language documentation by and for Native

communities.

### **Structure of this Dissertation**

This dissertation is structured into three main parts. The first part encompasses the Chapters 1-3, which describe how Indigenous communities construct, though internal and external pressure, causal links between the ability to control resources related to their languages and the political and cultural sovereignty of their communities. The process of controlling access to language, whether spoken or in digital archival collections can facilitate self-determination based on one of the most identifiable aspects of culture – language. Chapter 2 begins with outlining the historical development of treaties and the rights they guarantee. Then I make a connection between cultural alterity and maintenance of those treaty rights. I find, through examples from North and South America, that inability to control use of and access to language is a determining factor in maintenance of territory, resource access and federal recognition. Chapter 3 deals with the highly litigious issues of sovereignty and rights. Courts have become a primary site for mediation of these rights and I describe the role of oral history and use of Native language in relevant U.S. and Canadian court cases. A case study from the Northern Chumash provides a frame to view issues of language control, access, federal recognition and maintenance of sovereignty.

The second part includes Chapters 4 and 5 and provides an ethnographic account of the use of an Internet-based language archive platform with research partners at Lummi and Nooksack. Their experiences are framed in the context of the identification of existing language ideologies and their relationship to language preservation planning, politics and sovereignty. I begin by situating current issues relating to language and self-determination in

each community and then recount our experience with the archive platform. This research opportunity did not allow me to conduct an extensive ethnography in the community and my comments are focused on use of the archive platform and issues of concern in each community that impact language preservation. I end the section with a contextualized review of literature on the topics of language ideology and the public sphere. I find that identification of language ideologies can help structure efforts to increase cultural compatibility and efficacy of archival preservation and revitalization efforts.

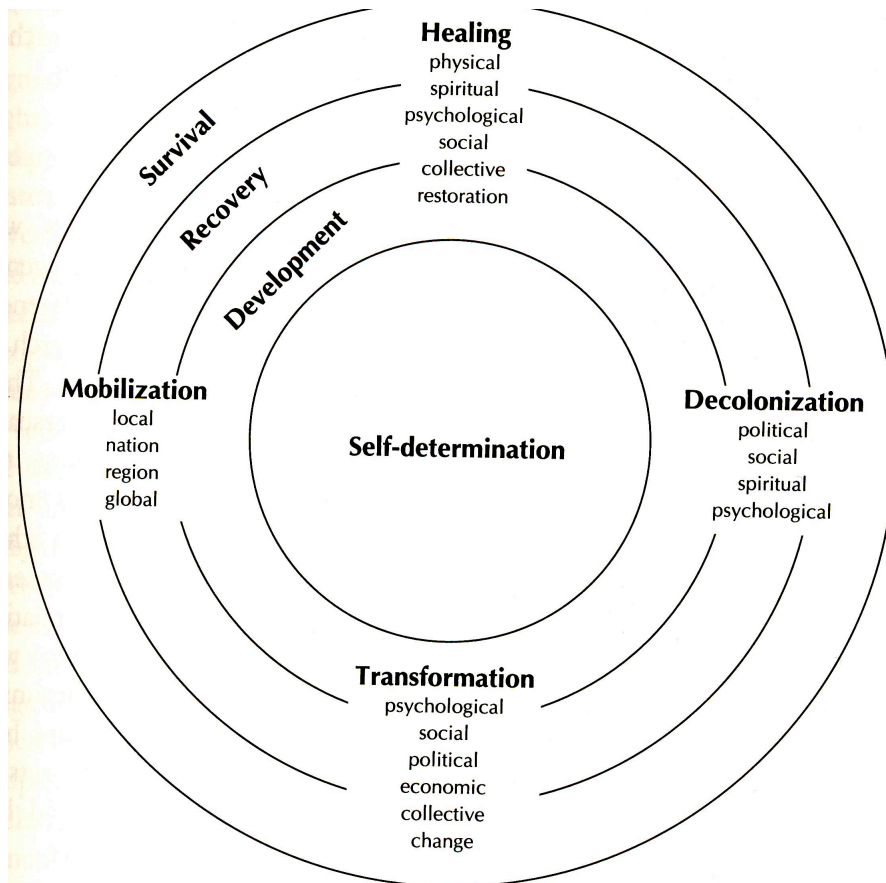
The third part includes Chapters 6 and 7. These chapters review selected international and community-based archives along with the archive platform Mukurtu CMS, to demonstrate different approaches to archiving and available technologies. I include reviews of these approaches to language preservation for the following three reasons. First, the design and capabilities of archives is varied and reflects differing ideologies and priorities. The functionality of archive operation and values behind its implementation will impact its perceived efficacy in the eyes of language origin communities. I am interested in documenting connections between design, implementation and values through an anthropological lens. Second, in making recommendations about improving the design and function of language archiving it is important to document current methods and their shortcomings. Lastly, I find that discussion of current archival approaches and envisioning alternatives brings together the dominant themes of this dissertation, including the connection between language archives and sovereignty, maintenance of cultural identity, identification of language ideologies and educational dissemination of endangered language resources. I begin with outlining the unique relationship treaty holding tribes have with the U.S. government to contextualize the importance and complexity of treaty based relationships.

## **Chapter 2: Sovereignty In Native America**

### **The Special Relationship**

Sovereignty and the ability to determine one's own future are central to the political, legal and cultural aspirations of Indigenous people in North America and elsewhere.

Speaking of Indigenous people, herself included, Tuhiwai Smith (1999:1) states, "It angers us when practices linked to the last century and the centuries before that, are still employed to deny the validity of indigenous peoples' claim to existence, to land and territories, to the right of self-determination, to the survival of our languages . . ." Tuhiwai Smith depicts the centrality of self-determination in relation to research in Figure 2. Since colonization began in North America, Native people and colonial powers have been involved in a complex process to identify, codify and implement the practice of legal coexistence, between those societies existing at the time of colonization and those that have formed since. The process of colonization has been conducted and defined by factors including military power, disease, resistance, science, religion, cultural difference and law. Colonial encounters have not been equal around the world and neither has their impact on Native people and their cultures. Native language transmission is one aspect of culture that has been dramatically altered by these practices.



**Figure 2 “The Indigenous Research Agenda” showing centrality of self-determination (Tuhiwai Smith 1999:117).**

The unique status of Native American nations in North America has been described as “nations within nations,” “a special relationship,” “domestic dependent nations,” “internal colonies,” and “the fourth world.” These terms signify that these nations have varying degrees of political sovereignty within the nation-state in which they reside. The nature of sovereignty varies greatly depending on external factors such as the existence of treaties, reservations and federal recognition, and also internal factors such as the efficacy of tribal political, economic, legal and cultural organization. Together, external and internal factors determine if the unique status is more like a nation within another nation, or a marginalized

ethnic community, as the term “fourth world” describes. For those tribes with treaties and federal recognition, there is a codified history of legal encounters which frame the current political environment.

European colonists have relied on legal, moral and religious rationale for their presumed superiority and justification for their occupation of land, subjugation of people and extraction of resources (Akers 2014). The Royal Proclamation of 1763 exhibits how British King George III interpreted capacity for North American colonization. Both the United States and Canada identify the Royal Proclamation of 1763 as a foundational element of their legal involvement with Native societies (Asch 1984; Slattery 1987; Roth 2002). The Proclamation specifies that conquest alone does not extinguish aboriginal title to land. For this reason, both nations embarked on treaty processes and exchanges of land, rights and resources for limited political autonomy.

Treaty making has been deeply flawed, skewed to the colonizers’ benefit and far from complete – leaving countless distinct societies unrecognized and vast areas, including nearly all of British Columbia and significant portions of the eastern United States, without binding legal agreements. According to Akers (2014:65), “in effect, the entire treaty-making process between the United States and Indigenous peoples was a sham in which the United States simply did what it wanted, covering up criminal injustices by calling these practices ‘treaty making.’” Though far from equitable, treaties remain valuable for Native people and a constant source of legal controversy. Treaty making has established tribal communities as nations, with limited sovereignty, within a larger hegemonic nation. Treaties have also forced tribes to be “competitively nationalistic” seeking power and resources differently than traditional kin based systems of interaction (Harmon 2007:23). The parameter of the nations

within nations relationship is frequently, and in some cases continually, the subject of litigation. It is safe to project that such legal challenges will only increase as pressure for land, resources and cultural independence continue.

The U.S. and Canadian governments have divergent approaches to maintaining their national hegemony while recognizing the unique status of Indigenous populations in their borders. In the U.S. recognized tribes generally have reservations with tribal government, courts, education systems and law enforcement. On reservations federal and tribal laws are used to govern and may outweigh state laws and regulations. For example, Native American tribes in Washington State can ignore a state law that prohibits smoking in public places. In Alaska, a Native Corporation may bypass some state environmental regulations when conducting timber harvesting on Corporation controlled lands (Dombrowski 2004). In Canada, the Royal Proclamation forms the basis for constitutional language supporting aboriginal rights and treaties, but many issues remain legally inconclusive (Slattery 1987). As in the U.S., Canada has a history of legal discrimination against Native people. The Indian Act of 1876 denied Native people the ability to practice aspects of their culture such as potlatch ceremonies and limited their capacity for political and legal organizing (Leslie 2002). In 1951 amendments to the Act were made that eliminated some of the most grievous human rights abuses. In 1969 an infamous “white paper” policy was circulated by the Trudeau administration, which called for abolishment of the Indian Act and would have terminated the unique political and legal status of First Nations people. The “white paper” was never enacted, but a range of issues including land title remained unresolved.

In 1971 the *Calder v. British Columbia* case acknowledged that Aboriginal land title existed at the time of the 1763 Royal Proclamation and confirmed that aboriginal title had

existed independently from colonial law. The 1971 ruling did not conclusively determine if Aboriginal land title was extinguished by colonial conquest. Future litigation, most notably *Delgamuukw v. British Columbia*, established criteria for proving claims to Aboriginal lands and eventually affirmed a role for use of oral histories as evidence in court. The recent (2014) *Tsilhqot'in Nation v British Columbia* case has for the first time acknowledged that Aboriginal title exists in British Columbia (Junger, et al. 2014; Wilson 2014). This significant ruling opens the door for other B.C. First Nations to seek title to lands and clarifies the framework used to determine the legitimacy of a land claim. The framework requires demonstration of ownership, use and maintenance of territory from the time of initial colonization to the present. Oral history will continue to provide important evidence for proving ownership to territory and the resource use practiced there.

The process of treaty making has not been consistent in the U.S. either. Prior to 1871 the U.S. president had greater independent authority to enter into treaties and between the Revolutionary War and 1871, over 600 treaty documents were signed (Spirling 2011:1). During this period the U.S. gained over two million square miles of land, ceded from Native American control, at a rate of two square miles per hour (2). The treaty-making period ended in 1871 and after began a hostile century where U.S.-tribal relationships were shaped by the eras of allotment and assimilation (1887-1943) and termination and relocation (1945-1960). Starting in the 1960s, the federal government again began recognizing tribes as independent nations and addressed tribal demands for self-determination. This period is responsible for much of the tribal government and legal structure still in existence today. In 1971 the Alaska Native Claims Settlement Act (ANCSA) was passed transferring land claims from Alaska Natives to the federal government. The passage of ANSCA began a period, that continues

today, where previously unrecognized tribes may apply for federal tribal recognition. Federal policy toward Native Americans has been in constant transition and past evidence suggests this process will continue to be defined by fluctuation and struggle.

The 1788 Treaty of Fort Pitt is recognized as one of the earliest formal North American Indian treaties, though other agreements, like the Walking Purchase of 1737 functioned similarly to treaties.<sup>6</sup> At a base level, treaties acknowledge existence of cultural, economic and political boundaries between Natives and colonizers. At the time of signing, those differences were great enough that simple assimilation was not seen as the appropriate recourse. At the time of initial colonization, cultural differences were demarcated by seemingly incompatible religions, kinship structures, diet, physical appearance and language. The degree to which the continued maintenance and demonstration of visible cultural difference will impact future eras of this “special relationship” remains to be seen. In North America treaty rights continue to be highly, which is particularly evident any time legal cases, such as the Boldt Decision or *Delgamuukw* trial are publicized (Miller 1992). The diverse range of benefits and rights provided by treaties are of significant interest to elements of increasingly polarized populations, especially in the U.S. Large amounts of wealth, resources, rights and territory are intertwined in continued maintenance of treaty rights and the interpretation of those rights in court. Accordingly, treaty-holding tribes are keenly aware of the implications of protecting those rights. The process of demonstration and continuity of cultural difference, or alterity, is one way tribal groups distinguish their otherness and those associated rights (Deloria 1978a; Sider 1993; Dombrowski 2001). As the U.S. continues to

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<sup>6</sup> The Walking Purchase of 1737 relies on a questionable 1680s deed alleging that the Lenape tribe agreed to sell land to the Penn family. In 2004 the Delaware Nation unsuccessfully attempted to regain control of 314 acres of territory, including land lost in the Walking Purchase.

become more culturally diverse and populous, those processes of maintaining capacity for Native self-determination may come under greater scrutiny.

The history of forced and selective assimilation has produced populations of Native people that are full tribal members, but have cultural traits that may be nearly indistinguishable from those of members of the dominant society. According to Niezen (2003), unlike the civil rights movements, the Indigenous rights movement is not looking for equality. Equality is considered equivalent to assimilation for Native people, who instead are looking for continuity of their treaty based rights and sovereignty, in the context of the nation state. For most Native people, the continued value of maintaining treaty rights is without question. Unless a national government is willing to restore full pre-colonial territory, provide financial compensation and offer complete independence, tribes have little interest in relinquishing treaty rights. There is no indication that either the U.S. or Canada has any interest in this type of legal separation that would likely lead to a Balkanization of territory. Secession is also not the goal for most North American tribal communities, as their populations, current territory and resources are insufficient to support full independence. How national governments will treat populations that become increasingly culturally assimilated while retaining treaty rights opens a rich vein of inquiry on the meaning of cultural identity, indigeneity and dependent rights. As discussed in more detail later, tribal communities are already grappling with the meaning of tribal membership and how indigeneity is understood and practiced in relation to Native language and self-determination. Resource and land pressures will only intensify this area of conflict.

The terms sovereignty and self-determination are well used in relation to important issues impacting Native people. According to Deloria (1998) the term self-determination

entered the discourse during the battle to end government termination of tribal recognition.

He states,

So we adopted the slogan “Self-Determination, not Termination,” and the term self-determination was deliberately chosen because down the road we wanted to be able to compare the status of Indian Nations to those African and Middle Eastern nations who had been “given” self-determination after World War I with the so-called mandates. Thus, we were pitting Woodrow Wilsonian ideas against American assimilationism. And we carried the day. (1998:26)

Deloria identifies the fishing rights struggle of the 1960-70s in the Pacific Northwest for bringing the term sovereignty into use. Native activists would frequently get arrested for fishing and would cite their treaty rights to force the unwarranted arrest to court. They used a slogan, “if you act like you’re a sovereign, eventually you will be treated as one” (1998:26). The 1974 *U.S. v. Washington* decision affirmed both the right to fish and solidified use of sovereignty in political organizing and academia. Deloria finds that the terms “sovereignty” and “self-determination” have received so much use that they are now nearly meaningless. He cautions against excessive theorizing and academic discourse on terminology because these issues can be consuming and there are so many tangible issues that need to be addressed.

The Western concept of sovereignty stems from articulations by Thomas Hobbes, John Locke and Jean-Jacques Rousseau who wrote about it as an absolute inalienable power (Boldt, et al. 1985). During feudalism, the sovereign was understood as the supreme lawmaking entity in a specific region based on their authority and hierarchy. The type of sovereign power wielded by the ruling class in Europe is not generally analogous to

leadership and political organization in pre-contact Native North America. Ruling elites existed in some communities, like the Pacific Northwest, though according to Clastres (1987) they were uncommon in North American Indigenous cultures. Instead, chiefs and elders led through possession of skill or customary knowledge that was recognized as beneficial to the group. Even in situations where ruling elites or “big men” held power, the absolute feudalistic power common in Europe appears to have been uncommon in North America (Miller and Boxberger 1994). Assigning sovereignty to Native communities has led to greater assimilation of their political and legal systems to Euro-American norms, while creating a dependency on maintenance of sovereignty to protect economically and politically valuable rights. The expression of sovereignty is closely linked with demonstration of indigeneity. According to Birrell (2015:226), “as a singular conception of identity, purporting to embrace a diversity of experience yet finite in its application, indigeneity is ultimately a cultural and political performance.” Native language is one method of cultural performance for the demonstration of indigeneity and support of legal rights (Viatori and Ushingua 2007). This next section describes theorization of the relationship between Native language, sovereignty, colonization, and language endangerment.

### **Sovereignty and Language Endangerment**

Native language has been recognized as an element of sovereignty, nationhood and an inalienable aspect of culture since at least the time of Johann Herder and Alexander von Humboldt (Viatori and Ushigua 2007). During the 18<sup>th</sup> century German philosophers closely linked language and nationalism with concepts like *gist* or the collective spirit of a nation. In this view, language was an indicator of national identity and fit into notions of linguistically

unified nation-states (Woolard 1998). Colonialism exported these beliefs outside of Europe and influenced ideology around Native American languages and their connection to social and political organization.

In Anthropology Franz Boas positioned language as a core aspect of cultural identity worthy of a specific field of study (Salzmann 1993). Outside of academia, the U.S. government has publically supported Native language use and preservation through legislation such as the U.S. Native American Languages Act 1990, which states “it is the policy of the United States to preserve, protect, and promote the rights and freedom of Native Americans to use, practice, and develop Native American languages” (Native American Languages Act 1990:Section 102). Both tribes and national governments alike have affirmed the connection between language and sovereignty through policy and practice. The power of the language-culture connection can be seen in how strongly colonial governments attempted to eradicate tribal languages during processes of forced assimilation, and how effective those policies were. Many Native communities recognize their traditional languages as vital aspects of self-determination, even as Native language endangerment has complicated the role that Native language performance and archival language resources play in affirming tribal sovereignty. Next I situate language endangerment and construction of indigeneity as an international process.

Colonization has occurred in every inhabited continent, but by different groups, in different geographic regions and with different intentions. In the continents of Africa and Asia, European colonization was primarily based around resource extraction (Mufwene 2008). Depending on the location, resources of interest included minerals, plants, animals, crafts and human labor. According to Mufwene, in these continents colonization was largely

uncommitted to permanent settlement, which left greater room for Native populations to retain their traditional cultural practices. Language, being a unique marker of cultural identity and continuity, reflects this trend. Of the roughly 2,035 languages in Africa, less than 10% are extinct or endangered (Bokamba 2008:97-98). In my own experience living in Tanzania (2011-2012), I was surprised to find the pervasive expectation that foreigners would learn Kiswahilli, even for an area that prospers economically from Western tourism. Language diversity remains high throughout Africa and some Indigenous languages are mediums for government level communication. For example, South Africa has eleven official languages – of which nine are non-Western. There is no guarantee that Indigenous languages of Africa will remain solvent as pressures of globalization increase, however their relative stability at least provides opportunity for extensive documentation and preparation for potential future language shift. In North America and Australia permanent colonization settlement strategies have drastically impacted language sustainability.

Comparatively, colonization in North America and Australia was never solely directed toward resource extraction – permanent settlement was part of the plan from early on. In North America, roughly 80% of Indigenous languages are no longer being learned by children, over 75% of Australian Aboriginal languages are extinct and 90% of the remaining Australian Aboriginal languages are highly endangered (Bokamba 2008:97-98). In the Caribbean, the Spanish literally worked the Native populations to death in gold mines and precipitated an almost complete assimilation of Indigenous populations into a new culture composed of Spanish, African slave and Indigenous origins. Accordingly, the Indigenous languages of this region are largely extinct, with exceptions like Garifuna, and few records for reconstruction remain.

South and Central American colonization was a mix of both permanent habitation and conquest for resource extraction. According to Mufwene (2008), both the nature of colonial interests and geographic isolation of areas like the Amazon Basin resulted in greater cultural continuity for many Indigenous populations and their languages. Approximately 77% of the roughly 700 South and Central American Indigenous languages are still recognized as viable (Bokamba 2008:98). Mufwene (2008) finds socioeconomic explanations for resulting language shift most compelling, drawing on Bourdieu's (1991) concept of the "linguistic marketplace" where speakers make informed decisions about the costs and benefits of language use. As the vast majority of Native languages in North America have been replaced by national languages like English, French and Spanish (Krauss 1992; Czaykowska-Higgins and Kinkade 1998; Bokamba 2008), the perceived value of Native language use remains an important topic for Native people and their governments. Native languages are one factor in demonstration of cultural alterity and associated rights associated with indigeneity. There are direct legal implications for demonstration of indigeneity pertaining to sovereignty, self-determination, rights, resources and territory (Hagan 1978; Dombrowski 2001). Language endangerment and resulting reliance on language archives create new challenges for displaying linguistic identity to internal and external audiences (Goodfellow 2005).

Due to processes of endangerment, language archives have increasingly become important sites for the preservation of language documentation, demonstration of rights and dissemination-based educational efforts. In each of the community based archives I research in Alaska, their archives contain documentation of place names, genealogies, stories and other oral tradition resources that describe the ownership of territory, rights and resources. Staff at each of these archives described direct application of these resources in support of

maintenance of sovereignty and in mitigation of land claims. These observations are consistent with findings in the literature (Hagan 1978; Fleckner 1984; Warren 1984; Birrell 2010). The products of documentation stored in archives is far from value neutral and members of some Native groups may have substantial concerns about cultural, political and legal implications of access to these materials – particularly if their languages are highly endangered.

As a language is used less, or not at all, the products of documentation become more valuable as a source for information. Reliance on recorded documentation describing resource ownership and sovereignty can also become elevated as fewer people recount this information themselves. If Native languages and oral tradition contain information with legal and political application, such as proving land claims, and Native language use is a clear marker of indigeneity, then if a language is spoken less, the value of the archival records of that language increases. Accordingly, the capacity of a Native community's ability to control use and access to these archival resources has elevated importance. Many Native groups have turned to archives for preservation of the products of documentation and their valuable cultural property. Other groups are hesitant or unwilling to place documentation materials out of their control.

Language revitalization is not the goal of every community, but regardless of revitalization goals management of language resources can have consequences for maintenance of distinctive cultural identity and sovereignty. As stated by Birrell (2015:233), “within legal and social identity, indigeneity is thus constituted as alterity.” In the United States, alterity has a unique role in maintenance of the political status held by Native nations due to the role and interpretation of treaties (Deloria 1978a; Sider 1993; Dombrowski 2001;

Miller 2003). Western understandings of sovereignty have led to a politicization of cultural uniqueness or alterity for tribes in North America as a way to maintain political independence. One aspect of the maintenance of alterity is through expression of distinct cultural traits such as language. Native language is a resource and is particularly subject to politicization because it is a salient marker of cultural difference. The next section explores the relationship between Native language and self-determination in more detail.

### **Language and Self-Determination**

According to Hagan (1978:135), “to be an Indian is having non-Indians control the documents from which other non-Indians write their version of your history.” Hagan goes on to say that Native Americans are held “captive of the archive” because neither resources nor the archive is in their control (138). Since the time Hagan wrote, control of archives by Native people increased, though more as tribal archives than language archives (Fleckner 1984). The implications for ability to manage the language resources in archives are part of cultural and political self-determination. Sider (1993:9) describes how Native American peoples are confronted with an “unavoidable and irresolvable antagonism between their past and present.” The treaty-based legal framework for demonstration of alterity as a pre-requisite for rights, resources and territory simultaneously asks Native people to be both traditional and modern. As stated by Birrell (2010:81), “the Indigene is perpetually determined by the law in continuous acts of violent (mis)recognition, the alterity of indigeneity is constitutive of the law itself, as a persistent and spectral ambivalence within it.” No other cultural group in the U.S. has to demonstrate alterity to retain their claim to cultural, political and legal identity. According to Dombrowski (2004:1068), Native peoples

are bound to the institutional and emotional sources of their alterity far more stringently than are non-Natives.

Tribes in the U.S. must consider implications carefully as they struggle to maintain their capacity for self-determination (Deloria 1978a). If they create too high a “profile” or are seen as too independent, they can “invoke the traditional American belief in the equality of the races that produces a demand that treaty rights be abrogated, reservations dissolved, and Indians thrust into the urban slums like other minatory groups” (87). Unlike the Civil Rights Movement and the current movement to provide equal rights to homosexual partnerships, equal rights are not the goal for North American Native communities. As described by Deloria, equal rights would end the unique trust relationship described in treaties. Thus, tribes have a struggle to maintain the continuity of their cultural identity and their treaty rights. Control of and use of Native language provides a lens to view the intersection of these concepts.

Connecting language and sovereignty provides an opportunity for many tribal communities to harness the broadly appealing work of self-determination to the challenging task of language revitalization. As argued later, beliefs about tribal sovereignty are pervasive and ideologically charged within many communities and can determine the efficacy of language preservation efforts. Communities with existing populations of Native language speakers are better positioned to demonstrate their cultural uniqueness through use and performance of their languages. For communities in advanced stages of language endangerment, there will be more emphasis on demonstration of control and engagement with archival recordings and other language documentation resources. Endangered language communities will also see utilization of language resources that may be found in archives as

critical to their efforts to train new speakers. The linkage between sovereignty and language is one reason why language preservation efforts are highly political and volatile in tribal communities.

Native language performance is not the only method for tribes to construct sovereignty and identity, but it is a powerful tool. As described by Bourdieu (1991), language is symbolically powerful in its semiotic ability to infer a type of capital which can be exchanged or commoditized. Tribal communities recognize that language has symbolic and tangible power to alter perception and their speakers make strategic decisions about how to manipulate the symbolic power of Native language use in public (Graham 2002). According to Ahlers (2006), Native languages are recognized as a means to invoke or display cultural capital and affect an identity that is from and informed by Native culture.

Governments, educational groups and NGOs also base decisions about recognition, resources and funding on the presence or absence of Native language. Native people may find themselves caught between competing expectations of what indigeneity is and how the associated rights are provisioned. As described by Graham (2002), perceived inability to speak a Native language can undermine the authenticity of an Indigenous spokesman and decrease their ability to advocate for their community. At the same time, an inability to speak the dominant language of government can leave communities “voiceless” (191). When Indigenous people are forced into categories based on cultural ability or capacity for cultural performance they can be trapped in static conceptions of indigeneity and experience the disempowering effect of outside groups defining the parameters of cultural authenticity. Boxberger (1989) describes a related process of disempowerment and marginalization in his

theorization of Lummi socio-economic history. The theory and its application are described in more detail in this chapter.

The next sections present examples from South and North America that describe instances where Native language performance impacts the ability for self-determination of political or legal rights. These examples show the importance of Native language in the designation of indigeneity from both within and outside the community. Additionally the examples portray various groups and their national governments in negotiation over allocation of rights and resources, and the construction and maintenance of identity. In each case one can see how the complex factors that impact decisions about language use, preservation and dissemination are contextualized. According to Deloria (1998), there is value in connecting the plight of South and Central American Native communities to those experiences in North America even if their experiences with colonization are different.

### **Language and Land**

This section will provide several examples, mostly from South America, that describe interaction between Native language communities and nation-states, where cultural performance and rights are linked. As previously stated, capacity for maintenance of political rights, territory and resources are related to demonstration of alterity and control of cultural resources like language (Hagan 1978; Williams 1984; Fleckner 1984). Normative demonstrations of indigeneity are problematic for Native communities and dictate potentially unachievable expectations of cultural performance. Birrell (2010:84) states that the legal framework Indigenous people are classified within “entails the production of an abstraction” that is culturally mediated – requiring performance of alterity for provision of unique legal

entitlements. Drawing from Derrida's (1996) discourse on the archive, Birrell (2010) states:

The Indigenous subject oscillates between the 'colonial desire for a reformed, recognizable Other, and a fear of the Other's immutable difference. In so doing, the construction of the Indigene as a legal subject is perpetually disrupted by the alterity of indigeneity as a spectre with-in the law itself . . . While determined by the context of the law, indigeneity interrupts the legal narrative with its indeterminacy . . . (99).

Within the Occidental legal tradition, Indigenous legal and cultural identity is bounded between the need to demonstrate alterity and a requirement that such difference is negotiated through what is permissible for the continuity of the nation state and its legal system. The following examples show several incidents where demonstration of identifiable cultural expression comes in conflict with requirements or expectations of how Indigenous people are defined.

The first example is from a South American community that experienced a high degree of language endangerment. Native language is a powerful symbol of identity for the Sápara<sup>7</sup> Indians of Ecuador, even if many do not speak that language (Viatori and Ushigua 2007:7). The Sápara use their language as a method of self-determination of their cultural and political autonomy in Ecuador and recognize their language as a vital component of both asserting their own independent identity and for individuals to build ideological association with their community. Post-colonial assimilation has led to the incursion of Kichwa (ISO 693-3 qua), an Indigenous macrolanguage,<sup>8</sup> as the everyday form of communication for the Sápara. Though the Sápara were still speaking an Indigenous language, use of Kichwa

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<sup>7</sup> Záparo (ISO 693-3 zro) prior to 2009.

<sup>8</sup> Some will classify Kichwa (Quechua) as an imperial language as it was a tool of the Incan Empire to consolidate power and control.

detracted from internal and external identification of the Sápara as culturally and politically distinct. Prior to 1998, when the Sápara began their language and cultural revitalization movement, they were described as “extinct” because of “an apparent lack of cultural and linguistic uniqueness” and seen as “too affected” by colonization to retain any “emergent standards of group identity” (Viatori and Ushigua 2007:10). The Sápara stressed the importance of their language revitalization program as part of their effort to obtain federal recognition.

The question of how to maintain cultural uniqueness when faced with a duplicity of assimilation forces – those of the hegemonically dominant culture and those of the larger and linguistically robust neighbors – are common challenges for small but distinct tribal communities. Language is a method of demonstrating alterity, though other methods widely exist. The Sápara believe they retain a unique identity even as disease and displacement has made them appear outwardly Kichwa, however their claim is difficult to substantiate without their language use. The example of the Sápara raises a difficult question for any Native community: what would happen to the Sápara if no speakers of the language remained and insufficient resources existed to attempt revitalization? When Indigenous languages fall into disuse, the ability for self-determination in that the community runs into the “Western colonial misconception” that a unique language is a requirement for sovereignty and part of defining a “valid or authentic Indian” (Viatori and Ushigua 2007:11).

Other examples from South America include the Pataxó Ha-Ha-Hae (ISO 693-3 pth) community of Brazil, who no longer speak their traditional language due to encroachment of Portuguese (Ramos 1995; Viatori and Ushigua 2007; Muehlmann 2008). As part of the Pataxó Ha-Ha-Hae campaign to obtain federal recognition, they were compelled to show

Indigenous language use to support their claims of indigeneity. Due to the moribund state of their language, the Pataxó Ha-Ha-Hae adopted another larger regional Native language, Mashakali (ISO 693-3 mbl), as a symbol of their “indigenous legitimacy” (Viatori and Ushigua 2007:12). Unlike the Kichwa example above, Mashakali is closely related to Pataxó, indeed it is the only other member of that language family. Thus, Mashakali is a strong candidate for serving as a marker of linguistic identity for the Pataxó, in a way that Kichwa is not for the Sápara. Unable to facilitate a language revitalization effort, the Pataxó community was forced to claim legitimacy by abandoning their own language. Monod et al. (2008) document the Upper Xinguan (Brazil) struggle to acquire government housing due to the endangerment of their language (ISO 639-3 asn). The Brazilian federal government provides some housing assistance for recognized Indigenous communities, but that assistance is dependent on ability to show unique identity. Inability to secure basic necessities, like housing or subsistence resources, inundates already marginalized communities with additional instability.

Dr. Gustavo Menezes of the National Indian Foundation of Brazil or FUNAI<sup>9</sup> cites examples of Kayapo (Brazil) tribal members involved in fighting construction of a dam in their home territory (personal communication, January 23, 2014). They have found it efficacious to embrace Brazilian expectations of indigeneity by speaking Kayapo (ISO 693-3 tux) and exhibiting traditional dress when presenting their case to courts and governmental organizations. Use of traditional dress and language is common for this community, but represents an active choice to avoid Western attire and language (see Miller 2003). Haley and Wilcoxon (1997:764) find, “indigenous rights movements more often obtain influence when

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<sup>9</sup> FUNAI - <http://www.survivalinternational.org/about/funai>

they employ the kind of widely held primitivist images . . . treating the indigene as a timeless part of the natural world, victimized but uncorrupted by Western civilization.” Whether by strategic choice or force, replication of normative expectations cultural performance detracts from the capacity of Native communities to define their own identity. North American Indigenous communities face similar circumstances and also make informed decisions about Native language use and policy in support of cultural identity and self-determination.

In an Alaskan context, Dombrowski (2001) finds that competition for what is considered authentic cultural performance results in social divisions and even rejection of cultural identity. He terms this relationship “the politics of recognition” (Dombrowski 2004:1063). Dombrowski (2001) describes how some Tlingit (ISO 639-3 til) community members are resentful of the political and legal pressures forcing prescribed expressions of Native American identity. This need to display indigeneity creates resource access competition between community members and tight control over sources of unique cultural ideology like language, Indigenous names and art. Accordingly, people find themselves “within and against their culture” simultaneously (183). One response identified by Dombrowski is that some Tlingit community members have joined a Christian church where they see an increased ability to redefine social hierarchy through “parallel cultural” and “anti-cultural” organization (174).

Also considering the role of political and cultural performance, Comaroff and Comaroff (2009) state that commodification of culture, through tying economics to cultural performance, is one process that leads to internal divisions. They find classes of “ethnic elites” use that cultural commodification to wield unequal control over the means of defining cultural identity (12). According to Dombrowski (2004:363), “indeed, the property of being

native turns out to be commodifiable in a host of important ways, and arguably, it has, despite its recentness, become among the most valuable and most fiercely disputed claims ever made by Native Americans.” Commoditizing the demonstration of cultural identity creates unbalanced power dynamic between people within a community and replicates colonial inequality between that community and the nation-state. There is a strong potential for corruption, exploitation and divisive power struggles in this arrangement.

According to Sider (1993:21), Native Americans must “remain an autonomous people to be considered Indians, they must also in the midst of their autonomy adopt the dominant society’s version of their history, and the dominant society’s requirements for historical continuity, in order to maintain even a shred of their autonomy.” Expectations cultural continuity are both implicit and defined. As example, the U.S. Census defines an American Indian or Alaska Native as “a person having origins in any of the original people of North America, *and who maintain cultural identification through tribal affiliation or community recognition*” (Sider 1993:xvii, my emphasis). No other racial categories in the Census expect maintenance of claimed identity. The census categories do not stipulate that people of “Black” or “White” racial groups should retain identification or affiliation and if it did, would likely create much confusion. Implicit and explicit expectations of indigeneity in the U.S. impact the conceptualization and practice of maintaining cultural and political autonomy. The “special relationship” between Native people and the nation-states they live within is constructed through a series of complex and seemingly contradictory expectations for demonstration of indigeneity. These expectations strain processes of constructing identity to internal and external audiences.

## Conclusion

This chapter has explored political, legal and cultural relationships between nation-states and the Indigenous people who live within their borders. Development of treaty-based relationships and use of language as a medium for demonstration of cultural alterity have been discussed in context of language endangerment. A series of short case studies show Native communities experiencing pressure, both internal and external, to build political sovereignty around a unique cultural identity. Native language use is one way alterity can be articulated and normative language use expectations are challenging for some endangered language communities. If a community feels compelled to signal cultural difference through language, the products of language documentation become important sources of information. Archive resources themselves can be considered elements of defining alterity.

Archives can enable communities to be more active agents in defining their own priorities and identity, leaving them less dependent on and affected by outside views. The implications for Native communities are both ideological and practical. Questions about the legitimacy of cultural alterity can impact rights to land, resources and self-determination. Increasingly, courts are asked to determine the validity of claims relating to indigeneity. Courts rulings are determined based on available evidence and precedent. The knowledge preserved through Native language oral histories, both spoken and in archival form, is a vital aspect of many legal cases. According to Deloria (1984), “language is the key to cultural survival and can not be considered in isolation; it is and must be *the substance of self-determination*” (251, my emphasis). In legal cases the capacity to apply and contextualize the knowledge preserved through oral tradition an important and complicated task (c.f. Ngūgĩ 1986). The role of the Native language use as evidence in court is considered in relation to

maintenance of self-determination in the next chapter. Additionally, cultural resource management is discussed as a way contextualize decisions about language use and access. Concepts of legal representation, resource management and cultural continuity are applied to a case study from Northern Chumash.

## **Chapter 3: Legal Challenges, Oral History and Archives**

### **Introduction**

This chapter discusses the role of Native language and oral tradition as evidence in North American legal challenges over sovereignty, territory and resources. Methods for controlling implementation and use of such linguistic resources are also considered. Performance of language is a common trait used for measuring authenticity and cultural identity of Native people. Courts are a venue where the rights, territory and sovereignty of Native people are determined. Here, as in negotiations with government agencies, Native people's connection to their culture, language and history is used to determine authenticity and privileges. In reference to the law, indigeneity is caught in an in-between or liminal space (Birrell 2015). Law relies on a historical notion of Native people and their authenticity, relegating them to a static portrayal. This portrayal discounts the impact of colonialism and can calcify perceptions of alterity. In an irony, Indigenous people are asked to show continuity to a place where disease may have displaced them and language was actively repressed.

First, this chapter describes several court cases that impact tribal and First Nations rights and highlight the importance of Native language and oral tradition use in court. In legal cases Native language and the oral histories they contain can be used for or against Native people. The control of use, access and contextualization of language resources is important for Native communities to maintain their alterity and in legal challenges. Failure to protect and contextualize oral histories and other Native language recordings that address place names, territory and resource ownership leaves this discourse available to others to

potentially use against the interests of a Native group. This chapter also describes application of Daniel Boxberger's model of natural resource management to language as a resource. An example of language resource use in the Northern Chumash community contextualizes major themes of this chapter. I will begin with consideration of several legal trials and their implications.

The mid 1990's *Delgamuukw* trial in British Columbia was influential for its findings on use of oral history as evidence, Native land title and treaty rights. In the trial performance of Native language was less a factor than the ability to contextualize and translate the information in the oral tradition for cultural outsiders (Daly 2005). In the *Delgamuukw* case, Gitksan, Wet'suwet'en and Nisga'a First Nation plaintiffs were fortunate to still possess fluent speakers and oral historians able to share evidence about land and resource ownership in culturally appropriate formats. However, the Court's intractable Western bias left much of this evidence underappreciated or dismissed.<sup>10</sup> Living speakers able to deliver complex oral histories may no longer exist in many North American tribal communities.

Cultural resources, like language, have poignant ability to describe the nature of attachment between people, places and resources (Hagan 1978; Williams 1984; Fleckner 1984). According to Birrell (2010:81), the "authenticity" of land claims efforts is directly assessed in relation to demonstration of unique cultural identity. In those instances when fluent oral historians are no longer available, the role of oral history documentation in archive collections becomes heightened. As described by Christen (2005:319), in the 1970's Aboriginal people in Australia collaborated with lawyers, anthropologists, and various

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<sup>10</sup> Bias was notable in the original court case presided over by Chief Justice Allan McEachern, not the appeal presided over by Chief Justice Antonio Lamer.

government institutions to document their spiritual affiliations to traditional lands. They engaged in documentation of sensitive cultural information for a practical reason: to provide evidence for Native land claims cases. Archival preservation of oral histories is also important because that process brings a degree of validation. According to Mawani (2012:355), “absent from the archive, oral histories cannot be accepted as law” – as written texts are so heavily privileged by courts. The results of the *Delgamuukw* trial and subsequent appeal show that legal acceptance of oral history is changing slowly. First I will describe oral histories as cultural processes of knowledge preservation and transmission.

## **Oral Traditions**

The importance and accuracy of the oral tradition as a mechanism for the communication and preservation of historical information is well documented (Bierwert 1996; Thom 2003; Cruikshank 2005; Miller 2007, 2011). Indigenous languages of the Americas were predominantly unwritten; accordingly most aspects of culture were orally held and disseminated. This includes specific information about ownership rights to territory and resources, legal practices and genealogy, all of which are critical for establishing and proving traditionally held territory, resources and political processes. Information was and is a source of power and wealth for many oral cultures. Elder/scholar Vi Hilbert describes current generations who are growing up without access to the information contained in their language and stories as both materially and physically impoverished, they are “pitifully undernourished, so poor” (Jennings and Hilbert 1995). The oral tradition preserves and disseminates this information via highly contextualized songs, stories and place names. Native communities in the U.S. and Canada have found that the ability to produce, interpret

and show current application of oral tradition teachings can represent success or failure in courts. The U.S. and Canada have separate legal practices and differing recognition of tribal sovereignty, but in each country it seems almost assured that tribes will continually need to defend their rights to land title, resources and sovereignty (Wilkins 1996).

Treaty making was often the first experience Indigenous populations had with written law (Harmon 2007). Many Native treaty signers did not read English, so the treaties were presented orally to the tribal members prior to signing. An obvious disconnect exists between what was told about treaties and their actual details and impact. According to Deloria (1978:97) Pacific Northwest treaties were presented to tribes using Chinook Jargon, which is a pidgin combining sign language, several Native languages, English and French. Chinook Jargon had been used as a trade language for about a decade prior to treaty signing. We can be assured that the nuances of this life changing legal agreement were not all communicated and understood. Indian and treaty law interprets what Native treaty signers believed they were signing, not the technical detail of what was written (Boxberger 2007:65). However, over time it becomes less clear what those differences are. Ultimately treaties are a creation of colonial governments and will continue to be interpreted by their courts and legislative bodies. Of lingering concern to U.S. tribes is that Congress retains unilateral ability to abrogate and alter treaties (Pommersheim 1995:41). The following examples of Native language and oral history use in courts are presented to show the importance of these resources and the challenge Native people experience when using them as evidence. The importance of both securing resources and contextualizing them is underscored.

Western legal systems are just that, Western. They are constructed and run to support and emulate the traditions and hegemonic principles of Western society. Courts and

especially active trials are challenging places to mediate the complex and culturally sensitive issues of how to use oral tradition as legal evidence (Miller 2011). Miller details the uphill battle tribal communities face using orally preserved knowledge as evidence in legal challenges. When tribal communities face or bring legal challenges over territory, access to resources and compensation for colonial injustices, they must furnish evidence of the nature of their past and present connection to territory that is understandable and seen as legitimate to the Western court system. Over time various court cases have established tests for proving tribal connection to land and resources (see Roth 2002:154-156; Miller 2011:109-113). The *Delgamuukw* trial identified “the nature of attachment to land” as the epicenter of investigation for determining establishment and maintenance of aboriginal title (Roth 2002:154). In the *Delgamuukw* trial tribes had to show evidence of “exclusive possession” of territory “managed according to traditional protocols” and “continuity of traditional use” as proof of their attachment (156-157). Both the U.S. and Canada rely on the same English legal foundation and there is a precedent for application of court decisions (*Southern Rhodesia, Re [1919] AC 211*) in former English colonies to modern land claim cases. U.S. tribes would be remiss to ignore the outcomes and opportunities illuminated by the *Delgamuukw* and the recent *Tsilhqot’in* trials.

Tribes and national governments rely on anthropologists and others to provide testimony on their behalf. Written evidence – often journals, letters and logs of missionaries, explorers, military or commercial representatives, is one source of such information. It is important to note that most written colonial and explorer accounts occurred after epidemics decimated local populations and disrupted traditional cultural practices (Mann 2006). These colonial accounts must also be understood as carrying the common bias held about Native

people during the time period. In the absence of acceptable written evidence, tribes turn to what they have always considered their most accurate and reliable source of evidence – oral histories.

Oral histories are stories that draw their strength, validity and meaning from relational information. Cruikshank is considered an authority of the oral tradition and, as cited by Miller (2011:12), her definition of oral tradition is: “broadly speaking, oral tradition (like history or anthropology) can be viewed as a coherent, open-ended system for constructing and transmitting knowledge” (Cruikshank 1994:408). Oral histories also reference people, places, events and other histories to contextualize and deliver their message, which can be difficult or culturally incompatible for cultural outsiders to interpret (Miller 2011). To present evidence tribes may place elders or other oral history practitioners on the witness stand or behind a deposition camera to describe the meanings of place names and origin stories showing connection to a physical location. To many tribal people, there could be no better way to elucidate the connection between people, place and history than the stories and words that have been carefully guarded for generations. The ideological difference between Indigenous ideas about law, including what constitutes evidence, that of Western courts can be described as incommensurable. Pommersheim (1995), Asch (1997), Culhane (1998), Daly (2005), Bell (2009) and others provide examples of cultural incompatibility in the legal arena.

Oral histories represent a synthesis of ideas and information that forms a verifiably accurate narrative, something described as historiographic structure (Miller 2011:32). Just as scholars will critically evaluate the validity or context of, so do practitioners of the oral tradition. Use of Indigenous words, place names, the presence of cultural teachings and the

information presentation style all provide someone versed in oral histories ability to understand their nuanced meaning. For a Westerner, a list of Native place names is not the first place one would start for researching land or resource ownership. However, it is the very starting place and authority for how trained tribal people will skillfully detail the deep meaning and significance of a place name as it relates to tribal boundaries, resource ownership, genealogy and history (Richardson and Galloway 2011). Historiography also describes the embedded information within oral histories. Aboriginal chronology skillfully embeds new events into the telling of much older stories providing dual timelines of information and meaning. Dinwoodie (1998) provides an example of contextual use of historiographic information by the Tsilhqot'in First Nation through their use of creation story referencing in a declaration of territory and resource ownership (see Chapter 6 for more description).

Use of mnemonic memory aids such as physical places, significant natural features and referencing other oral histories are common methods for presentation and preservation of this knowledge. Practices of referencing in oral histories are analogous to academic citations, where the work and ideas of other respected practitioners are cited to bring validity, context and deeper meaning to an argument or account. Presenting oral history in court is a challenge because outsiders to the community do not understand the citation style or the sources being referenced. In a legal case, this information will be more directly understood if the information is culturally translated for outsiders. Anthropologists often do such cultural translations and it is important to avoid disempowering community members through the perpetuation of outside expert privilege (Rosen 1977). Experts like Miller (2011) advocate for greater numbers of trained Indigenous historians, able to serve as expert witnesses and

cultural translators in court cases for their own communities. Use and management of archives (such as community-based ones) provides an environment to store oral histories and contextualize their meaning through metadata, and linkages to relevant images, locations, place names, genealogies and histories. Legal cases are an important context to apply resources in an archive collection. Building a qualified base of tribal members who are versed in oral evidence and able to interpret use for external circumstances is an aspect of affirming and expanding the self-determination capacity for tribal communities.

Archival management of oral histories is one method to ensure the preservation of documentation can influence court trials. Perhaps equally important, archives (especially participatory ones) can provide opportunities for engagement and recontextualization of knowledge found in documentation. Recording existing oral histories for an archive or enabling access to historical recordings alone will not alter the ability for Western courts to hear or understand the evidence within oral histories. In the context of legal cases, the challenge for Native communities is how to establish effective use of oral history resources and provide the context needed to understand or interpret the information. For many communities (see description of Reid (1987) in Chapter 4 and Sealaska Archive in Chapter 6) there is justified concern that groups opposing Native claims to rights, resources and territory could inappropriately access oral histories and misrepresent important cultural information.

Anthropologists have a role in working with linguists and other archive practitioners to develop archives that are compatible with a community's cultural framework. According to Miller (2011), anthropology contextualizes information such as oral history to more accurately portray the interdependent or holistic way Indigenous cultures understand data. Western courts often decontextualize data by looking at evidence in pieces. When oral

histories are cut up into palatable forms for courtrooms they are further decontextualized and in doing so, obscure or flatten the meaning in the histories. The same can be true in an archive. If we accept that oral tradition derives its accuracy, longevity and importance from active use and engagement with issues both current and past, then what happens to these histories that are no longer used in everyday life, but exist sequestered in an archive? When oral histories lie dormant, isolated from current application, they risk losing their richness and efficacy. A challenge for archives is how to enable cultural resources to continue having a relevant role in society. The oral tradition has always been, as stated by Miller (2011:129), “embedded in their [Native people’s] lands, tools, hands and faces, the conditions of their houses and villages, and other features of the landscape.” Archives that enable communities to annotate, contextualize, draw linkages and build historiographic structure replicate important cultural practices. These participatory elements may enable archives to avoid becoming the digital cemeteries that Widlok (2013a:185) cautions against, instead being an active place of dialogue with past, current and emerging histories. Methods, such as participatory archiving, can enable ability to meaningfully interact with knowledge in an archive that not only reinforces traditional knowledge preservation methods, but also can ensure materials have continued application.

### **Laws of the Land**

The *Delgamuukw* trial provides an example of the challenge and ultimate success of oral history utilization in court. The lengthy *Delgamuukw* trial involved extensive presentation of oral history testimony, both in Native languages and English by an impressive assemblage of traditional chiefs and titleholders (Daley 2005). Their presentations were

largely misunderstood and undervalued, at least in the initial ruling (Roth 2002). Unlike most Canadian First Nations in B.C., many U.S. tribes have already established land ownership through treaty processes. Treaty and ownership rights may be regularly challenged in the U.S., but the *Delgamuukw* trial was about the establishment of historical land title. The recent *Tsilhqot'in* (2014) case is a clearer victory for First Nations. In *Tsilhqot'in* the Canadian courts granted Aboriginal title in B.C. for the first time, though only for one community and one piece of land. Roth (2002:144) describes the lack of legal definition around territory and sovereignty as “the British Columbia anomaly.” The only historically recognized treaty in the province is the 1898 Treaty 8, in northern B.C. Until *Tsilhqot'in* confirmed land title was obtainable in B.C., the 1763 Royal Proclamation, which states that Native title will not be extinguished without voluntary cession, remained the legal basis for most Aboriginal land title. The *Delgamuukw* case, which began in 1987, was an attempt to bring clarification to land claims in B.C.

The *Delgamuukw* ruling created a modern treaty effort in B.C, led by the BC Treaty Commission. As of March 2014, nine First Nations, including the Tla'amin Nation, In-ShUK-ch Nation, Sliammon Indian Band and Yale First Nation have negotiated agreements to transfer land ownership and law making authority to these First Nations (BC Treaty Commission 2014). Of these, only two (the Maa-nulth First Nation and the Tsawwassen First Nation) have ratified treaties. The Nisga'a First Nation ratified a treaty before the formation of the BC Treaty Commission and another six treaty negotiations have been agreed in principle, but not yet ratified. Initially the treaty process was attractive to many tribes concerned that the *Delgamuukw* decision left them with few legal options to attain land title. However, according to Asch (2000) after the successful appeal, most First Nations saw the

B.C. treaty process as unnecessary and potentially leading to excessive relinquishing of rights. In the past few years the BC Treaty Commission process is some experiencing renewed interest. In March 2014, Tla'amin Nation became the most recent First Nation to reach the principle agreement stage of treaty negotiations.

With the success of *Tsilhqot'in* it is likely that many First Nations communities will seek to obtain land title through the courts, rather than the treaty process. Junger, et al. (2014:6) state,

An inevitable question is whether this decision will result in a significant number of other Aboriginal title claims coming forward through litigation. Only time will tell, but it is certainly not inevitable that this will be the case. Such litigation costs many millions of dollars, and at the end of the day, federal and provincial legislation can still infringe Aboriginal title for compelling purposes including economic development, mining and forestry.

First Nations communities will have to determine if the expense and risk of litigation is worth the rights they could be awarded. The *Tsilhqot'in* trial is part of an ongoing effort by the community to secure resource use in their territory (see Dinwoodie 1998). The ruling does not settle the question of compensation for use or occupation of unceded territory in B.C., but it is a significant victory. The *Delgamuukw* trial sought to obtain land title as well, but also became a trial for the validity of testimony based on oral history in court.

After three years of legal proceedings, the *Delgamuukw* trial judge, Chief Justice McEachern, found in favor of the Canadian government and discredited the validity of the oral history evidence provided at length by the Gitksan, Wet'suwet'en and Nisga'a First Nations. The 1991 ruling essentially extinguished their Native title to land in B.C. and also rejected the articulation of territory ownership and hereditary transfer described in length by

the plaintiffs. McEachern's biases have been written about at length and are grounded in fundamental beliefs about Native people and colonization described as "frontier myth" by (Rigby and Severeid 1992; Furniss 1999), supporting ideas of empty land, manifest destiny and a "struggle of white values of self-reliance, democracy and competition against opposite and degraded Aboriginal values" (Miller 2011:44). McEachern is infamous for citing Hobbes in his argument finding that the pre-contact Indigenous people of B.C. lived "nasty, brutish and short" lives (Roth 2002). The initial ruling was a significant setback for B.C. First Nations communities and the role of oral history in trial.

The ruling was appealed to the Canadian Supreme Court with partial success. In 1997 the Supreme Court reversed the lower court findings, but it was not the victory initially hoped for. The appeal did not settle the issue of aboriginal land claims in B.C., though it did revoke the initial extinguishment of title. Importantly, the appeal affirmed the legitimacy of oral history evidence use in court and recognized the validity of traditional territory and resource ownership and transfer protocol. According to Roth (2002:155), "the 1997 *Delgamuukw* appeal decision has made aboriginal legal principles and protocols – especially including rules governing the use, protection, and alienation of territories – a central type of evidence in the business of evaluating claims to aboriginal title." There is potential that the appeal ruling will provide a pathway for settling the large number of outstanding land claims in British Columbia and reduce future extinguishment of tribal sovereignty, as seen in the *Tsilhqot'in* case.

Western law is a culturally constructed entity that reflects the beliefs, values and history of the system that created it. Because the legal system is so imbued into our everyday lives, we can easily fall into the normative trap of believing it is based on universally held

ideas that reflect the most accurate rendition of correct cultural practices. Societal laws held equal validity in pre-contact Native culture and were reflective of their cultural traditions, as Western law does in our present society. The *Delgamuukw* trial serves as example of the intersection of two legal systems. Kandel (1992) describes anthropological best practices as non-judgmental and promoting cultural relativity. This contrasts with Western law and courts, which are, normative and judgmental (1-2). For the communities associated with the *Delgamuukw* trial, and many North American Indigenous communities, legal, protocol and rights claims were, and are, found in oral histories. Excluding oral tradition creates an impossible and undue burden on these communities to furnish evidence for legal claims. The use of oral history in *Delgamuukw* was possible because traditional teachings are still in active use in those communities. In many communities those teachings are held in archives, where language origin community members may have insufficient ability to control access.

These examples of the application of oral history as evidence in legal and procedural situations, along with the direct connections between language performance and sovereignty necessitate discussion about the development and management of such resources. As stated by Mawani (2012:353), “in current conflicts over indigenous claims to land, sovereignty, and self-determination, the archive remains a crucial point of reference and return.” I find that application of Boxberger’s (1989) model of cultural economy has utility in relation to archival management of oral history and language resources, because these cultural resources are often directly connected to tribal capacity for self-determination. For many language communities, the archive has become a main locus for the preservation of language resources and in effect their language, as conversational use declines. Accordingly, the archive is a site to study access controls and use of language resources. The choices about use and access by

language resources can be understood in context of a common pattern of Native American resource interaction.

### **Common Methods of Control**

Daniel Boxberger has spent his academic career immersed in research, writing and litigation relevant to Pacific Northwest Native communities. His book, *To Fish in Common*, is widely recognized for its ethnographic account and its historically grounded, cultural and economic analysis of regional salmon fisheries. In the book he describes his study of reservation community economic underdevelopment and a model of Native American resource use from the period prior to colonization through the present. Boxberger's contributions are based in study of the Lummi Nation and its tribal members as they participate in the regional salmon fishery.

The Lummi are a comparatively large Coast Salish community, with a reservation directly west of the city of Bellingham, WA (see Chapter 4 for more detail). The Lummi traditionally derived a significant portion of their diet from productive salmon runs of the Fraser River and, to a lesser extent, the nearby Nooksack River. As described by Deloria (1978b:93), "the social and political life of the tribe revolved around its fishing activities." Their traditional fishing grounds were the most productive in the state north of the Columbia River at the time of contact (76). However for the Lummi, their long-standing economic autonomy prior to European contact shifted to a state of dependency in just two centuries.<sup>11</sup> Fish are a unique "common-property resource," that no one owns prior to their being caught

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<sup>11</sup> European contact occurred in the 1790s for the Lummi (Boxberger 1989:18)

(Boxberger 1989:54). Resources of this nature are especially at risk for over use in a capitalist market.

The era between 1855 and 1900 brought new opportunities for Lummi to participate in a still vibrant salmon economy as laborers and sources of valuable knowledge (Boxberger 1989). During this time the colonial economy was still developing and salmon were plentiful. Overfishing, competition and increased settler incursion precipitated Lummi exclusion from the fishery industry between 1901 and 1974. Through litigation, activism and insistence of treaty-based rights to self-determination, Lummi experienced “marginal reintegration” into the state economy and some reestablishment of resource control in the late 1970s. Today Lummi has the largest Native fishing fleet in the state, but chronic underdevelopment still exists. This state of underdevelopment exists even given the presence of a valuable and commodifiable resource – salmon. Boxberger shows resource use can be characterized as a process starting with exclusive control of the resource, followed by integration of the Native population as labor and providers of the resource for colonial use, to forced exclusion and finally marginal reintegration in the resource economy. Through tracing the history of resource use and access, Boxberger is able to illuminate the impact of Native community entry (or collision) into the capitalist economic model.

At the time of European contact Lummi maintained access and control of an abundant and predictable salmon resource (at least once it returned to their territory) that formed the cornerstone of their culture. Salmon, as a resource, were utilized throughout the Northwest Coast and naturally competition existed. However, resource access practices and territory were well defined and regulated through cultural practices and described in the oral tradition and physical objects like totem poles (Suttles 1987; Boxberger 1989; Thom 2003, 2005). At

the time of treaty signing, in the 1850s, salmon were still of great importance to Native communities, but of little interest to settlers. Timber and land were of principle importance to non-Natives, as the commercial fishery for salmon would not begin for another 30 years. “By 1900, however, salmon were the most important resource to the state economy and Indian fishing was nearly extinct” (Boxberger 1989:2). At first, settlers were satisfied to buy fish from the Natives, and it was not until the 1880’s that they began aggressive commercial fishing. Starting about 1900 control of the salmon fisheries most productive runs and the capital to finance large scale operations were in the hands of settler society. The reservation based tribes saw a loss of their capacity to participate in the fishery because both the capital and decisions were controlled externally. Boxberger relies on a model of dependency theory that finds that the centers of capitalist power extracted labor and resources from the peripheral economies (Frank 1967; Aberle 1983). This relationship maintained a lack of infrastructure, development and capital in the periphery that continues today. Once the Lummis were drawn into the capitalist system they were used when profitable and excluded when competition (such as Chinese labor) or technological advances (notably the fish trap) were more attractive.

In 1893 Washington State began regulating and taxing use of salmon fishing traps, in part to exclude Native fishers. The white commercial fisheries quickly licensed most of the valuable sites and “in effect, it precluded Indian fishing” (Deloria 1978b:105). Though the Lummi were successful in winning several court cases in 1913, 1915 and 1916 that supported their treaty based rights to fish salmon, state and county officials largely disregarded the federal rulings and continued to harass, fine and deter Native fishing in the Puget Sound (107-108). Canneries, especially the Alaska Packers Association, forced the Lummis out of

the most profitable Fraser River fishing runs and they were forced to rely on Nooksack River subsistence fishing (Boxberger 1989:53). The Lummi attempted to participate in the commercial fishery numerous times and were marginally successful on occasions. However, by the early 1960s they lacked sufficient capital to maintain their small fleet and compete with larger non-Native operations. Native fishermen were further isolated from participation in the capitalist market because their reservation property was held in trust by the government and not available for use as collateral in a capital loan application from a bank (147). Throughout their experience of exclusion from the fishery Lummi people (and other treaty holding Native communities) maintained that their 1855 treaty guaranteed them fishing access in “usual and accustomed” locations and that these rights superseded the authority of state and county regulations. In 1974 the *U.S. v. Washington* decision (the Boldt Decision) acknowledged this claim and opened a new era of access and participation for the Lummi.

Judge Boldt found that Native fishers were guaranteed “in common” access to the salmon fishery and set the Native allotment at 50% of the total state catch. The ruling was a significant success for Native communities and fiercely opposed by non-Native fishers. In the years following the decision the Lummi salmon harvest increased dramatically. After the Boldt Decision, Lummi became the largest tribal fishery in the state harvesting up to 90% of the total tribal salmon quota (Boxberger 2007). This is largely due to their location on the Fraser River sockeye run and the size of the Lummi fleet, though the skill Lummi fishers should not be understated. Unfortunately, even as the largest and most efficient Native commercial fishery in the state, 90% of Lummi fishers still lived at or below the poverty line by the early 1990s (178). Lack of equipment, technology, financing challenges and a continued role as a raw material producer kept Lummi fishers in an economic disadvantage.

Boxberger sees this experience as evidence of the impact of exclusion from decision making and relegation to the periphery of the economy. He argues that his model of resource access and exclusion is “universally applicable” to Native-colonial resource use scenarios (Boxberger 2007:58). He also finds that,

This model of resource use and control examines the process of the hegemonic relationship between Aboriginal peoples and modern nation-states. It struck me that it might also apply to cultural and intellectual property. Today the use and control of traditional knowledge constitutes the major issue of the anthropology of the Coast Salish (Boxberger 2007:62).

Boxberger’s connection of cultural and intellectual resource management to his respected model of economic resource participation provides an important theoretical structure for viewing Native American cultural resource management and history.

The use and control of Native language through both performance and archival management in communities like Lummi and Nooksack (see Chapters 4 and 5 for more detail) can be viewed in relation to the theory articulated by Boxberger. Both Lummi and Nooksack had exclusive control over decisions about the use and dissemination of their languages during pre-contact times. External factors like war, migration, natural disaster, exogamous marriage, and language prestige and utility impacted language stability before colonization (Carlson 2007), but the tribes possessed a high degree of agency to determine language use. Colonialism brought integration of *Xwlemi' Chosen* (Lummi language) and *Lhéchelesem* (Nooksack language; ISO 639-3 nok) with settler culture and English. Some Coast Salish loan words and place names were integrated into English and some settlers learned Coast Salish languages, however the next phase of exclusion quickly took over. This was the era of boarding schools and forced assimilation that has precipitated Native language

endangerment in some communities. The phase of marginal reintegration can be seen at both Lummi and Nooksack in their efforts to preserve and revitalize their languages. The period of reintegration and reassertion of control over language produces culturally mediated responses by language communities for use, access and application of their language resources, both through oral language use and in archives. These responses are attempts to reestablish control and formulate policy around a resource that has become endangered, like salmon. A common reaction to scarcity is protection and restriction; another response is propagation and dissemination. Responses to salmon endangerment are complex, but strategies include both setting catch limits and propagation through hatchery programs. Responses to language endangerment are equally (if not more) complex.

In relation to language communities, some become highly protective of their language resources and restrict dissemination, while others share and teach to anyone willing to learn. Since language is so closely tied to identity and sovereignty, some groups are caught between needing to protect the resource, affirm sovereignty and engage in effective methods of language revitalization. In come cases, these competing interests can challenge articulation of language policy in a community. The efficacy of language dissemination efforts may be dependent on tools and methodologies that support the needs of communities in a process of reintegration of resource control. The Hawaiian language (ISO 639-3 haw) is one of the most successful examples of language revitalization in the world (Warner 2001) and accordingly, the dissemination methods for this language is worth consideration. As at Lummi, the Hawaiian approach to language dissemination can be understood in context of their experience of inclusion and exclusion from use and management of this resource. The experience during the exclusion period is of significance. In the Hawaiian context a high

degree of colonial integration with their language was experienced. In comparison Coast Salish languages, like that of the Lummi, saw very marginal levels of dissemination (especially in written forms) during the early colonial period. Settlers did not, by and large, learn Xwlemi' Chosen and the language never experience significant dissemination outside of its reservation boundaries. These two examples provide an approach to understanding the way language resources are managed by Indigenous communities in a period of cultural resource control reintegration.

### **Two Pacific Experiences**

The Hawaiian language is taught in a variety of public settings, including language nests for young children, K-12 immersion education, graduate and undergraduate degree programs. Language nests originated with Māori language (ISO 639-3 mri) language revitalization efforts in the 1980s, where older generation language speakers participated in early childhood education to provide children with an opportunity for language acquisition that may not exist in the home or standard school setting (Wilson 2001). Access to and dissemination of the Hawaiian language is among the least restrictive I have seen for an endangered Indigenous language. Dorian (2010:32) explains that communities exhibit fewer access and use restrictions for stable, “high vitality” languages in the public sphere. Communities with “low vitality” languages demonstrate the opposite reaction (c.f Florey 1993). According to Dorian, high vitality languages are those that have stable speaker bases and low vitality languages are those experiencing high degrees of language shift. In the Lummi community few speakers remain, while there are over 2,000 in Hawai'i. Hawaiian

language revitalization strategies are modeled worldwide, but their methods are challenging for some communities.

In 2005, I led a research trip to Hawai'i with a group of Lummi elders to learn about these successful language programs. We saw Hawaiian taught to anyone willing to learn in multiple educational settings. While visiting a Hawaiian language immersion school, the Lummi elders inquired about protecting access to the language and its cultural information. The Lummi, like many Salish communities, are highly protective of their language and maintain cultural protocol around its dissemination. The Hawaiian language teachers were direct with their belief that language should be taught to anyone who will learn it and the more available the language is the better. My Lummi companions found this level of access to language culturally challenging, but also saw the success of Hawaiian language dissemination efforts. When we returned from Hawai'i I watched to see if any language access or use changes were implemented. No significant changes were evident, leading me to question if protection of the Xwlemi' Chosen was inappropriately rigid. Since that time, I have come to appreciate the cultural and political rationale for the level of language protection at Lummi. Both history and cultural protocol are responsible for the differences in beliefs and cultural resource management helps contextualize these processes.

Missionaries developed the first Hawaiian language orthography in the 1820s and by the 1830s the first public Hawaiian print newspapers were in circulation throughout the islands (University of Hawai'i Manoa, n.d). Between the 1830s and mid 1900s over 100 newspapers in the medium of Hawaiian language were in use. Later Hawaiian language radio shows were also available throughout the islands. Literacy itself does not precipitate language stability or revitalization, rather my point is that the level of integration of a

language during early colonization has impacted ideologies about access and dissemination of language resources in seemingly predictable ways. Wide use of Hawaiian language in public provides a clear distinction from Salish experiences. In contrast, Xwlemi' Chosen has never had significant utilization or exposure outside the reservation and Lummi has struggled to develop an official orthography since at least 1978 (Charles, et al. 1978). In terms of Boxberger's typology, the Hawaiians experienced a florescence of public language presence during the period of integration with settler culture. During the subsequent period of reintegration, the Hawaiians had both precedent and resources for continued public use of their language. Lummi's limited integration of their language during early colonialism has left Lummi at a disadvantage for implementation of language revitalization. There is potential for further research on how experiences with language during colonial integration have manifested themselves in other communities. This information can help identify ideology and beliefs around language access and control. Articulation of other cultural impacts, such as class and status also has ability to alter resources access decisions. Next I briefly describe Coast Salish views on language and knowledge as property and a resource for management.

Suttles (1954, 1987), Deloria (1978b), Miller (2007) and others describe Coast Salish views on both the possession and dissemination of knowledge related to status and family owned privileges. For the Coast Salish, class standing was dependent on numerous hereditary possessions passed down within families. These hereditary possessions were generally intangible in nature. One of those possessions is identified by Suttles (1987:8) as *snəp*, usually translated as private knowledge or "advice." According to Suttles, "in a society that stressed private property as the Coast Salish did, it must have been very effective to present

moral training as private property, in the context of secret knowledge on the gaining of wealth and the maintenance of status” (9). Possession and control of advice conferred the practical, spiritual and moral attributes of members of the high class. Those people and families that “had no advice” and had “lost their history” were described as “low-classed people who don’t have anything and don’t know anything” (8). These factors of social stratification and ownership relating to both tangible and intangible resources were and are highly influential in Coast Salish life. My research does not address to what degree historic notions of class distinction continue to influence decisions about knowledge dissemination and access in Salish communities like Lummi, but according to Carlson (2007:616) “ . . . it is clear that, within Coast Salish society, status and identity have long been intimately and inescapably linked to spaces and places.” The early ethnographer George Gibbs found that the Chimakum people, a now extinct Quileute tribe (Washington State), maintained such a high level of secrecy around their language that Gibbs referred to it as a “state secret” (Gibbs 1877).<sup>12</sup> In other Northwest Coast communities, like the Kwakwaka’wakw, Goodfellow (2005) also reports that class distinctions remain alive and well. As communities reassert control of their languages, they may also fortify practices for protecting knowledge that ultimately diminish potential for dissemination.

My research at Lummi from 2006-2007 (Shepard 2007, 2009) found that knowledge of and access to Xwlemi’ Chosen educational resources and opportunities for language education may be influenced by ongoing processes of access control. In that study, research participants identified lack of access as a barrier to greater language dissemination efficacy among other issues, including orthography standardization and disparate language policy

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<sup>12</sup> The Chimakum people dispersed and amalgamated into the Skokomish, Jamestown S’Klallam and Port Gamble Band of S’Klallam Indians.

between departments. Statements such as, “our mental model is that language acquisition is too hard, too much, too secret,” were indicative of several responses elicited during Lummi community focus group sessions (Shepard 2007:140). Tension between protection and dissemination of cultural resources can result in a climate that threatens the transmission of cultural knowledge. This tension can be indicative of continued adherence to cultural protocol and values. Such tension can also reflect a need for development and implementation of different examples of language preservation and dissemination technology. Participatory archives are one such potential solution. Regardless of the technological solution, effective management of intellectual property is critical.

Brown (1998) states that tribal interests in ownership and control of cultural resources are attempts to regain command of their own identity construction, and political and economic sovereignty. Regaining management of resources important for self-determination is consistent with Boxberger’s period of marginal reintegration following a previous period of exclusion. Within Native communities there are divergent beliefs about dissemination of cultural material. Many Native cultures had and still have strictly controlled political and religious practices based on compartmentalization of knowledge access. Unrestricted access poses a challenge to those hierarchical power structures. Brown (1998:197) cautions that protectionist control of resources can lead to static understandings of culture and “difficulty distinguishing culture from its material expression.” In endangered language communities like Lummi, archives are becoming a focal point for language preservation efforts. The archive can become a site of material expression for endangered language communities that are not experiencing conversational use of their language.

Inappropriate use of intellectual property, extractive outside research practices and cultural assimilation has led many communities to fiercely protect their cultural information. For some communities and some types of cultural information, strict protection has preserved that information for use by current and future generations. In other communities, open strategies of dissemination have been key to preservation of information. Elder/scholar Vi Hilbert states that when she first started teaching the Lushootseed language (Washington State ISO 639-3 lut) at the University of Washington there was concern that these teachings should only be told within the family and especially not to non-Natives. Hilbert's response was that, "If you are teaching your family all that I am and you will live forever, then I will quit what I am doing" (Jennings and Hilbert 1995). Hilbert's work was controversial for her willingness to share cultural material in a public setting (Malone 2013:110). According to Malone, some Upper Skagit tribal members felt she "had betrayed the community" by teaching the language to non-Upper Skagit people.

Hilbert (1985) states her documentation and education efforts are driven by an interest to protect a fading art form and cultural tradition. This topic remains controversial in many Native communities and the balance of protection and dissemination can be difficult to strike. Views on appropriate protection of language vary from community to community and between generations and families. Concepts of "compartmentalization" and "containment" are useful in considering tribal responses to culturally significant materials in archives and on the Internet. The classic linguistic anthropological study by Keesing (1992) provides another way of viewing practices of accesses and control.

Keesing (1992) documented Kwaio (Solomon Islands ISO 639-3 kwd) community efforts to preserve their culture through processes of "containment and

compartmentalization.” Compartmentalization is the psychological or spatial isolation of aspects of traditional culture from an outside and/or assimilating group. For the Kwaio, “the way of the ancestors endures because of the invisible fences built around them, policed and tended” (198). This classic example shows how processes of containment can be used to safeguard cultural knowledge by keeping it private. Keesing describes Kwaio efforts to keep their culture separate from missionaries through avoiding the cash economy, insisting on use of the Kwaio language and keeping separate living spaces. Many minority communities exhibit elements of “containment and compartmentalization” around their languages and culture that are based on a combination of adherence to cultural protocol around knowledge dissemination and protectionist fears of inappropriate use of information. Competing interests in protection of cultural information, like language, and desire to use effective dissemination methods creates conflict for language communities.

In Chapter 1 endangered language archiving was described in context of the history of archiving as a practice and discipline. The process of archiving has over time created power imbalanced between those ‘doing’ the archiving and those groups whose resources (physical or intellectual) are being archived. The practice of archiving has, and in some cases continues to, constitute a replication of colonial roles and ideology. In many, but not all cases, archives continue to be unequal sites of interaction, particularly, between Indigenous peoples the dominant culture (Povinelli 2001). Especially in light of Internet based sharing of digital media, the practice of archiving is intertwined with questions about dissemination and access. For most of the Native communities I worked with, questions about appropriate dissemination and protection of intellectual property are the most contentious issues relating to language archiving. An example from the Northern Chumash tribe of California shows the

complexity surrounding access and control of archival language resources. In this case questions about protocol and intellectual property are important, but in different ways than other groups I researched with.

### **Ethnogenesis and the Archive**

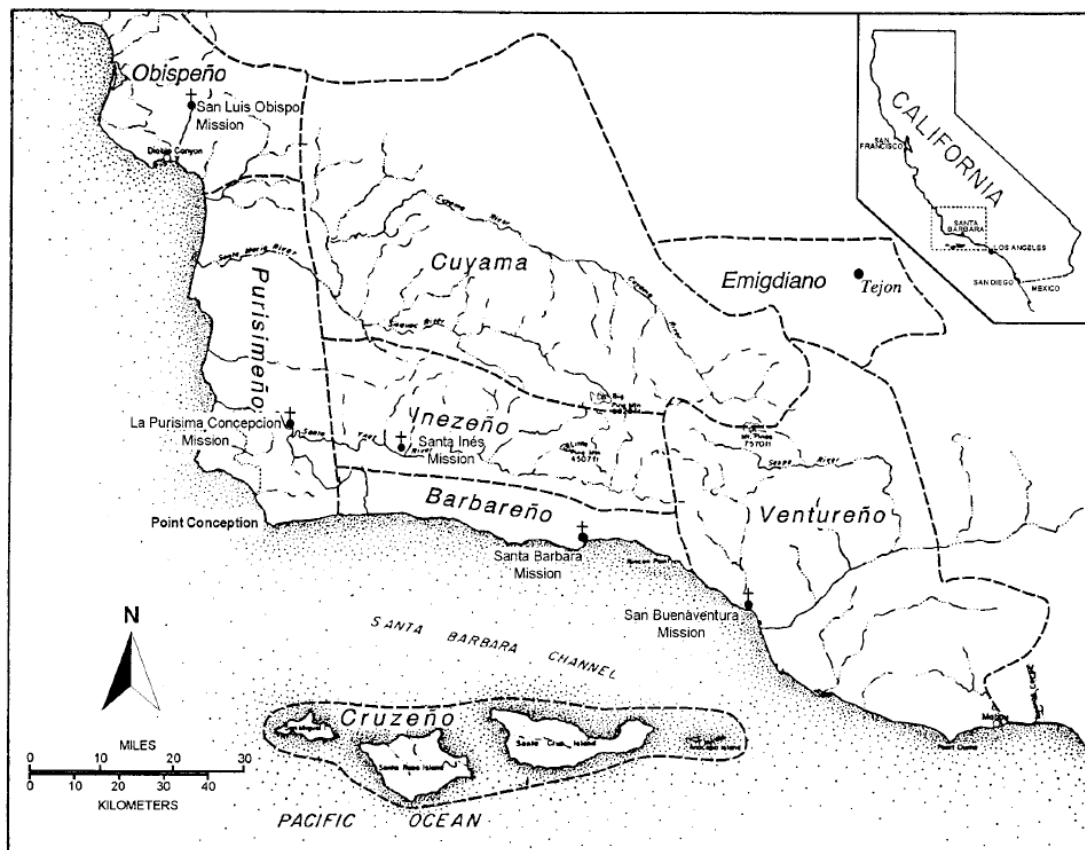
For many outsiders, controlling access to a language does not make sense, especially in situations where the languages are facing endangerment. However, when language is understood as an element of the performance and maintenance of sovereignty, the connections become clearer. Sovereignty is paramount to identity and livelihood for many tribal communities. Accordingly, elements of culture that articulate the nature of tribal claims to sovereignty are highly significant. Many tribal communities, especially those without formal treaties and recognition, find they must constantly protect themselves from situations where their self-determination can be eroded. For the Northern Chumash (ISO 639-3 obi) the desire to control access to their language is tempered by a struggle for federal recognition, need for assistance revitalizing their language and an ongoing effort by non-aboriginal people (neo-Chumash) claiming Chumash identity.

Leah White Horse-Meta is a member of the Northern Chumash Indian Tribe (*yak tityu tityu*), a community with California State tribal status, but lacking federal recognition or a reservation. I interviewed her in early 2014 about her experiences as tribal leader, artist, graduate student and parent who is teaching her language to her children. The Northern Chumash are one of several Indian communities designated as Chumash in and around Santa Barbara, CA (see Figure 3). Like many California tribes, they experienced early and double colonization – first by the Spanish in the early 1500s and later by the U.S. Like most

California Native languages, Chumash is critically endangered. Atypical is the Northern Chumash's well-documented struggle between those Chumash that are genetically related to aboriginal Chumash and those neo-Chumash that have claimed this identity since the 1970s (O'Conner 1989; Haley and Wilcoxon 1997, 2005; Haley 2002, 2007; J. Johnson 2003). Mrs. White Horse-Meta's experience reveals how language can be used to both affirm and undermine sovereignty, and the importance of tribal communities having ability to control access to archival language records.

I acknowledge that Mrs. White Horse-Meta has clear opinions on the issue of ethnogenesis in her community its impacts. My information is admittedly one sided and I did not attempt to interview any individuals of the so-called neo-Chumash. It is not my intent to support or deny the claim of ethnogenesis, but utilize the issue to contextualize ramifications of archive resource access decisions. It appears that the literature on this topic seeks to correct, what authors such as Haley and Wilcoxon (1997), see as a misconception. However, even given the extensive genealogical research presented in the literature, for those second and third generations born to neo-Chumash families divisions between facts and identity are difficult to parse. Professor Haley from the State University of New York College at Oneonta contributes a majority of research on this issue from analysis of genealogy records, mission archives and Mexican military and immigration records. In Chapter 4, I again confront the issue of tribal membership, in the example of Nooksack disenrollment. The Nooksack are federally recognized, while the Northern Chumash are not federally recognized and lack the ability to define membership that is recognized by the federal government. Non-federally recognized tribes have criteria for membership and procedures for disenrollment, but do not access all federal tribal benefits. However, there are still cultural benefits, financial

opportunities and other rights associated with non-federally recognized tribal membership. The Northern Chumash situation is a relevant example of how a tribal community experiences perceived loss of sovereignty related to inability to control cultural resources. The reactions of the community shed light on decisions language communities make about access to cultural materials. In a larger sense, the example is meant to show archives as a site of struggle (Mawani 2012).



**Figure 3 Chumash territory, linguistic boundaries and Spanish mission locations (Haley and Wilcoxon 1997:76).**

Rosario Cooper was Leah White Horse-Meta's great, great grandmother, and served as a principal Obispeño Chumash (Northern Chumash language) consultant for famed linguist and ethnologist John Peabody Harrington. Like most of Harrington's work, the

recordings and transcripts of his 1910s to 1920s interviews with Mrs. Cooper are unpublished.<sup>13</sup> These recordings are housed at the Smithsonian Institute, which was his employer, and have limited public access. Mrs. White Horse-Meta's family was interested in researching the content of Rosario Cooper's interviews with Harrington and found the recordings were not easy to access. This prompted a trip to the Smithsonian archives in Washington, DC where the resources are held.

Mrs. White Horse-Meta describes feeling conflicted about the lack of access to resources she feels she has rights to (personal interview, January 30, 2014). She was frustrated that, as a direct descendent, she could not easily obtain resources she believed would be useful in her efforts to further Obispeño language revitalization and learn about her culture. At the same time, she was relieved that the valuable cultural information and language contained in the interviews were not accessible to neo-Chumash groups claiming tribal identity. During her visit to the Smithsonian, an archivist told Mrs. White Horse-Meta that soon many of Harrington's collections would be digitized and anyone could have access via the Internet. The archivist expected excitement and appreciation, but instead Mrs. White Horse-Meta found herself calling the tribal chairmen in alarm. To understand her reaction, some background in neo-Chumash ethnogenesis is useful.

Ethnogenesis is the process in which a group of people acquires an ethnicity (Roosens 1989; Sider 1994; Hill 1996). Ethnicity is distinct from race and can be manufactured or assumed, changed and altered. The populist writer from the U.S., Michael Novak, called the 1970s the "Decade of the Ethnics" for the wave of people self-identifying as ethnic (in M. Miller 2013:10). This period was preceded by an era of anthropological questioning by

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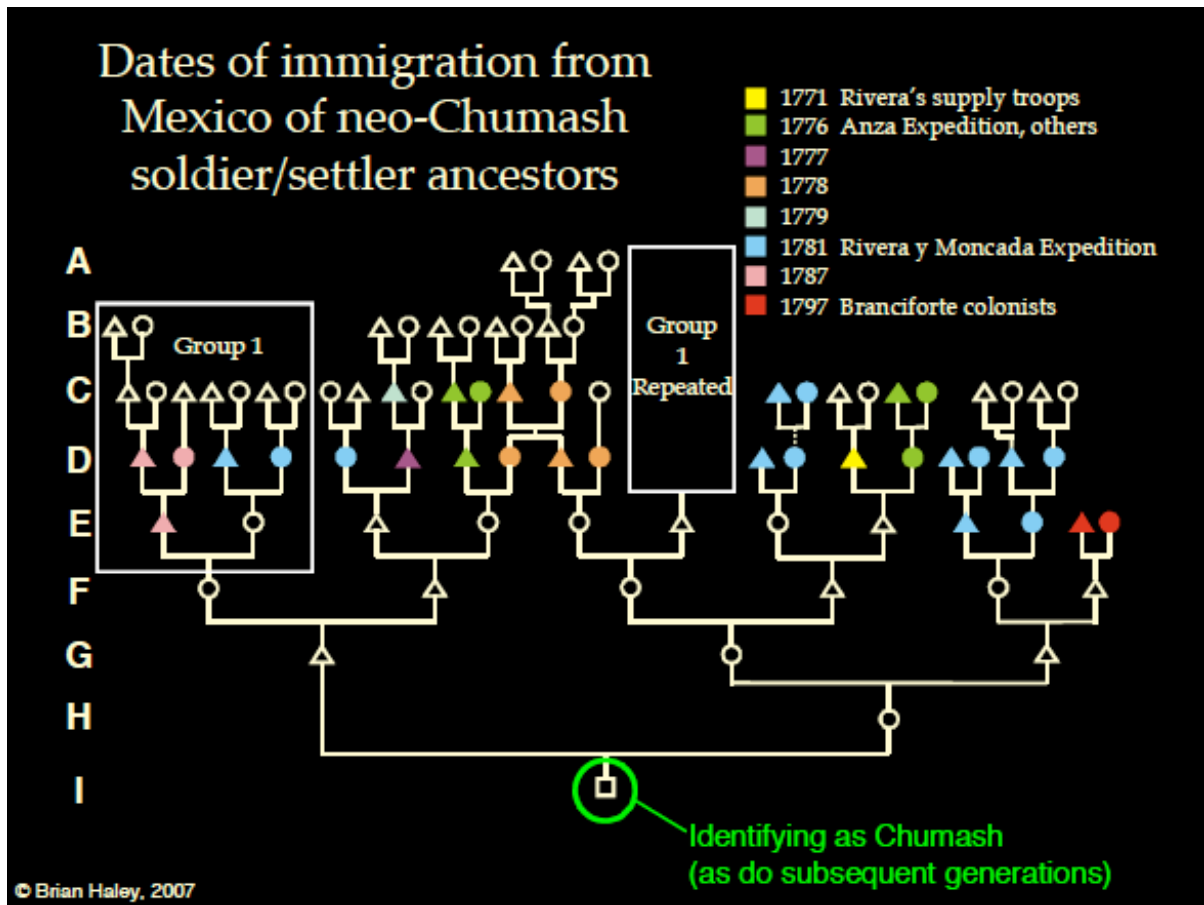
<sup>13</sup> For a Salish example of Harrington's work see Kinkade (1991).

scholars such as Fredrik Barth and Eric Hobsbawm who challenged the rigidity and legitimacy of ethnic and racial definitions. Federally recognized tribes identify the fluidity of ethnic identity as a threat to their capacity for self-determination and ability to regulate membership. Accordingly, tribes like the Cherokee Nation created organizations such as the “Fraudulent Indian Task Force” to educate the public about groups they see as illegitimately claiming Cherokee identity and rights (M. Miller 2013:4). Both recognized and non-recognized tribes have since made an effort to more clearly define the boundaries of their ethnic identity and many groups feel a high degree of animosity toward those fraudulent claims to Native identity. Digital boundaries between cultural resources also need maintenance, as the example from Northern Chumash example shows.

In the context of White–Native American relations, the process of ethnogenesis is often seen as an inappropriate usurpation of identity by members of the hegemonic culture. Viatori and Ushigua (2007:14) employ the term “White wannabes” to describe “culturally nonindigenous individuals who can claim indigenous identity by tracing their lineage to a distant ancestor.” The authors argue that performance of Native language is a powerful way to safeguard legitimate tribal identity heritage from this phenomenon. According to Viatori and Ushigua (2007:14), “language serves to separate Indians from white hobbyists and further reifies the notion that language is the ultimate proof of cultural legitimacy”. Language is again seen as a clear method for defining identity and maintaining it. Non-Indigenous people assume Native identity for a variety of reasons including marriage, adoption and identification with a culture. In some situations there are political and financial objectives prompting ethnogenesis. In the case of the Northern Chumash, the reasons appear to be a combination of mistaken genealogy, desire to be part of a distinct culture and interest in

using Native identity to further the environmental protection of an area called “the Western Gate” or Point Conception (Haley and Wilcoxon 1997, 2005).

According to Haley and Wilcoxon (1997:761), “these neo-Chumash who emerged in the 1970s lack Chumash or other Native Californian ancestry and are descended almost exclusively from the people who colonized California for Spain from 1769 to 1820.” The distinction between Spanish, Mexican and Native ethnicity can be difficult to trace in the long process of California colonization, but Haley and Wilcoxon (2005) have extensively traced genealogies and mission records to support their claim of neo-Chumash ethnogenesis (See Figure 4). In describing the neo-Chumash they state, “they cross supposedly impermeable boundaries without intermarriage or adoption. These boundary crossings are one reason why scholars often fail to accurately describe neo-Chumash social history: Few expect to have to cross borders of ethnic literatures to trace particular families” (Haley and Wilcoxon 2005:433). The neo-Chumash gained public recognition through their high profile participation in protecting Point Conception from development in the 1970s. Since that time the neo-Chumash have participated in cultural events, academic research and aboriginal grave monitoring – often benefiting financially and excluding aboriginal Northern Chumash. The issue has become further complicated as there are now multiple generations of neo-Chumash that were raised as Chumash. This example brings together diffuse concepts of identity, self-determination, language preservation and the archive in one multifaceted case study.



**Figure 4 Analysis of “neo-Chumash” genealogy (Haley 2007:4).**

Families like that of Mrs. White Horse-Meta have struggled to express their Chumash heritage, while maintaining separation from the neo-Chumash. Aspects of culture that are highly identifiable, such as language, are especially problematic. Obispeño Chumash is severely endangered, but dissemination of the language poses a risk of sharing that information with neo-Chumash. When Mrs. White Horse-Meta found out that the Smithsonian planned to make her ancestor's Obispeño language recordings available on the Internet, she immediately thought of its potential for misuse. In thinking about neo-Chumash use of archival information in the Harrington files, Mrs. White Horse-Meta states,

I think the biggest insult is that for Rosario (Rosario Cooper) to be alive and to be able to tell Harrington and be able to document that language, she went through hell. It was a very rough time for Indian people, very rough time. For families that did not have to experience that level of colonization and fear to just decide in the 70's that it's cool to be ethnic, is kind of like an insult. You didn't go through lynching. You got to vote. We are still in recovery mode (personal interview, January 30, 2014).

The pressure of neo-Chumash families promoting their own version of Chumash identity makes people like Mrs. White Horse-Meta extremely cautious about controlling public access to her language.

According to Haley and Wilcoxon (1997), one of the ways that neo-Chumash construct their identity is through accessing anthropological and linguistic documentation of the culture. The authors state, “for better or worse, people have filled in their gaps of knowledge about the aboriginal past with their own creativity and assumptions, shaped by popular and scholarly images of an enduring traditional Indian as well as the circumstances of the moment” (Haley and Wilcoxon 1997:775). Aboriginal people also fill in “gaps of knowledge” with information in many of the same ways as described by the authors. In many communities, archival records are a main source of information for Native people to learn about their own culture and part of an active process of engagement with their past (Robertson 2012). However, the authors cite the impending publication of the Harrington interviews with people like Rosario Cooper, as providing non-ethnically Chumash people with more material to construct their identity. Mrs. White Horse-Meta states that her community is in a bind, because they need to rely on outside assistance for linguistic analysis of Obispeño and revitalization, but they are constantly concerned about misuse.

The situation for the Northern Chumash is indicative of the challenges posed by increased access to cultural heritage resources in archives. Native communities have concerns that the increased access will provide others with resources that will be used against them and their capacity for self-determination. At the same time Native communities are interested in making effective use of archival materials to further their own language and cultural revitalization processes, along with affirming sovereignty.

Questions of authenticity are complicated topics for tribal communities and anthropologists. The experience of the Northern Chumash shows that communities may restrict access to their linguistic resources when that access is seen as compromising to their ability to maintain cultural authenticity and pursue self-determination. In terms of Boxberger's typology, the Northern Chumash are still struggling to gain control of their cultural resources as they try to emerge from a process of exclusion. Their experience of reintegration is marginalized, by both their history of colonization and the current struggle to maintain a distinct identity from the neo-Chumash groups. According to Mrs. White Horse-Meta,

What makes humans validate someone is if they speak the language – well then they must be real. That language is so powerful, so sacred. To just throw it around is ahhh, but we need help . . . Sometimes all we have is that language that's the last shred of anything we have. But making it accessible can lead to further exploitation. It's just a really hard balance. Because yes we do need linguists to help us, we do need support we don't have the capacity ourselves, so yes we need that. If we had a casino we would be able to fund most of this ourselves, but we don't. Santa Ynez [federally recognized Chumash tribe] does a brilliant job of funneling most of their [casino] resources into their language program. So we're fighting to hang onto every

little bit, and that sometimes comes off as being hostile or closed (personal interview, January 30, 2014).

This passage underscores the capacity for language to “validate” identity and how Mrs. White-Horse struggles with the competing needs of access and protection. According to her:

Our dancers lost a grant application to a group of neo-Chumash just last month. We don’t get funding. So now our dancers, who are real authentic people, don’t get materials and the people who will be dancing at the competition will be doing it for money in a way that is not authentic or real (personal interview, January 30, 2014).

This example shows a small but direct impact of the struggle for control of identity in California. A much greater impact on the Northern Chumash has been their unsuccessful effort to gain federal recognition, something complicated by the neo-Chumash situation. Mrs. White Horse-Meta believes that community archiving could greatly help her tribe’s ability to control their cultural heritage and identity. An archive that provides what Christen (2008) describes as “fine-grained” management of cultural protocol could enable greater local control of access to sensitive information. This example from Northern Chumash shows the importance of local decision-making and the potential consequences if outside organizations (like archives) determine cultural resources use access. The next section considers examples where external organizations shape discourse around language policy and its impacts on language origin communities. Discourse can impact internal and external conceptualization of a language, its level of endangerment, ideology, and management of language as a cultural resource.

## **Discursive Controls**

When a community loses control of archival management and methods of dissemination for their language, there can be direct affronts to their capacity for self-determination, as seen in examples where ability to access resources and services is dependent on ability to perform Native identity through language. Also damaging can be the loss of control of the discursive space surrounding a language. The rhetoric surrounding an endangered language and who is constructing messaging or ideology about a language is also of concern. Hill (2002) identifies how discourses of ownership, valorization and enumeration can impact conceptualizing of endangered Native languages. Errington (2003) also engages the concept of external valorization and commodification of language by endangered-language advocacy groups. Their examples show the potential for language communities to lose ability to define their own linguistic reality, just as they may be regaining some control. Examples of Native people being pushed to the periphery of decision making about management of their cultural resources can result in marginalization.

According to Hill (2002:120), some endangered-language advocacy groups promote a theme of “universal ownership,” where languages belong to the world as a piece of collective humanity to appreciate and preserve. Statements that refer to languages as “treasures of humanity”, “the world’s knowledge,” or “our collective wealth” are examples of universal ownership. At first this theme sounds altruistic and indeed many individuals involved in advocacy truly believe any work to save endangered languages is positive. However, Hill finds that “the theme of universal ownership specifically alienates endangered languages from their speakers and other members of the communities in which the languages are spoken” (120). According to Hill, for some Native communities the idea that foreigners share

ownership of their language and have a stake in its future is incomprehensible. Aside from the apparent concerns over intellectual property there is the potentially greater threat that any ownership outside the community erodes control and self-determination. Hill finds that “fear of loss of control over resources and more specifically a theme of theft is widespread in communities where endangered languages are spoken” (123). In my own experience, extractive research and high language endangerment produce a climate where tribal members are concerned with theft and improper use of knowledge. This perceived threat can impact willingness to participate in language preservation projects and is rationale for local management of these resources.

Hill (2002:120) identifies a second theme of “hyperbolic valorization” expressed through statements like, “endangered languages are priceless treasures.” Though probably well intentioned, objectifying a language may create an ideological chasm between the language and its speakers. Meek (2007) warns that as languages become less used, they become more revered and are placed on metaphoric pedestals. If excessive reverence is attributed average community members begin to feel the language is out of their reach because they are not as “Indian” as older speakers, their pronunciation is not as good, or the language is something only for elders. Hill (2002:120) states, “the discourse of hyperbolic valorization converts endangered languages into objects more suitable for preservation in museums patronized by exceptionally discerning elites than for ordinary use in everyday life by imperfect human beings.” Conflating language with “treasure,” “wealth,” or being “priceless” may further disconnect language from daily life and render it something more befitting heaven than earth. This increased valorization can further isolate the language, even in a revered state, to an increasingly small number of experts. When communities lose their

ability to define aspects of their own culture they inevitably see a loss of their ability to define themselves. According to Errington (2003:726), external valuation of a language can “alienate languages radically from interactional contexts, natural environments, and communities.” When languages become archived, especially those that are highly endangered, there is potential for archives to become a site of hyper valorization. I expect that all archives have the potential to increase valorization of a language, whether it is community managed, participatory, or not. However, higher levels of accessibility and every-day engagement with the language should reduce the likelihood of inflated valorization.

Hill (2002:127) cites “enumeration” as a third rhetorical discourse of concern. Enumeration refers to listing and quantifying items in a collection and describes the barrage of alarming statistics about language endangerment used to create a sense of crisis. Most academics would agree that the rates of language endangerment are a crisis, but the way those statistics are conveyed and used can be problematic. Continual publication of negative statistics about languages may excite some into action, but also can push others into apathy. Outside categorization and quantification of Indigenous communities is also a practice associated with colonial power (Richards 1993). If enumeration is only done by outside groups, then language communities are re-experiencing the colonial methodology of quantification as a means of control. Colonial era census lists are an example of control through quantification. Those lists of tribal members are plagued with inaccuracy, but continue to serve as a defining aspect of tribal enrollment. As shown in Chapter 4, these records continue to impact tribal membership in places like Nooksack with divisive consequences. Enumeration is also seen in quantification of who is a speaker, how many speakers there are and the level of fluency they have. Decisions about the existence of

speakers are commonly made by organizations like *Ethnologue*,<sup>14</sup> and may not accurately reflect the linguistic reality of the community.

A brief example from the Nooksack community contextualizes the concept of enumeration. Lhéchelesem is officially listed as extinct on *Ethnologue* with the last first-generation speaker, having passed in 1997 and the last partial language speaker having died in the 1990s (Galloway 2007). While the language is ‘officially’ extinct, in a visit to specific parts of the Nooksack community one would see some use of the language and even young people attending language classes. George Adams (also a speaker of Xwlemi’ Chosen and Halq’eméylem) is a self taught Lhéchelesem speaker. He has mastery of the syntax and phonetics of the language and is recognized by Galloway, an expert linguist in Lhéchelesem, as having “flawless” command over the language (Galloway 2007:221). Due to outside attribution of the label “extinct,” Nooksack and their partners find it difficult to obtain funds for their language revitalization efforts. In funding applications I have participated in, reviewers have questioned the efficacy of recording the language elicitation of a second-generation speaker and the remote potential of extinct languages rebounding. I agree that chances for revitalization are challenging, but that challenge is greater when the endangerment of a language is misrepresented.

Hill (2002:128) finds that outside claims about extinct languages or quality of the speakers can “be heard as dismissive and insulating by members of younger generations in the community who make claims of speakerhood in some form.” There are already significant barriers for youth to learn these no longer conversational languages, without the

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<sup>14</sup> Ethnologue: <http://www.ethnologue.com/>

negative consequences of enumeration further complicating matters. According to Deloria (1984),

Self-determination and cultural renewal are hard for young Indians who see their culture defined for them by the outside world instead of their own people defining it for themselves. The cultural landscape is now so littered with erroneous information that it is extremely difficult for the serious Indian youngster to learn the truth about his [or her] past (254).

In 1978 William Hagan cautioned tribal groups against allowing ownership and representation of their cultural information by non-tribal organizations. Deloria, Hill, Errington, and others identify diverse challenges of external representation of sensitive cultural information, like language. Issues of ownership, valorization and enumeration are important to consider when undertaking an archiving initiative to increase success and cultural compatibility.

## **Conclusion**

These first three chapters have explored the relationship between sovereignty, language, identity and culture. I have situated these concepts in the context of the evolving legal relationship between Indigenous populations and colonial governments and those relevant impacts for language archiving. The process of colonization in North America created a classification of people based on perceived difference and codified rights to resources, territory and political organization for that population. The “politics of recognition” continues to impact the preservation of cultural alterity to maintain rights that are dependent on difference. Native languages have long served as an identifiable marker of cultural difference and identity. Capacity to demonstrate control of language, both through

performance and in through the practice of archiving is one strategy to maintain this identifiable difference.

Tribal control of language resources and access can be understood as a response to changing participation in management of this resource. The history of Indigenous peoples' control of linguistic cultural resources is framed in the context of access, marginal inclusion, exclusion and reintegration to management of this resource. The period of reintegration provides important capacity to study diverse strategies toward protection and dissemination of cultural resources. These strategies are influenced by experiences in previous periods, as described by Boxberger (1989). Many tribal communities are regaining some control of their languages after a period of forced assimilation and exclusion, and many are actively pursuing language revitalization. These efforts are being affected by new capabilities for language dissemination and access through archives.

The ongoing process of language shift is changing the way people within and outside of these Indigenous cultures understand cultural identity. Language shift is defined by Fishman (1991:40-41) as negative change in intergenerational language dissemination as experienced by a group or community. This process occurs over many years and reflects internal and external factors such as migration and cultural, economic and social change. Changing practices of language use are also impacting the ability of origin language communities to show connection to territory, resources and tribal status. The legal system has become a main focus of challenging and articulating the parameters of rights. Here, Indigenous communities often struggle to provide evidence in support of their claims that is compatible with the Western legal system. Oral histories are a prime source of evidence for

tribal communities and, while their acceptance in courts are growing, the languages these histories are based in have increasing need for preservation.

Decisions surrounding access and control of archival resources are dependent on factors including cultural protocol, federal recognition and experience in management of language as a resource. The process of archiving by Indigenous communities can be recognized as an act of self-determination because there is capacity for public declaration of rights, beliefs and ideology. The potential of ubiquitous access enabled by the Internet has created a motivation for tribal communities to define and articulate access and control standards for their languages before others do so for them. According to Deloria (1984:251), “language is the first glue that links peoples together, and the major emphasis in self-determination and ultimately in self-government should be the preservation of language where it still exists and the cultivation of it where it has eroded or fallen into disuse.” Given the strong connection between Native language, cultural identity and self-determination, it is understandable that Indigenous communities are sensitive to implicit and explicit challenges to their ability to define their own linguistic identity. Regaining aspects of the control of this resource has been hard won in many cases and can impact carefully maintained sovereignty.

The next section describes two Coast Salish communities’ trial use of a language archive platform. I specifically investigate how ideology construction and identification are understood in relation to language use and control. I also consider how the Internet is changing public representations of culture and its impacts on archiving. Defense of continued ability for self-determination is a clear component of the language ideologies seen in both communities, and this likely applies to many other communities as well. Language revitalization and documentation efforts will find increased efficacy through recognition of

connections between language, identity and sovereignty as understood by the language community and the nation-state.

## **Chapter 4: Culturally Impacting Language Preservation**

### **Introduction**

The following two chapters describe ethnographic research, situating it in the context of the linguistic anthropological theory of language ideology and the structuralist sociological concept of the public sphere. Definitions of language ideology focus on analysis of beliefs that influence language structure and the cultural and political choices around language use. The language structure vein of this discourse is often associated with the work of Silverstein (1979) and topics of indexicality (2003) and metapragmatics (1985, 1993). I find definitions of language ideology that take into account the “social facet” of the field are the most applicable to my work (Woolard 1998:4). Heath (1989:393) describes language ideology as the “self-evident ideas and objectives a group holds concerning roles of language in the social experiences of members as they contribute to the expression of the group.” According to Irvine (1989:255), language ideology is “the cultural system of ideas about social and linguistic relationships, together with their loading of moral and political interests.” I apply language ideology theory to the decisions individuals make about language use. The individual choices are evidence of existing, competing and emerging group ideologies around language. Current research on language ideology encompasses a broad field including work specific to endangered Native languages (Kroskrity 2010, 2011; Field and Cuero 2012).

In relation to endangered languages it is useful to understand how ideologies support or obstruct language revitalization efforts. For the Indigenous communities I work with, it is impossible to separate politics and treaty rights from issues of cultural importance. As

described in the previous chapters, management of Native language as a resource is closely tied to issues of identity and self-determination. Archives have become an important site for the mediation of ideas about Native language preservation, demonstration, control and dissemination – making language archiving practices and important object of study. In the communities discussed here and in my review of Alaskan community archives, I find that language ideologies influencing Native language archiving and dissemination practices are informed by cultural values and political considerations. Archives also function deterministically (Foucault 1972; Derrida 1995; Manoff 2004), which can lead to misaligned ideological agendas between archives and language origin communities.

Archives functionality reflects their design, which directly impacts their use. According to Manoff (2004), Derrida's (1995:17) concept of "archivization" describes how the structure of an archive determines its use and what type information becomes contributed to the archive. Foucault (1972:128) also wrote on the subject of the archive, calling it a "system of discursivity" that structures the nature of the materials it houses. As stated by Manoff (2004:12), "the methods for transmitting information shape the nature of the knowledge that can be produced." I term the process of how archive use is influenced by the design and functionality 'archive determinism.' These next two chapters largely consider the ideology of potential archive users and its implications for archive use. The design of archives, which reflects the ideology behind their implementation, also determines use.

Participatory and community-based archiving are two strategies for improving use of archives and the resources they preserve. Widloc (2013a, 20013b) describes the common instance of data obsolescence on the Internet and how information in archives can also quickly fall out of use without careful consideration of community interests. Identification of

language ideologies impacting intellectual property use and dissemination is another strategy for increasing archive use, and hopefully, sustainability. Since archives now also operate in the context of the Internet and digital data mobility, theorization of the Internet as a communicative space is relevant. The public sphere is a concept for discussion of access, knowledge mobilization, construction of voice and representation in archives and on the Internet.

The concept of the public sphere is based on work by Habermas (1989) who studies discursive public spaces used for debate and free exchange of ideas in Europe in the late 1800s and early 1900s. Habermas views the public sphere as a middle ground between spaces constructed by the state and spaces of private individuals, something Habermas recognizes as essential for maintenance of democracy. This public arena for ideas was predominantly informed by male members of the bourgeois class, however the theory has found modern application in relation to the Internet (Dahlberg 2001, 2005; Bohman 2004; Dorian 2010). Issues of voice and representation (Dinwoodie 1998, 1999) are relevant for Native communities as they seek to construct their public presence. Construction of voice and representation in the public sphere can be described as acts of declaration (Dinwoodie 1998). Later in this section, an example of declaration by the Tsilhqot'in Indian Band is described in the context of other declarations, like Thomas Jefferson's Declaration of Independence. Additionally, as knowledge becomes increasingly mobilized, the "social life" (Widlok 2013a) of these resources and their utility for recontextualization (Hennessy 2010; Mawani 2012; Robertson 2012) is valuable to consider.

Language archives can shape how cultural resources exist publically. An archive can control access, facilitate interaction, foster collaboration and enable articulation of ideology

relating to management of cultural resources. Archives can also alienate cultural resources from source communities. The consequences for both empowerment and loss of self-determination are relevant in public sphere mediation of the archive. Concepts of the public sphere and language ideology both have value in identifying efficacy of language preservation efforts. The research presented here is predominantly informed by observations and interviews with members of two Coast Salish communities in Washington State, the Lummi Nation and the Nooksack Indian Tribe. I will also draw upon interviews with members of several Alaska Native communities that are described in greater detail in Chapter 7. This chapter details use of ethnographic information from Lummi and Nooksack in the identification of language ideologies. I show how ideology and practice intersect in relation to language preservation and archiving.

### **The Lummi Nation: Language and Treaty Expressions**

The Lummi Nation is a federally recognized Coast Salish tribe whose reservation lies near Bellingham, Washington (Figure 5). *Xwlemi' Chosen* or the Lummi language is one of four still spoken dialects of the Northern Straits language branch, which is part of the Salish language family. The Lummi were signatories of the 1855 Treaty of Point Elliott along with other regional tribes and in the 1870s reservations were created at Lummi, Suquamish, Tulalip and Swinomish. Federal recognition and reservations came later for other Salish communities, such as the Nooksack. Lummi is a regionally large sized tribal community with approximately 5,000 enrolled members living predominantly on tribal reservation lands.



**Figure 5 Lummi Nation territory, including Madrona Point, on Orcas Island (Nugent 1980)**

Research and documentation of Xwlemi' Chosen peaked in the 1970s and 80s before the last first-generation of speakers passed away. During this time numerous recordings of first generation Xwlemi' Chosen speakers were made. No comprehensive dictionary or grammar exists for Lummi though Dr. Richard Demers, Professor Emeritus at the University of Arizona and Xwlemi' Chosen linguist, has often said he would like to complete the dictionary he started in the early 1990s. None of the current speakers of Xwlemi' Chosen learned fluency from birth, but their work will hopefully enable others to have that opportunity.

Gibbs (1863) published the first records of Xwlemi' Chosen. This resource documents approximately 1000 Xwlemi' Chosen words and about 500 words in the neighboring Klallam

language. The publication is primarily a word list and provides very little ethnographic data. According to Kinkade and Seaburg (1991), the prolific ethnologist and linguist Harrington traveled to the Lummi Reservation in 1941 and collected some linguistic data that can be found in Harrington (1981). Around the same time Suttles began collecting ethnographic data at Lummi, a research relationship he maintained until the end of his life. Suttles conducted a significant amount of research with the Coast Salish and helped reverse a belief that Coast Salish people were too assimilated to Anglo-American culture to warrant study (Suttles 1951, 1954, 1987). Suttles developed models for economic exchange and affinal food production and distribution practices to explain how Coast Salish people dealt with both abundance and scarcity of food. Suttles was fortunate to conduct research with fluent first-generation Salish speakers. At Lummi Suttles worked with influential elders, such as Julius Charles and Patrick George, and they produced valuable linguistic and ethnographic data. Numerous audio recordings of Xwlemi' Chosen speakers have been preserved because of his work.

Deloria (1978) produced an extensive chapter on Lummi ethnographic history with particular attention to the rapid development of their aquaculture program. Charles, et al. (1978) is an unpublished collaboration between distinguished Lummi elder Al Charles and linguists Bowman and Demers. The work is used internally at Lummi for its classified word list and descriptive information about the language and culture. Demers' work and collaborations form much of the grammatical analysis for Xwlemi' Chosen including Demers (1974, 1997), Demers and Jelinek (1982, 1983), and Jelinek and Demers (1994). Demers retains a classified word list of approximately 3000 Xwlemi' Chosen words that hopefully will become a publication someday. Charles, et al. (1978) credits Thompson (1972) with devising an early Xwlemi' Chosen orthography used in their work. Charles, et al. (1978)

acknowledge that the Lummi lacked an agreed upon orthography in the late 1970's. Forty-five years later, a decision still has not been made. The lack of an official orthography complicates dissemination efforts, including the ability of tribal departments to share language resources (Shepard 2007).

Other relevant Xwlemi' Chosen publications include Montler (1999), which describes dialectical variation between the four remaining Northern Straits dialects through comparison of 100 words.<sup>15</sup> The publication also distinguishes Klallam as a distinct language. Chinchor (1975) and Jelinek (1993, 1995) both worked with Xwlemi' Chosen grammar and syntax from the 1970s on. The existence of linguistic documentation has not easily transferred into usable language curriculum for Lummi tribal members advocating language education. Much of the materials are either academic linguistic treatments or exist as unfiltered field notes, both of which require linguistic training to decipher.

Given its size, the Lummi Nation has an impressive education system with tribal control of a Headstart preschool, a K-12 public school and Northwest Indian College (NWIC). NWIC was originally formed as the Lummi Indian School of Aquaculture (LISA), which supported Lummi's large aquaculture program. After *Washington v. United States* confirmed treaty resource rights for federally recognized salmon fishing at 50% of total state catch, LISA was renamed the Lummi School of Fisheries (LSF). LSF later became Lummi Community College and now NWIC. As a tribal college NWIC offers associates and bachelors degrees through its main Lummi campus and six satellite campuses. Education is a hallmark of Lummi investment in development and infrastructure. Language archiving at

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<sup>15</sup> Montler (1999:462) states that Gibbs (1863) mentions Semiahmoo as a potential sixth Northern Straits dialects but the language became extinct before any documentation could be completed.

Lummi will have greater efficacy if the functionality of the archive supports language revitalization through education. Additionally the tribe is highly protective of their treaty right to fish salmon and carefully consider how projects – whether a language archive or an industrial development – can impact their ability to maintain the treaty right to fish. Salmon continues to be a focal point for Lummi culture and economy (Deloria 1978b), even though the resource has been greatly diminished and Lummi has experienced exclusion from this resource (Boxberger 1989, 2007). Every iteration of adult and higher education at Lummi has included a specific curricular focus on salmon fishing, which speaks to the principal importance of this treaty-based fishing right. Today Lummi maintains the largest Native fishing fleet in the United States.

According to Boxberger (2007) public policy and litigation have always influenced Coast Salish research. Maintenance and application of treaty rights is a continual process for tribes and it warrants recurrent study, as it is a matter of cultural continuity, economics and an ongoing declaration of sovereignty for communities like the Lummi. Though treaty signing occurred in 1855 and the U.S. Supreme Court affirmed salmon fishing rights in 1979, the relationship between people, treaty, territory and resources continues to be contested. Just as treaty rights have been affirmed by court decisions, such as the Boldt Decision (1979) and the Rafeedie Decision (1994) described next, court challenges could just as thoroughly eliminate rights.

In the U.S., Congress retains the right to unilaterally abrogate or alter treaties and Indigenous rights (Pommersheim 1995:41). In effect, many treaty tribes like Lummi are cautious regarding public access to cultural information that may describe the nature of attachment to territory or connection to resources. As stated by Birrell (2015:232), “if

language and culture can be reconstructed from documentation then so can legal nature of attachment.” Cultural documentation contains information with a range of potential applications – political, educational and legal. Use and management of language resources is understood in context of these highly consequential concepts. According to Woolard and Schieffelin (1994:56), “not only linguistic forms, but also social institutions such as the nation-state, schooling, gender, dispute settlement and law hinge on the ideologization of language use.” Consideration of treaty rights maintenance has clear capacity to impact ideology around language and decisions about public sphere access to language resources. Two recent examples of continued Lummi engagement with protection of salmon fishing rights are evidence of the importance of these issues. The first example is their participation in the early 1990s federal court case over application of the Boldt Decision to shellfish harvesting. The second is current tribal opposition to the Gateway Pacific Terminal (GPT) adjacent to reservation lands.

Lummi was part of the landmark 1974 *Washington v. United States* case where the federal government sued the state of Washington in support of an alliance of Pacific Northwest tribes (Bruun 1982). These tribes, including Lummi, argued that Washington State limited tribal rights to salmon harvesting in violation of existing federal treaties. The decision centered around interpretation of consistent language in regional treaties which promises “the right of taking fish, at all usual and accustomed grounds and stations, is further secured to said Indians in common with all citizens of the Territory.” In 1979 Judge Boldt ruled that Washington State was infringing upon federal treaty obligations and allocated 50% of the state salmon harvest to recognized tribes. Boldt found that fishing rights were reserved for Natives from a time of aboriginal ownership, while non-Natives were granted a privilege to

this resource. Lummi reintegration into the salmon fisheries economy after the Boldt Decision was an integral aspect of Boxberger's (1989) model of resource control and exclusion. The legal implications of the ruling continue to provide grounds for the articulation of resource access rights, as shown in the next examples. The ruling impacts economically valuable resources, national and local politics and environmental policies; it is an understatement to describe the Boldt Decision as both significant and divisive (Miller 1993).

### **Salmon, Shellfish and Rights**

In the early 1990s Lummi participated in an effort by regional tribes to apply Judge Boldt's decision in *Washington v. United States* to shellfish harvesting. The tribes argued that continued access to shellfish resources was promised in all traditional harvesting grounds. The 1994 ruling by Federal Judge Rafeedie (known as the Rafeedie Decision) was consistent with the Boldt Decision allocating equal or "in common" access to shellfish in usual and accustomed areas, except shellfish in artificial beds. The U.S. Supreme Court refused to hear the case in 1999, as they had already ruled on the fundamental merits of the case in 1979. The Rafeedie Decision was not only a success for tribal shellfish harvesting rights, but also served to further reinforce the Boldt Decision.

A recent implication of the Boldt Decision in court is the 2007 ruling by Judge Ricardo S. Martinez (the Martinez Decision) that found Washington State has a treaty based obligation to "refrain from diminishing fish runs by building or maintaining culverts that block salmon passage to spawning and rearing grounds" (Echo-Hawk 2010:391). The landmark 1974 decision continues to have important and evolving impact in the relationship

between tribes, Washington State and the a broad understanding of the environmental and resource management factors that support viable salmon and shellfish populations.<sup>16</sup>

Accordingly, Lummi maintains a continued interest in preserving its treaty rights and the resources it guarantees. In addition to the coal terminal issue described next, Lummi is making use of treaty-based rights to salmon harvest for the purpose of influencing local commercial development in sensitive environmental areas, wetland remediation policy and disposal of contaminated soils in proximity to the Nooksack River.

In my experience, the tribe is cautious about controlling access and use of cultural knowledge that is related to capacity to demonstrate and maintain treaty rights. As stated by Hoffmann (2002:8), in his description of Colombian Indigenous ethnic identity construction and maintenance:

Whether in meeting requirements stemming from legal texts - which set up the traditional as the essential condition of identity - or in response to the dynamics of popular mobilization – which reconjures the worth of forgotten practices and values - reference to ancestral life has become obligatory and indispensable in the elaboration of ethnic identity.

Both in the expression of ethnic identity and maintenance of legal rights, cultural knowledge that may reside within archival collections has a valuable role. As shown by Sider (1993) and Dombrowski (2001), in the U.S. continued ability to demonstrate cultural identity is an important way of maintaining recognition as a tribal nation. Efforts to manage cultural resources publically are seen as vital to maintaining sovereignty. These efforts also impact ideology surrounding public information dissemination and access. Loss of ability to define

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<sup>16</sup> See Blumm and Steadman (1998) for additional examples of litigation impacting salmon, their habitat and treaty rights preceding and following the Boldt Decision.

use of cultural information could lead to erosion of self-determination and rights. Access to and use of language is one cultural resource Lummi is concerned with managing. Lummi makes public statements and demonstrations of their treaty rights in a variety of formats. A current and controversial application is their ongoing opposition to the largest proposed North American coal export terminal, which would be built adjacent to their reservation lands. A different type of public declaration of rights is the 2013 play presented by the Lummi Nation titled “What About Those Promises?” Both examples will be briefly described below.

### **Exporting Rights**

The ocean floor drops dramatically off the Cherry Point shoreline or *Xwe Chiexen* (in Xwlemi’ Chosen), making it one of the best remaining deep-water port sites on the U.S. Pacific coast capable of docking large cargo ships (Sheargold and Walavalkar 2013). Cherry Point is located about five miles northwest of the Lummi Reservation, along the rich Fraser River salmon migration route (Figure 6). The site has long been a reef net fishing ground, burial site and place of cultural significance for the Lummi (Ballew 2013). The shoreline is currently undeveloped at the proposed terminal site, though heavy industrial oil and aluminum refining plants are in the area. According to a Surfrider Foundation report (Nakamura, et. al 2011:17) “the proposed terminal location is within the Usual and Accustomed Fishing Grounds for local tribes,” including both the Lummi and Nooksack. The regional marine ecosystem surrounding the terminal is within traditional use areas of the federally recognized Suquamish, Swinomish and Tulalip tribes. The international border is only 13 miles away from the proposed site, which includes the Fraser River and numerous

First Nations communities that depend on salmon that migrate past Cherry Point.

Development of the terminal will create herring spawning habitat degradation, wetlands loss and raises potential for fossil fuel spills in the Salish Sea. Cherry Point and associated waterways are relevant to overlapping use claims, such as fishing (multiple tribes and non-tribal fisherman), recreation and cultural use.

Cherry Point is an important habitat for eelgrass and herring, whose health directly impacts salmon (Stiffler 2013). Herring are of particular concern as they are an important food source for salmon and the population at Cherry Point is “genetically distinct and spawn at a different time from other local herring” (3). The number of spawning herring at Cherry Point has plummeted 92% between 1973 and 2012 and their available spawning habitat has been reduced by nearly 65% since 1981 due to industrial development and construction of three piers that service existing refineries (5).

The Gateway Pacific Terminal (GPT) proposal has sparked international attention because the impacts of the terminal will not only affect the area surrounding Cherry Point. GPT opponents believe the ramifications of coal transport and combustion, habitat loss and shipping traffic will have far reaching national and international impacts (de Place 2011). These include diminished salmon runs, ocean acidification, global climate change and pollution. The GPT is proposed to receive coal mined from the Powder River Basin in Montana and Wyoming, which would be transported to Cherry Point by rail (Figure 7). The coal would then get shipped to Asian markets, mainly fueling a Chinese demand for coal-powered electricity.



**Figure 6 Lummi Reservation adjacent to the proposed Gateway Pacific Terminal**  
 (<http://gatewaypacificterminal.com>)

The opposition to the proposed GPT has come from a diverse group that includes the cities of Bellingham and Seattle, WA, as well as environmental groups and tribes. Main supporters of the project include labor unions, small towns (e.g. Ferndale, WA) and rail, coal and shipping companies. Towns and cities on the rail line between the Powder River Basin and Cherry Point estimate an additional 20 coal laden trains per day would cause increased traffic, noise, spread coal dust and raise the potential for spills. Other opposition centers on the loss of marine habitat and increased shipping traffic in the Salish Sea (Puget Sound). The third major argument against GPT is the most complex and challenging to regulate. Burning coal in China will increase global green house gas emissions, just as nations are working to

reduce their climate change impacts.<sup>17</sup> The Sightline Institute estimates that carbon emissions from the burning Powder River coal “would vastly exceed the carbon from the dirty oil sands fuel planned for transport in the controversial Keystone XL pipeline” (de Place 2012:7) The impacts of climate change are significant, but are likely to be disproportionately severe for populations that rely on natural resources for their subsistence (Sheargold and Walavalkar 2013). For example, shellfish production in the Pacific Northwest is already compromised by ocean acidification caused by increased carbon dioxide absorption and resulting decreased ocean water pH (Malakoff 2012). Ocean acidification makes calcium based shells weak and juvenile shellfish especially at risk for predation.

The Lummi oppose GPT because they believe the project will infringe on their capacity for self-determination and ability to harvest resources in accordance with their treaty rights. According to Lummi Tribal Chairmen Tim Ballew (2013:2),

. . . if built and operated (the terminal) would have a substantial impairment on the Lummi treaty fishing right harvest at Xwe Chiexen (Cherry Point) and throughout the Lummi “usual and accustomed” fishing areas . . . The Lummi Nation expects that the [US Army] Corps of Engineers, on behalf of the United States of America, to honor the trust obligations to the Lummi Nation related to these proposed projects. We believe that the Corps should see that these projects would without question result in significant and unavoidable impacts and damage to our treaty rights.

Federal and regional governments are currently collecting data for an Environmental Impact Statement (EIS) as the first step in a lengthy permitting process the terminal. The Lummi

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<sup>17</sup> See 2014 US/China emissions reduction goal: <https://www.whitehouse.gov/the-press-office/2014/11/11/fact-sheet-us-china-joint-announcement-climate-change-and-clean-energy-c>

Nation is one of a regional consortium of tribes that have submitted formal opposition to the GPT project during the EIS public comment period. The Lummi Tribe has also expressed their opposition in public demonstrations (Figure 7). Lummi's 1855 treaty with the federal government provides ability to oppose the GPT project in ways other interested stakeholders, such as environmental groups, cannot. The federal government has obligation to ensure their actions (such as permitting a project) do not infringe upon preexisting obligations, such as maintaining ability to harvest salmon or shellfish in usual and accustomed areas as stipulated in treaties. Due to Executive Order 13007, the federal government must also consider if a site has sacred cultural value to Native Americans if permitting involves federal agencies. Permitting for the GPT project requires approval from state, county and federal agencies, including the federal Army Core of Engineers.



**Figure 7 Public Lummi opposition to the proposed coal port (images.google.com).**

Over 50 tribes in seven states have formally opposed the GPT, though the Lummi are the closest and potentially most threatened by the development (Johnson 2012).

Environmental groups have mounted strong opposition to the terminal, but tribal treaties have a unique capacity to have impact on this project. According to Johnson (2012:A7),

The cultural claims and treaty rights that tribes can wield — older and materially different, Indian law experts say, than any argument that the Sierra Club or its allies might muster about federal air quality rules or environmental review — add a complicated plank of discussion that courts and regulators have found hard to ignore.

Tribal opposition to the Keystone XL pipeline from the tar sands to the Gulf of Mexico is another area where tribes are currently testing their capacity to affect federally permitted projects that will have environmental consequences.

Executive Order 13007, signed by President Clinton in 1996, directs federal agencies to consider the sacred value of sites to Native American communities when determining use permissions. Lummi recognizes the area around Cherry Point as sacred due to the existence of numerous intact burial sites. Results of the pending environmental review will almost certainly land this issue in court. It is likely that Lummi will again draw upon the knowledge of elders in the community and archival recordings to support their claims to resource, territory and connection to place. The Boldt, Rafeedie and Martinez Decisions and opposition to the GPT exemplify public engagement in defense of treaty rights by the Lummi Nation. Lummi relies on their treaty for continuity of access to rights and resources. The rights associated with that treaty are grounded in cultural knowledge that describes treaty promises, traditional use areas and harvesting practices. Protection of the resources that affirm these rights is part of the ideology surrounding cultural resource use management.

### **“What About Those Promises?”**

In addition to opposition against projects seen as detrimental to treaty rights, Lummi also engages in occasional public expressions of their ongoing relationship with sovereignty

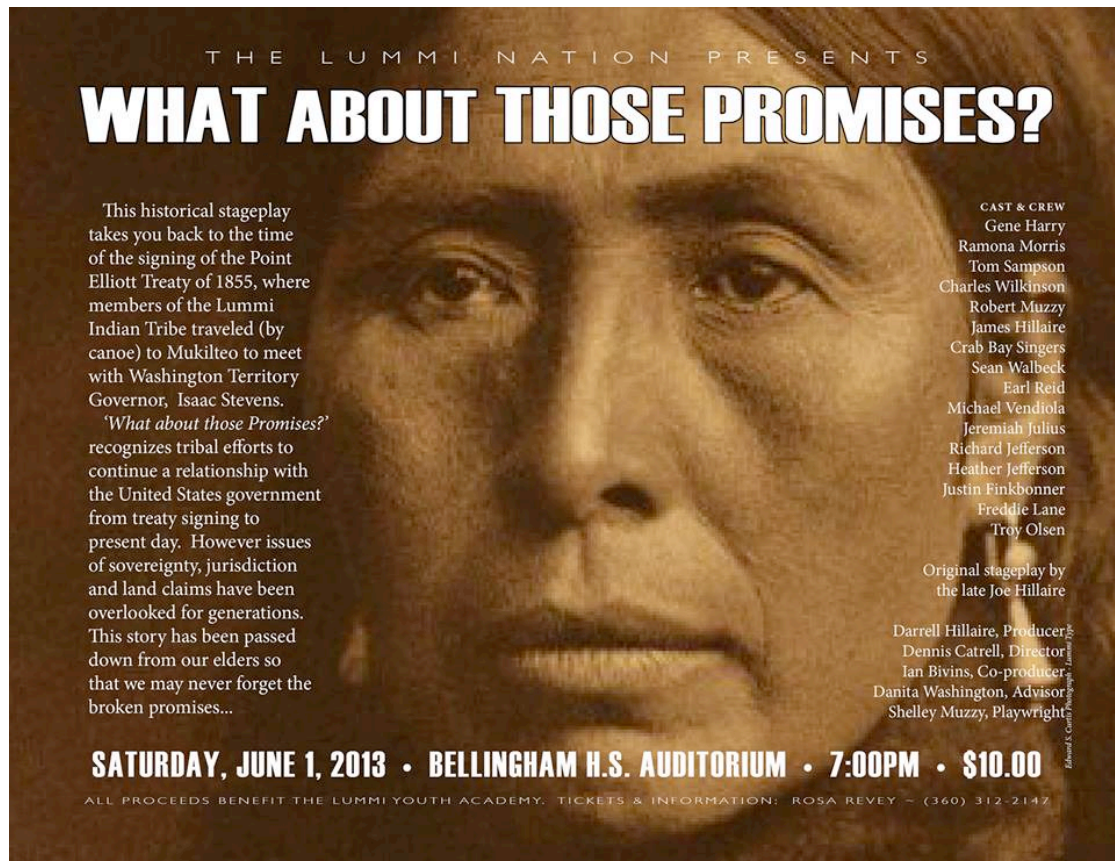
and the treaties that affirm it. The most explicit example I have seen was the 2013 play entitled “What About Those Promises?”,<sup>18</sup> produced by past tribal chairman and current tribal Treasurer, Darrell Hillaire (Figure 8). The play is an extensive production involving elders fluent in the closely related Saanich language (Coast Salish, Vancouver Island), Professor of Indian Law Dr. Charles Wilkenson (University of Colorado Law School), and a large cast of Lummi tribal members. The play is significant for a number of reasons. First, it was performed in downtown Bellingham to a sold out crowd of over 700 city residents and tribal members (it has since been performed on the Lummi reservation and at the University of Washington). Though the Lummi Reservation is less than 10 miles from Bellingham, there is still limited interaction between the two communities and persistent undercurrents of discrimination.

Second, the play involved extensive Coast Salish language oratory by skilled oral history practitioners, like Elder Tom Sampson (Saanich). I estimate that roughly 99% of the individuals in the theater were unable to understand the sometimes lengthy Coast Salish speeches describing genealogy, territorial claims and traditional protocol. This event may have been one of the most extensive performances of Coast Salish language in the city limits of Bellingham in many years. Third, the event was a direct explanation of Lummi treaty history from their perspective. Treaty rights and many aspects of Native culture are often told about them and less often by Native people themselves. According to Attwood (2011), the process of identifying the meaning of indigeneity is conducted largely outside the view of hegemonic society. The media portray Native people, but few Americans have regular encounters with Native people. This play shows Lummi has interest and ability to clearly

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<sup>18</sup> “What About Those Promises?” trailer: <https://www.youtube.com/watch?v=zA54BPSSgi0>

articulate their history publically. Public declarations, such as the “What About Those Promises” play, are important venues for Lummi to declare and contextualize their history to both internal and external audiences. Archives are another venue Lummi could accomplish internal and external demonstration and contextualization of their history and present.



**Figure 8 “What About Those Promises?” flyer (www.images.google.com)**

The play tells the story of Lummi participation in the Point Elliott treaty signing in 1855 and the promises made by Governor Stevens. According to Mr. Hillaire, the production is a “story about the Lummi people, for the Lummi people. It’s about what has been left to us, what our rights are or could be, and our responsibilities to those rights” (Hillaire 2013). As much as the play communicates to outsiders about Lummi and their history, the play is

also an orally based practice of information dissemination to Lummi people. The play describes ongoing and unresolved Lummi effort to extract compensation from the federal government as promised in their treaty. The play narration was skillfully interspersed with lecture from Dr. Wilkenson contextualizing treaty law in the U.S. According to one actor, “these promises you heard tonight, those stated by Governor Stevens said ‘Americans will take care of you’. It hasn’t happened, it hasn’t come true. This is why as Aboriginal people of this land and country, we are not giving up” (Hillaire 2013).

The play moves chronologically from the 1855 treaty signing to a 1927 Indian Claims Commission trial when Lummi began their legal attempt to obtain compensation from the government. In subsequent years the federal government offered the Lummi an offensively low settlement of \$57,000 (Boxberger 1989:128). The play depicts the 1974 Lummi Tribal Council meeting that voted to reject the settlement payment, even though the tribe faced significant financial struggles at the time. Every year since 1974, the Tribal Council has voted to reject this settlement. The play is a rare public declaration of the treaty rights possessed by Lummi, their understanding of those rights and the ongoing land claims battle. “What About Those Promises?” is an authoritative statement on issues at the heart of Lummi tribal identity. Like the later example of Tsilhqot’in declaration (Dinwoodie 1998), Lummi both adhered to traditional cultural protocol in delivery of factual information in public and appealed to the Western audience as well. Importantly the event was rich in Coast Salish language and delivered entirely orally.

I present these examples to show the fundamental importance of ongoing maintenance of treaty rights to the Lummi Nation and the understood consequences of the erosion of these rights. Both examples show the role of cultural resources in the expression of

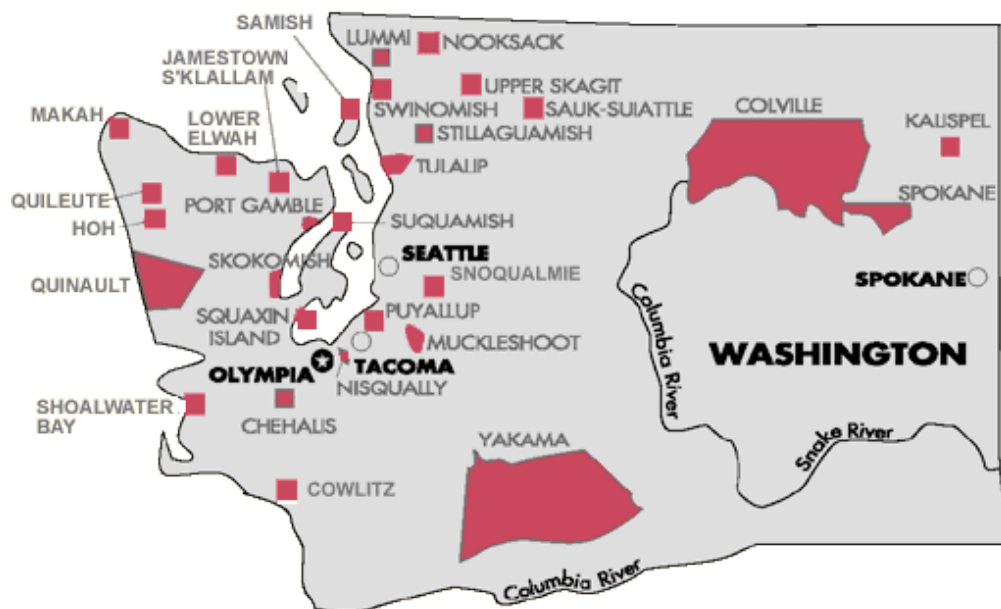
rights and their maintenance. Treaty rights are employed in land claims, resource access and environmental protection battles. Lummi makes regular and public use of their treaty rights to impact laws and proposals they view as damaging. Less frequent are public examples like the “What About Those Promises?” play, where Lummi engages in overt explanation of these rights to internal and external audiences. Even given its proximity to the City of Bellingham, there are limited shared economic interactions. What political interactions are shared are often oppositional, such as conflicting positions on water rights, land use, and ferry terminal operation.

When communities like Lummi make decisions that could impact their rights, the ramifications are carefully considered. As demonstrated earlier, the performance and archival legacy of Native language are aspects of cultural identity and continuity of culture that predate colonialism. In my experience evaluating the efficacy and role of Internet-based language archiving at Lummi, considerations of treaty rights significantly impact language ideologies because those recordings describe the nature of connection to territory and resources. In turn, language ideologies structure decisions about access to and use of language resources in the sense that there is a tendency to carefully control access to language resources. Next I briefly review literature on the Nooksack and relate a current tribal controversy to language preservation efforts.

### **Nooksack Indian Tribe: Opportunity and Opposition**

The Nooksack Indian Tribe is a Coast Salish community of about 1,800 enrolled members, with a reservation north and east of Bellingham, WA (see Figure 9). The Nooksack and their language have been documented less than Lummi. Literature relevant to Nooksack

culture includes Jeffcott (1949), Amoss (1974), Suttles (1987), Reid (1987), Wells, et al. (1987), Thom (2005), Carlson (2007), Galloway (2007), Harmon (2007), and Richardson and Galloway (2011), Richardson (2012). The Jeffcott text is notable for its early documentation of selected oral histories and some description of the territory, though the material is written for non-academic audiences. The Amoss dissertation represents one of the most comprehensive treatments of Nooksack religion and culture. The text primarily describes changing religious practices, including the reemergence of the winter dance ceremony and the rise of Shaker religion. Wells, et al. only cursorily describe Nooksack though interviews with Jeffcott and others, devoting most of their work to the closely related Stó:lō culture. Carlson, Galloway and Harmon all discuss Nooksack in the *Be of Good Mind* text. Their contributions describe historical population and language shift (Carlson), a comparison of Nooksack and Stó:lō language revitalization programs (Galloway) and notions



**Figure 9 Washington State Native American reservations including Nooksack (www.images.google.com)**

of belonging and tribal membership (Harmon). All these works are described in more detail in this section

Suttles never spent significant time at Nooksack and relies on the unpublished field notes of Paul Fetzner, collected in 1950, to describe their language and culture briefly. The Reid (1987) text (primarily from secondary sources) is notable for its claim that Nooksack and other Coast Salish communities did not represent cohesive, self-identified groups historically, and instead developed this model of social and political organization during the early 1900s. Without cohesive group structure, Reid argues that defined concepts of territory ownership did not exist. This claim is refuted by Thom (2005) and is largely inconsistent with other scholarship on Coast Salish notions about territory (Suttles 1951, 1987; Miller 2001, 2007). The conceptualization of territory promoted by Reid is an example of the reason many Indigenous communities are cautious about access to cultural resources, like oral histories and interviews. There could be direct consequences for interpretation of treaty rights if courts and federal governments believed that Coast Salish people did not recognize territorial ownership and control of the resources in that region. If courts had accepted claims made by Reid, influential legal decisions (like *Boldt*) may have been very different. In future court cases there is a danger that cultural information like that found in oral histories and interviews could be used against Native people to diminish capacity to claim access to territory and resources.

The Galloway and Richardson (2011) text is the first monograph dedicated to the Nooksack and is the product of years of research. Their work describes the Nooksack people, their language, its boundaries and over 150 place names that contextualize Nooksack relationships to their territory. The significance of the places names are documented along

with maps, current photos and accompanying pronunciation of the names by Elder George Adams.<sup>19</sup> The book also describes the extant language recordings and field notes relating to Nooksack. This work was warmly received by the Nooksack people in 2011 and provides important material to support language and cultural revitalization in the community.

Texts describing the Nooksack language or *Lhéchelesem* include Amoss (1961), Galloway (1984a, 1984b, 1985) and Galloway, et al. (2004). The early Amoss (1961) text is a M.A. thesis representing the first linguistic treatment of the language. Galloway (1984a) is a comprehensive description of Nooksack phonology. This work and that found in Galloway (1984b and 1985) are based on existing archival recordings and primary fieldwork done before the last fluent speakers (George Swanaset and Sindick Jimmy) and the two partial speakers (Mrs. Louisa George and Mrs. Esther Fidele) passed away. Galloway, et al. (2004) is a publication in collaboration with Mr. Adams and another Nooksack tribal member Catalina Renteria that describes the unique process of language revitalization underway at Nooksack. The publication displays the command Mr. Adams has over the language and presents Nooksack as an unexpected language reconstruction case study.<sup>20</sup> The Nooksack's language is referred to both as Nooksack and *Lhéchelesem* in the literature, but I will use *Lhéchelesem* as that is the terminology used by both Adams and Galloway. According to Galloway (2007:212) the name *Lhéchelesem* is the language name which stems from a now abandoned village name, *Lhechálos*, while Nooksack is the name of the tribe and translates as “bracken fern root people.”

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<sup>19</sup> Audio resources accompanying *Nooksack Place Names*  
<http://www.nooksackplacenames.com/>

<sup>20</sup> In August 2014 Professor Galloway passed away, leaving an important legacy and a significant loss for Salish language preservation.

Traditional Nooksack territory encompasses the inland region of Mt. Baker, its foothills and the Nooksack river drainage. Richardson (2012:n.p.) states, “the Nooksack were one of many Indian groups which were party to the Point Elliott Treaty of 1855, in which title to the land of much of western Washington was exchanged for recognition of fishing, hunting and gathering rights, and a guarantee of certain government services.”<sup>21</sup> Unlike the Lummi, the Nooksack were not provided federal recognition or reservation land following the 1855 treaty process. At the time reservations were created, the government was not interested in creating a reservation for each distinct cultural group; instead tribes like the Nooksack were instructed to join the Lummi on their reservation. The Nooksack have “historically edgy” (Harmon 2007:43) relations with the Lummi that were exasperated by their lack of reservation land and later frustration that Lummi did not support their early application for federal recognition. Few Nooksack moved to the Lummi Reservation (Deloria 1978b:102), even after government agents told tribal members they were expected to relocate several times between 1873 and 1874. After it became clear that the Nooksack were not going to be moved without military force, they were allowed to remain in a small piece of their traditional territory (Harmon 2007).

Lack of land ownership and recognition made tribal unity challenging and resulted in greater linguistic and cultural assimilation for the small community (Amoss 1974). According to Harmon (2007:44), non-reservation tribes were “exposed to land-hungry and intolerant non-indian settlers (*sic*)” and neglected by the federal government. Even without federal recognition or land rights, the Nooksack continued to function as a tribal community.

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<sup>21</sup> According to Amoss (1974:27) the Nooksack representatives to the treaty signing were prevented from attending the signing because of winter ice. Their inability to attend the treaty negotiations is partially responsible for the initial lack of federal recognition.

Beginning in 1926, they petitioned the government for recognition and in 1935 voted to accept the Indian Reorganization Act (Richardson 2012). The vote had only local symbolism, but helped build unity and purpose in the community. In the 1950s, the tribe pursued a land claim case through the Indian Claims Court for loss of land without compensation. The Claims Court sided in favor of the tribe and a small cash settlement was awarded in 1965. Continued pressure by the tribe finally resulted in federal recognition in 1973, just in time to participate in the *United States vs. Washington* court case over salmon fishing rights. The Nooksack had won recognition and a reservation, but by the 1970s processes of intergenerational language transmission had largely been severed and use of the language diminished. Federal tribal recognition was a major achievement, but the years without ability to legislate and govern had taken a toll on the community and the continuity of their cultural practices. The last fluent speaker of Lhéchelessem died in 1977 and the language was soon declared officially extinct (Galloway 2007).

Galloway (1985, 2007) describes Lhéchelessem going through a process of gradual extinction over the past 300 years. The Chilliwack people in British Columbia spoke a Lhéchelessem dialect and were culturally and economically connected to the Nooksack and their territory around Mount Baker (Galloway 1984; Carlson 2007). Chilliwack oral tradition recounts a massive landslide that forced the Chilliwack to migrate north and west into the Fraser River floodplain. There, they adopted the local Halq'eméylem language (Carlson 2007:141-151). Carlson describes the event occurring prior to historical records and that an epidemic wave of smallpox may also have contributed to the migration. Around the time of the Chilliwack migration, Nooksack men began taking wives from the Halq'eméylem speaking Chilliwack community. Over time Halq'eméylem and later English become

dominant languages in the Nooksack community. Neither Halq'eméylem nor Lhéchelesem is commonly spoken in the community today.

Lhéchelesem is critically endangered and officially considered extinct by groups like Ethnologue. However, my experience in the community tells a different and more complex story. Today, Lhéchelesem is in a unique process of revitalization led by George Adams, a highly skilled but largely self-taught speaker. Brent Galloway was the main linguistic authority on Lhéchelesem and had attained practical fluency in the language. He regularly collaborated with Mr. Adams on Lhéchelesem grammar and phonology, often fully in Lhéchelesem. The recent progress made toward Lhéchelesem preservation is in jeopardy due to an expected list of problems facing other endangered languages such as lack of time, funding and resources. The passing of Dr. Galloway has significantly hindered language preservation efforts. Language preservation is further challenged because knowledge of the language is now concentrated in one person, Mr. Adams. The tribe lacks secure archival storage for language resources putting Mr. Adams' knowledge at further risk. The political climate has also produced a highly unstable employment and funding environment for language preservation and revitalization work.

Currently the Nooksack are involved in a public battle over tribal membership. I use this issue to frame claims about language stability. Tribal politics are notoriously divisive and the Nooksack case is no exception. This example shows the vulnerability of endangered language preservation work and a rationale for secure archiving. Local politics at Nooksack are currently dominated by a disenrollment confrontation that puts the tribal membership of 306 current Nooksack tribal members at stake. Mr. Adams is personally immersed in the issue and his experience illuminates situations where divisive tribal politics can impact

language preservation efforts and ideology. The case for disenrollment rests on whether a common ancestor was actually Nooksack or from a First Nations community in British Columbia.

### **Disenrollment Politics**

According to Miller (2007:16) Coast Salish tribes commonly “struggle internally over what constitutes a community and who ought to have membership.” Nearly every Coast Salish group has internal battles over membership, complicating efforts to govern and create policy. Enrollment struggles are not uncommon throughout U.S. tribes (Spruhan 2007; Painter-Thorne 2009), but there are elements of Coast Salish societal organization that may contribute to challenges defining membership. Coast Salish societies were never governed by centralized political systems and did not build their identity around language or clan in the way other communities did. Instead of clans, Coast Salish societal organization centered around large kin groups that managed ownership of houses, use-rights, resource harvesting areas and spiritual powers (Suttles 1987; Miller 2007). Clans are less volatile than kin groups as they encompass multiple families and continue to exist regardless of the current rise or fall of one family’s power. According to Miller (2007:21) clans are “immortal” due to the persistence of their structure. In comparison Coast Salish kin structures are more susceptible to “mortal” oscillations of power and influence. According to Miller, “from this viewpoint, tribes and bands can be thought of as being composed of competing families, whose members’ loyalties lie more with the families than with the political units that contain them” (19). The current enrollment dispute highlights the rise and fall of certain families and the impact on membership.

Enrollment was a contentious issue at Nooksack even before they achieved federal recognition. Harmon (2007) provides an example of the fluid nature of tribal membership through portrayal of George Swanaset's process of selecting Nooksack identity. Swanaset was respected for his leadership, became a tribal chief and was instrumental in the tribe's effort to attain federal recognition during the mid 1900s. Today, his decedents are prominent in the Nooksack community. Harmon uses Swanaset's story<sup>22</sup> to exemplify the interconnectedness of Coast Salish communities and the sometimes fluid boundaries between regional group affiliation. The story shows that complex overlapping family relationships, extending over a large geographic region do not always fit neatly into census rolls and membership lists. Harmon's model provides a useful context for the current disenrollment issue at Nooksack, which is one of numerous membership controversies in tribal communities throughout the U.S.

As described by Harmon (2007), Swanaset was a Coast Salish person with loose ties to multiple groups in the region, including the Tsawwassen, Langley and Samish. While Swanaset's stepfather was Nooksack, his mother was not. For Harmon, this affiliation fits Coast Salish practices of using factors other than the nuclear family for defining group membership. Swanaset attended boarding school in multiple locations (including Nooksack) and married twice – to women in different communities and on different sides of the international border. He fished, worked and maintained relations throughout the Coast Salish region, though he never used that term. According to Harmon, "he saw no contradiction between his international kinship ties or mobility and his allegiance to Indians of the Nooksack Valley" (36). For Swanaset and other Coast Salish people, movement and identity

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<sup>22</sup> Based on a 1951 interview of George Swanaset by Paul Fetzer

in multiple communities was/is common as there are traditional practices of exogamous marriage and resource sharing over significant distance in the region. Coast Salish people maintained clear tribal identities and unique dialects or languages in close proximity, but “did not plant an impassible fence around themselves” (Harmon 2007:41). Past tribal membership practices are understood and fluid compared to current membership rules, which are often based in specific census list records and resulting blood quantum percentages.

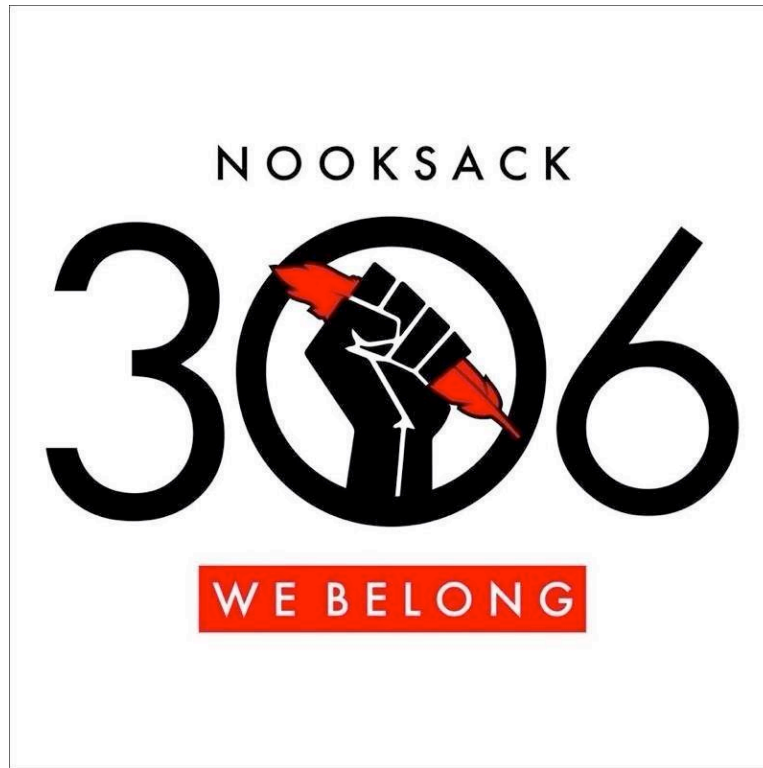
Fluid understanding of group affiliation has historic relevance in the region, but is at odds with federal recognition, the methods of census data collection and categorization, and resulting tribal membership designation (Harmon 2007). The international border has greatly colored choices people make about their group membership. U.S. policy was to create large tribes on few reservations as opposed to Canadian efforts to keep bands separated. U.S. reservations are fundamentally problematic in assuming multiple groups that did not previously live together would do so, especially in the poverty of a reservation. The porous and dynamic nature of historical tribal boundaries is at odds with how Coast Salish must present themselves to federal governments and in legal cases (Cruikshank 1998; Harmon 2007). The need to maintain unique federal recognition prohibits Coast Salish tribes from defining themselves broadly or collectively. Harmon (2007:48) states that describing political affiliation regionally,

. . . demonstrates that the social, racial, and political categories – categories such as kin, Indian and Nooksack – are not prescribed by nature and are neither universal nor eternal. As they were for George Swanaset, they are the evolving result of childhood learning and later experiences, of comparisons and contrasts among people of interactions and negations in specific historical circumstances, of reactions to shifting power and incentives. Even the most basic assumptions – assumptions about the relationship of identity to birth of

residence, for instance – are not universal but vary from person to person, group to group, and historical period to historical period.

The process of determining enrollment was and is complex. The current divisive membership dispute has ramifications for health benefits, schooling, resource access, casino revenue and language preservation work.

This disenrollment issue is discussed because it is part of the current cultural landscape at Nooksack and impacted my research on language preservation efforts in the community. Of particular significance is that Mr. Adams has become a leader for the Nooksack 306 (Figure 10), as the group facing disenrollment is known. His role as the only remaining Lhéchelesem speaker means that his identity and activities are closely tied to the fate of language revitalization programs in the community. Tribal politics can easily derail even the best-intentioned projects. Lhéchelesem education efforts became more difficult after his involvement in the disenrollment issue and at the time of writing, his position as the tribe's only tribal Lhéchelesem language instructor and researcher has been eliminated. I do not intend to support or repudiate the case of those facing disenrollment. Ultimately membership decisions are a sovereign right of the tribe as shown in the *Santa Clara Pueblo v. Martinez* U.S. Supreme Court ruling. Published rationale for Nooksack government disenrollment is difficult to find, which explains this admittedly one-sided account.



**Figure 10 The Nooksack 306 logo ([www.images.google.com](http://www.images.google.com))**

On April 12<sup>th</sup>, 2013 Mr. Adams and I went out to lunch to talk about language and my Language Life resource management platform. Walking into the restaurant I saw the front page heading of our local Bellingham Herald: “Nooksack to Disenroll 306.” Mr. Adams and I discussed the disenrollment plans, but neither of us yet realized how consuming the issue would become. After the disenrollment issue began in early 2013, Mr. Adams began to observe ramifications of his involvement in the issue. His support for those facing disenrollment became detrimental to his language work and other culturally related projects he participates in. He first noticed that some families supporting disenrollment removed their children from his optional afterschool language program. There is nowhere else in the community to access this education, so the impact on language dissemination is significant. Additionally, if disenrollment for these tribal members goes through, the disenrolled families

would become ineligible for tribal education services, like the afterschool language class. That would remove yet another group from the classroom. At the time of writing, Lhéchelesem language education has been eliminated for all children because Mr. Adams' employment in the tribe was terminated.

Mr. Adams also found the community divisions caused by disenrollment cut short the Native Tribal Canoe Journey he was leading in summer 2013. Since 2006 Pacific Northwest tribes and First Nations have gathered in the summer to celebrate the cultural tradition of canoe travel. Each year a different community takes turn hosting groups who paddle by canoe from as far as Vancouver Island, the British Columbia coast and Southern Oregon. Paddlers are mostly young people, keeping a focus on cultural education for youth. The event also builds awareness about traditional marine transportation routes used by Native people in the Pacific Northwest to trade, visit family and follow seasonably available resources.

Equally important to the final destination, are the host communities along the route. Tribes and First Nations host canoe teams along their journey, providing opportunity for rest and community. The event is imbued with culture, language and protocol. At each stop traditional protocol must be followed, where the canoe team formally requests permission to enter into the territory of the host community. This request and most formal oratory are conducted primarily in Native languages in my experience. The event is an excellent example of cultural revival, community building and promoting physical fitness. The journeys often require long amounts of time in a boat, exposure to weather and potentially dangerous open ocean crossings. Mr. Adams has led a summer canoe journey for Nooksack youth for several years and the event is an opportunity to engage youth with language education in a highly experiential environment. In 2013 the final destination was the Quinault Nation on the

Olympic Peninsula (Washington State). However, by summer 2013 the disenrollment controversy at Nooksack was a prevalent topic between tribal members in a variety of contexts. Many tribal political conflicts are primarily between adults, but this issue has direct consequences for adults and their children; about half the youth in Mr. Adams' canoe were listed for disenrollment. I will return to the events in the canoe after brief background on the disenrollment issue.

The recent disenrollment controversy at Nooksack has not been the subject of any published academic work, but the issue has received extensive coverage in local, national and international media. Additionally experts, like Professor Bruce Miller (UBC Anthropology), have written statements of behalf of those slated for disenrollment, affirming their Nooksack lineage. To say the issue has been divisive for the Nooksack and a magnet for negative publicity is an understatement (J. Miller 2013). Jobs have been lost, financial and medical security has been put in question, and relations in this small, rural community have been disrupted. There is significant literature on tribal membership conflicts throughout the U.S. and their relevance to tribal law, treaties and gaming (Reitman 2006; Spruhan 2007; Painter-Thorne 2009; Rubio 2009). These authors generally agree that as casino revenue increases, tribal enrollment becomes more contentious. In the context of this paper the disenrollment issue at Nooksack is evidence of unintended impacts of tribal politics on language education efforts.

Tribal officials state that the 306 Nooksack members are at risk of disenrollment because the ancestor they trace tribal lineage to, Annie George, was not on the 1942 tribal census. All the Nooksack 306 trace their Nooksack tribal affiliation to Mrs. George, whom they believe was a full-blooded tribal member left off the census roles. Anthropologist Jay

Miller describes that census records are challenging to use as the basis of membership decisions because accurate membership counts in the early 1900s were difficult (Mapes 2013). In relation to a Snoqualmie (Washington State) tribal membership dispute Miller finds that “most [census] records after 1920 are inaccurate, messed up, corrupted or intentionally falsified” (Mapes 2013:n.p.). While census records are notoriously inaccurate, they are still the standard many tribes rely on. Mrs. George had three daughters, each of whom married Filipino men – one with the last name of Rabang. The Nooksack 306 are subsequently all of mixed Filipino and Native American descent. A Los Angeles Times article from 2000 describes the Rabang family, their actions and Filipino ancestry (Cabrera 2000). It seems the disenrollment issue stems from the Filipino ancestry and Rabang family practices more than the degree of Nooksack lineage.

The LA Times article is entitled “Nooksacks Allege Filipino Family Has Conquered Tribe From Inside.” The article describes corruption, drug trafficking and control of tribal government by members of the Rabang family at Nooksack. The LA Times article is frequently cited by current tribal council members as part of their rationale for disenrollment. The article alleges that Rabang family members gained positions of power in the tribe, including tribal chairman, and used their influence to hide illegal operations and silence opposition. One tribal member interviewed for the article described the Rabang family taking over their tribe and disrupting a 1996 enrollment audit to determine the legitimacy of the Rabang family’s Nooksack heritage. It is difficult to parse out right and wrong in complex interfamily disputes within tribal communities. It is clear that loss of tribal membership has significant consequences and that tribal governments, like the Nooksack, have a court affirmed right to determine membership requirements in their own communities.

The Nooksack Tribal Constitution states that tribal membership includes “persons who possess at least one-fourth (1/4) degree Indian blood and who can prove Nooksack ancestry in any degree” (Kinnison 2013:n.p.). According to Kinnison, “no one disputes that the 306 members facing disenrollment possess more than 1/4 Indian blood and have Nooksack ancestry” making them eligible for enrollment. However, ability to determine how membership rules are interpreted and applied is a sovereign right of tribal governments. The Nooksack 306 took their case to Nooksack Tribal Court in 2013 after the Tribal Council announced that those scheduled for disenrollment would not receive back-to-school, holiday or casino profit sharing financial stipends even though no final membership decisions had been made. Tribal Court Judge Montoya-Lewis rejected their legal challenge on grounds that “tribal membership rules vary widely from tribe to tribe, but it’s undisputed that the authority to make those rules lies at the heart of tribal governance and sovereignty” (Stark 2013:n.p.). Montoya-Lewis cites the 1978 U.S. Supreme Court case of *Santa Clara Pueblo v. Martinez*, where the court affirmed tribal council rights to make and enforce rules governing tribal membership. As the Nooksack 306 members petition to be kept in the tribe, state, federal and tribal courts offer them few options.

Tribal membership is volatile nationwide and the rise in Indian gaming throughout the country is making tribal membership more lucrative and enrollment battles more common (Painter-Thorne 2009). Nooksack has a small casino, but profit sharing for enrolled members is fairly minimal. Continued access to Indian Health Services, tribal housing programs and other tribal programs are much more significant financial concerns. For Mr. Adams, the disenrollment is personal in addition to impacting his language education work. While his own enrollment status is not being questioned, many of the Nooksack 306 are members of his

family. The Nooksack 306 have an Facebook page<sup>23</sup> and actively support their own cause and network with others facing tribal disenrollment throughout the country. Mr. Adams has become a leader for the group, petitioning the state government, speaking at rallies and in March 2014, challenging the current tribal chairman, who is the main supporter of disenrollment, for reelection. Mr. Adams lost the election by 50 votes, but two supporters of the Nooksack 306 were elected to the tribal council. Opponents of disenrollment believe it will now be more difficult for the disenrollment to pass, though that is uncertain. Mr. Adams joins a growing list of those supporting the Nooksack 306 that have lost or been forced out of their jobs. Two tribal council members supporting the Nooksack 306 were forced to resign in February 2013 and three days before the tribal election Mr. Adams and seven other tribal employees opposed to disenrollment lost their jobs. At the time of writing the disenrollment proceeds but no final decision has been made.

### **Disenrolling Language Work**

Without Mr. Adams providing after school language instruction, there are few options for youth to access this education. Also of concern is the vulnerability of Mr. Adams' careful work building a dictionary and grammar for Lhéchelesem. Nooksack lacks a secure repository for linguistic data – materials are kept on paper and in hard drive files. Mr. Adams' data must now be kept in unsecure personal locations and could be lost or damaged at anytime. Given the advanced stage of Lhéchelesem endangerment and the confinement of its knowledge in so few people, documentation and preservation of language resources are critical elements of this language's viability.

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<sup>23</sup> Nooksack 306 Facebook page <https://www.facebook.com/TheNooksack306>

Prior to the disenrollment dispute Nooksack was providing language education, even given their language's advanced stage of endangerment, their limited funds and personnel. During my early research, Mr. Adams was using a hybrid immersion approach in his daily afterschool program and between 10 and 20 students attended the class regularly. During the day he also worked to complete his dictionary and translate materials into Lhéchelesem. In the 2013 Summer Canoe Journey, Mr. Adams was attempting to teach youth Lhéchelesem in the canoe, but found that tribal politics followed them. The disenrollment issue had been publicly simmering in the community for months and was receiving national and international news coverage. About half the youth in Mr. Adams' canoe were subject to disenrollment. A week into the journey, he found that disagreements were breaking out between youth designated for disenrollment and families supporting their expulsion. He felt that the spiritual and emotional unity so important to a canoe team was lost. Fearing the disunity had made their open water journey dangerous, he beached the canoe and they returned to Nooksack on land. I find their inability to paddle to Quinault is a metaphor for Nooksack's struggle with language preservation. There are good intentions, capable leaders, and willing youth – however divisive politics can easily derail the efforts.

My description of the current political strife in the Nooksack community is meant to show the diverse factors that impact the efficacy of language preservation and education efforts in tribal communities and possible motives for use of language documentation platforms. Divisive politics are certainly not unique to Nooksack and tribal membership disputes are becoming more common. Nooksack is an exceptional case, as linguistic knowledge is heavily concentrated in one tribal member and that person has now become controversial. Nooksack is also exceptional because the last speaker of a language is often

one of the oldest members of the community and may not have developed teaching skills. Mr. Adams is a skilled teacher in addition to being a knowledgeable speaker. He will hopefully have opportunity to contribute for years to come. The identification of language ideology at Nooksack is relevant to their current experience with political instability and resulting impacts to language efforts. Lummi and Nooksack are each excellent examples of the need for a secure archive of language resources. Each has unique needs and rationale for archiving and opportunities for dissemination. The next section details language documentation and dissemination practice and ideology at Lummi.

### **Documentation and Dissemination at Lummi**

Ted Solomon has been the Director of the Lummi Language Department (LLD) since 2002. The LLD is a small office within the Cultural Department of the Lummi Nation tribal government. In 1987, Lummi Indian Business Council (LIBC) Resolution #87-15 directed the Lummi Nation to provide Lummi language education in all schools and set a goal of language fluency within two generations. This resolution is responsible for the creation of the LLD and initiated contemporary Xwlemi' Chosen language education efforts. The LLD currently employs two media specialists and two language teachers. The media specialists are responsible for digitization and management of legacy recordings held by the LLD and have spent countless hours combing through recordings to isolate individual words, sentences, stories, and songs into independent digital files. Thousands of unique files have been produced by this effort. Their work has produced a digital corpus comprising the legacy recordings that Lummi has obtained from regional libraries and private researcher collections. Their collection also contains some recent language documentation. Other legacy

recordings have been identified but not yet obtained and the LLD continues to search for these invaluable resources.

Lummi language recordings are not housed in any of the major international archive platforms and very little Lummi language content is available through the Internet. The LLD is not opposed to all public access to their language, as example the LLD sponsors efforts to mobilize some language recordings and lesson content through the Lummi Nation website,<sup>24</sup> occasional Lummi Nation radio programs and the Lummi Nation newspaper, the *Squol Quol*. Their collection contains oral histories and resources documenting their connection to place, ownership of resources, traditional use areas and protocol around exchange of rights. Sharing of these resources brings to the surface concerns about use of cultural knowledge, access and potential ramifications if these resources are misinterpreted.

I have been involved in conversation about a secure repository for language resources at Lummi since 2009. Initially we looked into the FirstVoices<sup>25</sup> language education website. The neighboring Saanich First Nation in Vancouver Island has successfully used this site. The attempt at implementing FirstVoices at Lummi highlights organizational, orthographic and ideological challenges of archiving, especially in digital repositories. Coordination of Xwlemi' Chosen education efforts is decentralized and jointly managed by the LLD, Lummi Tribal Schools and Northwest Indian College (NWIC). The LLD coordinates language education efforts at Lummi Head Start School, Lummi Day Care and Ferndale Public Schools. Xwlemi' Chosen education within the tribally controlled Lummi Tribal School is coordinated by the Lummi Education Department. There is a lack of coordination of

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<sup>24</sup> Public Lummi language samples:

[http://www.lummi-nsn.org/website/dept\\_pages/culture/culture.shtml](http://www.lummi-nsn.org/website/dept_pages/culture/culture.shtml)

<sup>25</sup> FirstVoices: <http://www.firstvoices.com/en/home>

curriculum between the LLD and the Lummi Tribal Schools due to different approaches and use of different orthographies (Shepard 2007). NWIC manages their modest number of language classes independently.

I have collaborated with Mr. Solomon, the LLD Director, since 2005 when I conducted my MA research. His willingness to consider ways technology can aid in language revitalization was a welcome surprise, given the lack of language resources available via the Internet. Mr. Solomon has expressed an interest in creating greater accessibility to both legacy and current Xwlemi' Chosen recordings. Increasing access to Xwlemi' Chosen resources was the main recommendation resulting from my MA research (Shepard 2007), a project that Mr. Solomon participated in. Next I describe efforts to adopt FirstVoices at Lummi.

### **First Collaboration Attempt**

FirstVoices is a product of the First People's Cultural Foundation and provides a unique Internet-based language educational tool that supports about 60 language communities throughout Canada. The platform is geographically and financially connected to British Columbia, and accordingly 80% of the language communities using the site are located in B.C. Its funding model allows free use of the site and staff support to B.C. First Nations. Other Canadian First Nations pay one-time use fees to support project costs. Non-Canadian language communities are welcome to use the site but must also pay for site use. There are no language communities outside of Canada using FirstVoices, though Lummi came close to becoming the first.

The LLD maintains a collection of historical or legacy recordings pertaining to Xwlemi' Chosen and some for neighboring dialects like Samish. Since no first generation language speakers of Xwlemi' Chosen remain, these recordings and accompanying linguistic analyses represent the most comprehensive repository of vocabulary, pronunciation and conversational communication. Mr. Solomon recognizes the importance of the legacy collections managed by LLD and their potential application. Accordingly, he has been willing to investigate options like FirstVoices and the Mukurtu site used in my research. In our conversations, Mr. Solomon articulates a need for a community-based archive that can directly support educational efforts and maintain protection of intellectual property. The exact product he envisions does not currently exist. However, learning about his intended application for such as tool has been valuable in my evaluation of other archive examples and in determining underlying language ideologies that impact language work at Lummi.

When I first began working with Mr. Solomon, nearly all the legacy recordings were stored in fireproof cabinets in the LLD office. The collection of tapes and reels had already been mostly digitized, though initially onto CD media. Physical storage of irreplaceable media (both analog and digital) is highly vulnerable to damage, degradation and loss (Barwick 2003). Over the past five years, most of the legacy collections have been migrated to servers maintained by the tribe's Information Technology department. Server-based storage at Lummi decreases potential for damage and loss, but by no means conforms to industry standards of data preservation, interpretability and backups. Currently, legacy recordings are only available to LLD staff through networked computer access. On numerous occasions, I have seen instances of computer failures and platform upgrades causing staff (and me) concern about the security of these legacy materials. Ability to securely archive

legacy recordings, mobilize those collections and continue adding to them are rationale for use of an archive platform.

Mr. Solomon was impressed by many of the features in FirstVoices. The platform looks professional, has multiple ways to search and categorize words, has a smartphone application and provides each language community with a customizable homepage. I connected him and Mr. Brand, Director of FirstVoices, which led Mr. Solomon to visit their Saanich office. The LLD then arranged for Mr. Brand to present FirstVoices to a group of tribal council members, elders and language department staff.

At the presentation I could see that many people saw the potential of the FirstVoices platform and recognized that Lummi urgently needs more tools for connecting language learners with content. However, concerns raised by members of the tribal council about sovereignty, access controls and cross-border data ownership ultimately derailed the effort. According to Mr. Solomon, many of the divisive issues could have been worked through with through their tribal attorney, but were never pursued. Licensing was going to cost about \$50,000 for Lummi and require them to provide extra staffing in the LLD to handle the increased workload, though this was not the issue that ultimately held up the collaboration. Members of the tribal council seemed willing to entertain the costs but felt that contract language required them to sign over ownership rights to intellectual property, which was seen as inconsistent with their sovereignty. As Lummi members understood the agreement FirstVoices offered, they would lose exclusive intellectual property ownership to their data once they were uploaded to the Canadian-based FirstVoices server. The Terms of Use language, available on the FirstVoices website, states that language communities retain copyright for their linguistic resources. I am certain that FirstVoices is not interested in

usurping intellectual property ownership and that they are sensitive to tribal sovereignty as a Native run entity. However, the stated concerns about sovereignty are consistent with already discussed ideologies around language resource protection at Lummi. The public objections to FirstVoices may also correspond to other political factors within the tribe that limited the success of this initiative.

### **Organizational Influence**

Coordination of Xwlemi' Chosen education efforts are simultaneously coordinated by three organizations. Each group has unique interests, resources and ideologies that influence their projects. Northwest Indian College offers college level Xwlemi' Chosen courses and preparatory courses for Native language teacher certification. NWIC is connected to the Lummi government, but is formally autonomous. Lummi Education Department coordinates education at the tribal K-12 school and has provided Xwlemi' Chosen classes since 1976. Their classes are currently taught once a week for an hour and are mandatory. Approximately half of school age Lummi children attend the tribal school and the other half elect to attend classes in the Ferndale public school system, where Lummi language education is not available during the school day. The Lummi Language Department provides after school language classes at Ferndale High School in addition to the Headstart and Daycare. The decentralized approach to language education at Lummi may hinder the efficacy of education efforts in the community.

I have observed a long running tension over curriculum, orthography, fluency standards and vision in language education policy between the different organizations at Lummi. To me, centralizing direction of Xwlemi' Chosen education would make efficacious

use of limited resources and exploit the exceptional asset of a tribally controlled education spanning daycare to college. The current disparate approach results in small challenges like inconsistent teaching strategies and fundamental problems such as concurrent use of three different orthographies. Shepard (2007, 2009) addresses these issues and recommendations in more detail, but I note them here because the inconsistent language education policy and tension between those coordinating that policy can affect the success of language related initiatives.

A language documentation preservation initiative, like the one proposed with FirstVoices, could significantly increase the Lummi Language Department's influence and leadership through mobilizing their legacy corpus into an online collection that supports educational curriculum. This action would also further standardization their preferred orthography in lieu of the orthography used by other tribal organizations. The standardization of orthography and use of their educational resources would likely increase LLD influence around language policy in the community. Perceived language policy influence may partially explain why the FirstVoices collaboration never materialized.

Though the FirstVoices collaboration was not ultimately successful, its consideration signifies that leadership at Lummi is interested in acquiring technology that supports language dissemination and is willing to make a financial investment. The technology must be aligned with Lummi's core interests in protection of sovereignty and support of education. The proposed adoption of FirstVoices highlights the ideology and functionality Lummi is seeking in a language dissemination and preservation technology. Once the collaboration with FirstVoices was unsuccessful, I began looking at other options for language documentation preservation and mobilization at Lummi. I researched several major

international archives and as described in proceeding chapters, these options did not accomplish the functionality we were seeking. About this time the Mukurtu CMS archive platform was in active development. The platform had many of the features my partners and I were interested in, particularly around protocol management. We eventually decided to trial this site and I began coordination with Mukurtu to build a test environment.

The Mukurtu Content Management System is a free archive platform designed around the unique needs of Indigenous cultural archives (see Chapter 7 for a full review of the platform). I worked with Mukurtu staff to create my own site, called Language Life, and presented the platform to LLD staff. Mr. Solomon agreed to try this platform to see if it met his community's needs. Mr. Adams at the Nooksack Indian Tribe's Education Department was also willing to participate in testing the tool in relation to Nooksack language resource preservation and dissemination needs. Their diverse experiences, motivations and concerns indicate practical and theoretical applications of archiving in each community and the language ideologies impacting these interests.

Mr. Solomon and Mr. Adams have similar goals around language revitalization in their respective communities: both seek to document, preserve and teach their languages to new generations. However, their methodologies are divergent, which provides opportunity for study. The capacity of each department, their resources and skills represent differing ideologies and infrastructure in each community. Their experiences are relevant for comparison, as the languages have similar levels of endangerment. Mr. Solomon and Mr. Adams know each other personally and each was provided identical opportunities to make use of the Language Life documentation site. In each case, important examples of how language preservation is impacted by cultural and political issues within the tribes are

evident. Lummi and Nooksack experiences in the Language Life trial elucidate the language ideologies of each community and strategies for mediating use of the digital public sphere. The next chapter describes our trial of the Language Life site and contextualizes this experience in the discourses of language ideology and the digital public sphere.

## **Chapter 5: Language Life**

### **Introduction**

This chapter describes use of the Mukurtu-based Language Life language documentation and dissemination site by two tribal partners: Ted Solomon at Lummi and George Adams at Nooksack. Both my tribal partners had equal access, training and support using the Language Life site and were successful in uploading the types of content they felt was most relevant to their needs and the goals of their department. Both were quite busy and did not always have ability to regularly meet with me, but were still generous with their limited time to test use of the site and share thoughts on its implications and utility. The Mukurtu platform is still under development, though available publically. The version of the software I used for this research had flaws and limitations that may have limited some of the platform efficacy for the two partners.

My research was not funded and I did not have resources to hire technical assistance to develop additional features or implement complex customizations of the platform. Ability to fund a programmer would greatly increase the function and capability of the site. I was fortunate to have free use of the Mukurtu platform and the technical support of their staff. The experiences of both my tribal partners are valuable for determining design and functionality needs of an archive platform. I was also able to observe the relevance of existing language ideologies on decisions about access, control and use of language documentation and dissemination. The public sphere and related concepts like construction of voice and resignification of language resources also have applicability to this experience. Resignification in the context of this dissertation refers the process of attributing meaning to existing language recordings or resources through new use. Ginsberg (2002) and Hennessy

(2010) both describe resignification of historical media by Indigenous people and the role these new resources have for communities. This chapter is structured by first presenting experiences with the Language Life site then reviewing literature on language ideology and the public sphere.

### **Language Life: Lummi and Nooksack**

The Mukurtu site is designed to be highly flexible and facilitate cultural resource management for Native communities. In Chapter 6 the Mukurtu CMS platform is reviewed in more technical detail along with several archive examples. The Language Life site was created in 2012 for project use. The Language Life site enables preservation of nearly any file type and media files can be added individually or in bulk. Files can have extensive amounts of metadata attributed and material can be licensed to show ownership. Mukurtu CMS is unique because it is designed to facilitate use of Indigenous cultural protocol for the purpose of controlling access to content.

For example, access can be limited to particular families, genders or ages if appropriate. There are almost limitless access controls available, from fully public – to highly restricted. The Mukurtu platform was initially designed around print media (images and documents) archiving but can accommodate audio collections as well. In my experience the site is not optimized for audio in its current version, which makes its application for language preservation challenging at times. However, specialized programming could have enabled easier use of these media types. Mukurtu CMS is built using open source Drupal software, which makes the platform highly modifiable. The platform architecture enables users to develop additional features to meet specific needs. Those additions can either be used on a

local instance of Mukurtu CMS or adopted by Mukurtu as part of their codebase. The platform shortcomings were a hindrance to both tribal partners and resulted in valuable recommendations for improvement.

At Lummi, Mr. Solomon selected the types of media he wanted to post to the Language Life site without difficulty. The majority of the recordings in the LLD collection are legacy materials from the 1950s-1980s that have already been broken into individual word and phrase files. Individual media files are optimal for uploading into an archive platform and signify extensive work already completed that enables Lummi to make immediate use of archiving technology. In some cases Lummi also has CSV spreadsheet files that accompany the digital files. When available, these spreadsheets contain transcriptions of the original field notes for the recorded elicitation. Mr. Solomon noted a need for assistance with more transcriptions, as this has only been accomplished for a fraction of the recordings in the Lummi Language Department collection. Additionally, there is a need to document known metadata in spreadsheets to improve the archive corpus. For our first upload Mr. Solomon selected a batch of recordings by William Seaburg for their clarity and existence of an accompanying transcription. I initially envisioned that my tribal partners would be responsible for selecting content and uploading it to Language Life themselves, however they decided to only select the content and have me complete all the uploads. The platform was not as user friendly as I had anticipated (especially for batch uploads) and each of my partners had limited time available.

As we uploaded content, Mr. Solomon was quick to recognize platform limitations in file compatibility and display. For example, the site can upload a WAV file, but playback was inconsistent. Much of the Lummi recordings were in WAV format because they were

made using Microsoft office products. Finding these problematic, we converted content to other formats and eliminated playback issues. Mr. Solomon was also critical of how Word and PowerPoint files did not open within the web browser, instead requiring a download prior to opening. Lummi has language related content in a variety of formats reflecting years of using different technology and diverse dissemination strategies for those outputs. We quickly learned that significant preparatory work is needed to make file uploads function well. Minor inconveniences like incompatibility of DOCX and PPTX files left an impression that the site design was functional but inconsistent and not yet complete. We eventually found ways to post all the types of media we wanted and developed a reasonably efficient procedure for batch uploads of media and metadata. In total we posted about 75 word files encompassing a variety of general vocabulary terms and about 10 files in a range of other formats. Implementation of a content management platform could help focus production of media and metadata into standardized file formats.

Mr. Solomon is very skilled at researching extant recordings of Xwlemi' Chosen, facilitating their digitization and isolation of individual units of speech. When appropriate he also directs his staff to record lesson content for dissemination in class and through media outlets, such as Lummi Nation Radio. Mr. Solomon regularly conducts official welcomes and openings of events or meetings in Xwlemi' Chosen. We spend long periods of time listening to legacy recordings of word lists, stories and songs when together. We also discuss recording quality, preservation and access. Mr. Solomon is keenly aware of recordings missing from his collection from deceased linguists and anthropologists who worked in the community. For him an archive site would provide a space for management of both full length and segmented recordings. There is value in having a location where Mr. Solomon

could demonstrate archive practices his office is capable of as he continues to seek repatriation of materials.

A fundamental difference between the approaches to language preservation and revitalization at Lummi and Nooksack is availability of language resources. Lummi possesses hours and hours of mostly digitized files – many already parsed into individual word files. Nooksack has far fewer legacy recordings and during the time I worked with Mr. Adams he possessed no legacy audio recordings. Recordings of Lhéchelesem do exist (Galloway 2007:213) but reside in private collections such as Galloway's and at the University of Washington. In 2002 Galloway completed a grant-funded project to digitize about 100 hours of cassette and reel-to-reel recordings made with first-generation Lhéchelesem speakers. These were transferred to CDs and a copy of the collection was given to the Nooksack Tribe. At the time I worked with Mr. Adams, he no longer had a copy of these valuable recordings. He believes the tribe still has the CDs, though the collection may no longer be complete. That the person at Nooksack with the highest level of Lhéchelesem fluency and the only position dedicated to Lhéchelesem education does not have adequate access to this resource is indicative of the inconsistent funding and prioritization of Lhéchelesem language education at Nooksack. An archive solution could ameliorate this problem, which was part of Mr. Adams motivation to participate in my project.

Given lack of access to legacy recordings, Mr. Adams is inclined to spend more time conducting linguistic analysis and preparing content for a dictionary. Unfortunately no one is currently documenting Mr. Adams' command of the language. I did find that Mr. Adams had organized a classified word list, lessons, songs and stories in digital word document format.

A worthwhile project, that he and I only scratched the surface of, is recording Mr. Adams dictating his textual resources.

The first resource Mr. Adams selected for the Language Life site was a text lesson file used as the first module in his after school class. We uploaded his lesson to the Language Life site and used it to structure our audio content uploads. When prompted with the opportunity to record Lhéchelesem and post to the Language Life site, Mr. Adams displayed confidence in his role as a Lhéchelesem speaker and elected to record vocabulary found in his first instructional unit. We recorded basic greetings on one occasion and numbers on another. These audio recordings were linked to the lesson text so a user can view the lesson and click on a word to hear its pronunciation. The display and operation this resource is basic but functional. In total we posted one lesson and approximately 50 audio files to the Language Life site. With additional funding the lessons could be further developed into more complex multimedia resources.

During my meetings with Mr. Adams, we also worked on projects like his translation of the book *Green Eggs and Ham*, which I helped produce in print and electronic formats. Translation of a 45-page book with sometimes unusual sentence structure is a testament to Mr. Adams' skill. We planned but never completed work to record his narration of the book into a media enabled PDF file. Often, Mr. Adams would spend long periods of time reading in Lhéchelesem, discussing etymology of words, demonstrating grammar and applying known phonological shifts between regional Salish languages to theorize a word missing from Lhéchelesem. All of Mr. Adams' work on Lhéchelesem is stored on an unsecure and un-backed up computer, along with paper notebooks. These resources are constantly in danger of loss and the ability of others to learn this knowledge would be enhanced by a

preservation and dissemination platform. A language revitalization program will reflect the strengths and resources of those people directing it; it also reflects their goals, ideologies and expectations. Language archives also display a reflection of the values and interests of the group they represent. Next I describe some of the functionality of the Language Life site.

### **Platform Application and Analysis**

The approach of both project partners is valuable and certainly neither is better; both also help identify strengths and weaknesses in the Language Life platform. At Nooksack file format was less of a challenge than the time required to create content and accurate orthographic display. At Lummi, uploading and playback of files were of principal concern along with metadata descriptions. For example, initially the diacritics in Lhéchelessem did not display correctly. For someone attuned to morphological accuracy like Mr. Adams, slightly inaccurate text display was very problematic. Though the Mukurtu platform supports a full range of Unicode fonts, it was still a challenge for me to produce the functionality I expected. Through networking with a Drupal programmer, I was able to make all diacritics display properly. Small consistent difficulties with the site left both my partners feeling they needed my assistance to use the site and they made limited efforts to use the site without me. This is a good reminder to have a stable and highly reliable platform prior to use with partners if possible. It was difficult to overcome the feeling that the site was still a work in progress.

The protocol based restriction features of Mukurtu CMS are its central design feature. Everything else is built upon this concept. I found that this feature worked well and was generally easy to use, though we used it at a basic level. Our trial of the platform was limited

to a small group of people, negating use of most of the restriction capabilities. The Mukurtu platform allows items and users to have fine-grained protocol permissions that control access. My tribal partners selected between fully public and completely private access for each piece of content added to the site. They knew that site access was limited to their use and no sensitive information was posted during our trial. Accordingly neither was very concerned about access controls on the platform. If our usage of the site expands or has any public access, the protocol restrictions would have greater application.

Given that Mr. Adams and Mr. Solomon know each other, each elected to allow the other viewing access for their sites. Both participants were interested in how their counterpart was using the site. Their comments about each other's site content show the utility of an archive that allows fine-grained access permissions and collaborative features. Mr. Adams was able to use his linguistic capabilities to scrutinize recordings uploaded by Lummi. For example, when Mr. Adams saw what I have helped Lummi post, he was critical of missing accents and glottal stops, or spelling mistakes in the transcription of words. Mr. Adams quickly began suggesting corrections and improvements and was able to leave written comments on the site if he chose. Another example is Mr. Adams recognizing the utility of Lummi's use of spreadsheets to batch upload content and increase metadata entries. At Lummi, Mr. Solomon noticed the structured lesson content posted on the Nooksack site and the way we linked audio files. This prompted us to emulate some of this practice. If my partners had wanted I could have given them ability to edit content together. This capability enables opportunities for collaboration with scholars, other language practitioners and members of other departments. Participatory archives utilize collaborative strategies of this nature. There is an obvious potential for challenges and disagreements on correct spelling

and pronunciation. However, for severely endangered languages this type of critical and creative exchange would be amazing to see. Our trial shows the importance of access management capabilities to not only limit access, but to allow access to those that can help improve content.

Participatory archiving is an emergent trend in the design and implementation of archives, and may enable greater critical exchange and engagement (Theimer 2011; Stenzel 2014; Henke et al 2015). Participatory archives provide ability for users to generate, edit and contribute content to an archive. Archives that integrate opportunities for collaboration may have greater utility for communities with overlapping interests in preservation of the products of documentation and dissemination. Participatory archives may also make efficient use of time by involving multiple people in the time intensive process of archiving. In our trial of Language Life, processes of uploading content and associated metadata were time consuming, even when using the batch import feature. Drawing on a larger number of people to upload content, check its accuracy and make edits could have significant benefits, while increasing broader engagement with archived content.

There is precedent for online knowledge building collaborations in a variety of context. Collaborative knowledge mobilization or “crowdsourcing” has allowed the production of vast amounts of peer-reviewed content at Wikipedia<sup>26</sup> and to a lesser extent at the Endangered Languages Project.<sup>27</sup> Wikipedia is one of the largest and highest traffic sites on the Internet and has created a user generated and managed online encyclopedia with over 35 million pages and nearly 5 million individual articles (Wikipedia 2015). The Endangered Languages Project was originally a collaboration between the University of Hawaii and

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<sup>26</sup> Wikipedia: [http://en.wikipedia.org/wiki/Main\\_Page](http://en.wikipedia.org/wiki/Main_Page)

<sup>27</sup> Endangered Languages Project: [www.endangeredlanguages.com](http://www.endangeredlanguages.com)

Google, and compiles user generated content on about languages and the status of their endangerment. Collaborative knowledge mobilization is not without its challenges, especially when applied to community based archiving of endangered languages. However, methodologies that support user engagement and diminish “data cemetery” effects deserve further investigation. A data cemetery, as described by Widlok (2013a:185) occurs when digital data is stored, but has low utility due to its access limitations or the design of the storage repository.

When an archive environment invites participant contributions, comments and editing, users have more opportunity to feel a greater sense of connection and community. A study of motivations of Wikipedia contributors (Kuznetsov 2006) found that increased participation in editing and building content made users feel their presence was not only important, but also needed. Opportunities to contribute content and even use existing content to create new, resigified content (Hennessey 2013) further builds connection to the site resources and reduces problems described by Meek (2007), where a language is only associated with scratchy old recordings and elders. Further study is needed to see what challenges arise through group efforts to increase accuracy of the transcription, pronunciation and metadata associated with digital heritage items. Native language accuracy can be highly controversial and as noted by Goodfellow (2003:53), preoccupation with accuracy and purity of language can be detrimental to a community and their language preservation efforts. Accuracy on the Language Life site is important to both my tribal partners but in different ways. A collaborative process could build a wider stakeholder audience that takes ownership and influence over content in an archive.

Both partners are dedicated to revitalizing their languages and continue to work in a context where their languages are critically endangered. Their unique approaches to documentation and revitalization projects were evident in their approach to using the Language Life platform. Their experiences provide rationale for functionality and design needs of an archive. It is questionable if either Mr. Adams or Mr. Solomon realistically expects their language to again be the common medium in their community in the future. Instead, they are working to provide increased opportunity for future generations to learn the languages. At Lummi, Mr. Solomon is building up a repository of recordings so people can enhance their learning by hearing the language as well as seeing it in written form. The documentation corpus is rich with vocabulary elicitation and conversational speech from a variety of individuals and both genders. If securely archived and used to construct educational opportunities Lummi could effectively leverage their existing educational infrastructure for robust Native language education.

Mr. Adams is focused on using his linguistic skills to catalogue a comprehensive word list and dictionary since little documentation of Lhéchelesem exists. An important opportunity exists to record Mr. Adams' language knowledge in audio format. Nooksack lacks the political stability and infrastructure to deliver effective language education at this time. A focus on preserving what knowledge exists seems more efficacious. Both need secure repositories for their work, greater collaboration and methods for increasing dissemination. Recordings in the Lummi Language Department are minimally secured and could benefit from secondary backup and migration into non-proprietary file formats. Recordings in this collection could also benefit from transcription and greater application language education efforts. Mr. Adams' work is highly vulnerable because it is kept in

notebooks and in locally held digital files. Loss of this irreplaceable material would be devastating for the future viability of the language. Given the passing of Dr. Galloway, the number of people in the world able to understand and speak Lhéchelessem is quite small. Any loss of material pertaining to this language is amplified because the small remaining speaker base.

Mr. Adams reports some Nooksack community members are advocating adoption of the Halq'eméylem language due to the advanced stage of Lhéchelessem language shift and historical connections to Halq'eméylem language communities. Language preservation decisions are often more complicated than they initially appear. Just as adoption of a language preservation platform would likely standardize orthography at Lummi, platform use at Nooksack may solidify support for Lhéchelessem rather than Halq'eméylem. As the Nooksack community considers the merits of use of a larger regional language over Lhéchelessem, there is another controversy in the community over identity. In the context of the disenrollment issue, the actions of people on either side of the dispute are scrutinized. Mr. Adams' involvement siding with the Nooksack 306 may overshadow any of his language work.

Though Reyhner (2006) advocates the benefits of keeping a dialect active in a community to harness identity construction associated with the language, an argument can also be made for the rationale of adopting a language with a larger speaker base. There are relevant cultural and linguistic bonds between the Nooksack and the Stó:lō, and the Stó:lō have a well developed language education program and an archive. These decisions are fundamental to tribal identity, are connected to political sovereignty, and impact archiving decisions. Management and preservation of language resources is a complex task precisely

because decisions about official orthography, control of tribal language policy and official language promotion are made during the process of preparing materials for preservation. Theorization of language ideology provides an entry point to explore and identify the complex and often competing values impacting decisions about language use and policy. I find that decisions about language preservation are informed by ideology in the community and it is likely that language resource management decisions also affect those ideologies. These next sections review literature on language ideology and the public sphere. I use this review to connect theory and practice relevant to my research.

### **Ideologies and Application**

Silverstein (1979:193) defines language ideology as a conscious body of rules and choices about language, stating ideology is “a set of beliefs about language articulated by users as a rationalization or justification of perceived language structure and use.” Also relevant are greater differences between European and Native American beliefs about the level of abstraction between words and things, based largely in the highly indexical and performative nature of oral languages. Silverstein (1985) uses the term “reflectionist” to describe how European languages privilege the referential functions of speech, whereas Native American languages use speech to animate the natural world around them.<sup>28</sup> From a linguistics perspective Florey (1993) uses the term “cultural associations” describes how scarcity, availability and access to language resources produces intergenerational changes in belief about what parts of language are public, secret and sacred. Later edited volumes

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<sup>28</sup> Changing language ideologies due to enculturation and English language dominance may have created a situation where North American Native language communities now express as much reflectionist association between speech and the subject of its reference as European languages.

(Schieffelin, et al. 1998; Kroskrity 2000) developed the discourse to encompass performance, power, speech rules, conflict and language contact. Field and Kroskrity (2009:4) situate language ideology more directly in relation to speaker attitudes and expectations as “the *belief and feelings about a language* and discourse that are possessed by speakers and their speech community.” This definition of language ideology is of particular utility for the study of language shift (Fishman 1992). As the academic community gained greater appreciation for the severity of global language endangerment, scholarship on language ideology gradually became more focused on endangered language communities.

Recent books on language ideology (*e.g.* Kroskrity and Field 2009; Shaul 2014) have addressed the experiences of endangered language communities, language revitalization efforts and ideologies that describe linguistic practices in communities where a colonial language has become dominant. In a study of K<sup>wak</sup>waka’wak<sup>w</sup> in British Columbia, Goodfellow (2005) finds that an Indigenous language, even in advanced stages of endangerment, can still retain its capacity for signifying cultural identity and indigeneity. She states, “. . . I contend that language is used as a marker of cultural identity, even, and sometimes especially, in cases where a language is undergoing a reduction in function due to the impact of colonization” (13). Goodfellow finds that use of K<sup>wak</sup>’wala denotes cultural belonging and group solidarity, and is used as boundary marker for distinguishing both territory and cultural identity and as an indicator of ritual space. This research is aligned with findings by Ahlers (2006). Research of this kind is valuable for understanding the continued importance of Native language ideology in the context of significant language shift. Recognition of language ideology also provides an opportunity to strategize effective language dissemination practices.

Study of language ideology for the purpose of informing language documentation and revitalization efforts has emerged as a developing field. Several examples describe ideology in relation to use of story and indexing in oral performance to engage participants (*e.g.* Palmer 2003) and use Native language, even if in limited capacity, to frame the indigeneity of a discourse (*e.g.* Goodfellow 2005; Ahlers 2006). One example is the work of Barbara Meek (2010, 2011) who provides description of how Kaska (Athabaskan; ISO 693-3 khz) language ideologies help understand experiences of youth attempting to learn the Kaska. Meek identifies internal processes of hyper valuation of Kaska as language endangerment becomes more pronounced. This process distances youth from engaging in the language and taking ownership of it. Moore and Hennessy (2006) apply language ideology to community experiences with language repatriation and use of resources on the Internet. For them, language ideology consists of the ideas that community members have about their “language and the way it is used and represented and their ideas for changing the social order to institute practices that conform more closely to their values and practices” (123). This application of language ideology is helpful because it considers the changing nature of ideology and how ideology can affect practices.

Language ideologies can experience shift, just as language use can. As opposed to the large, isolated and remote communities of the American Southwest and those with great migratory range, such as tribes of the Great Plains, Coast Salish communities lived in close geographical and linguistic proximity to their neighbors. Abundant, seasonally returning salmon resources led to stable habitation and linguistic variation in a small geographic area. Common preference for exogamous marriage and potlatching made communities highly interconnected and multilingual, while still retaining linguistic uniqueness (Miller 2007). It

was not uncommon for Coast Salish families (and other Native groups) to be conversant in four or more languages so that they could communicate with all family members (Suttles 1987). According to Field and Kroskrity (2009:18), West Coast language ideologies were traditionally “utilitarian” in nature, placing less connection between identity and language in multilingual communities. Here identity was more a product of one’s knowledge of history, rights and spiritual powers, than language. In contrast, Pueblo culture in the American Southwest has been more isolated and closed; there language has been an “especially salient marker of identity” (19). Accordingly language is highly protected in this region, as its role in identity construction is significant. In the Pacific Northwest this historically lower association of language with identity has changed due to scarcity and as articulated by Boxberger (1987), by lack of participation and control of management of their language resources.

Field and Kroskrity (2009) find that prestige surrounding Native language use increases as endangerment becomes more severe. In the Pacific Northwest language shift and assimilation have increased the importance of language as a factor in defining identity and language has become identified as a type of wealth and status. As fewer people speak Native languages, this identifiable marker of cultural knowledge has become a more significant aspect of identity construction, which is especially noticeable in areas like the Pacific Northwest. According to Field and Kroskrity (2009:20):

In such communities, as degree of fluency decreases, its importance as a ‘badge of identity’ increases proportionally, and community members attain a heightened state of awareness concerning the level of fluency of other community members claiming legitimately or otherwise, to be speakers.

As corroborated by Hill (2002), Errington (2003) and Meek (2007) valorization can lead to a dissociation of the language from the everyday lives of people. Sapir (1949) and others have described the high value Pacific Northwest tribes placed on wealth, status and rank. For many communities words and ability to speak those words “have taken on objectual qualities, and language is now seen as a collection of words or a special kind of property” due to increased levels of endangerment (Field and Kroskrity 2009:20). Whiteley (2003) gives this process the term “reflexivization,” where the importance of highly symbolic aspects of culture, like language, become more significant through scarcity. The degree of reverence or value placed on languages, especially as they become more endangered, can lead to increased access control and protection of the language. Language destabilization can also result in users becoming more protective of these languages and limiting their access. Technology, like that employed in archives, can provide a mechanism and location to make choices about limiting or enabling access to cultural resources like language. Accordingly, the choices made about language access and use in an archive constitutes a valuable site for identification of language ideologies.

Fishman (1991) discusses the importance of “ideological clarification” to parse out potentially competing views on the benefits and obstacles to language revitalization (17). As in the examples from Lummi and Nooksack, more complete understanding of language ideologies may also elucidate some best practices for improving success of revitalization efforts. Approaches to language revival are, as Galloway (2007:212) states, “conditioned by social and cultural differences, linguistic differences, political differences, personal differences, and national differences as well as many similarities . . .” There are also relevant

connections between communities that are dependent on treaty rights and maintenance of cultural difference, as seen in examples of Hawaiian and Gwich'in in Chapter 7.

In the Lummi and Nooksack communities, Native language is used to frame Indigenous space (*cf.* Ahlers 2006) and triggers strong emotions of pride and comfort. My earlier work (Shepard 2009) showed that Lummi participants overwhelmingly expect their future generations to have ample opportunity to learn their Native language, even while they may not feel able to do so themselves. I found that Lummi participants displayed a highly reverential ideology around their language, yet they are increasingly detached from even the possibility of learning the language themselves.<sup>29</sup> To understand what seems as a contradiction, it is relevant to consider that Native communities are still in active recovery from forced assimilation practices that living generations experienced. In Northwest Washington State, Native American youth largely attended compulsory boarding schools between 1855 and 1932 (Shepard 2007:32). Boarding schools, like the Tulalip Indian School in Washington, generally prohibited Native children from speaking their Native languages and in turn that generation did not pass Native languages on to their children. Native people are now being told they can and should learn their Native language, but it seems that individuals are telling themselves that learning the language is beyond their capacity. Clearly there is a role for education and technology to attempt to close the gap between desire and action. An opportunity exists for higher education and the non-profit sector to provide these resources, since traditionally marginalized groups may not have capacity to start such a venture themselves.

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<sup>29</sup> See King (2000) for similar findings.

Scholars like Meek (2007) document the challenging task of Native language education in tribal communities. There are potentially dangerous undercurrents of self-inflicted guilt developed by Native people around learning their traditional language that warrant future study. Current levels of access to language resources, effective education and conversational opportunities in many communities limit real potential for language learning. The familiar complications of time, money, motivation, and application are also significant and add to the existing challenge of second language acquisition. However, creating dissemination practices that are informed by assessment of language ideologies and employing culturally appropriate methodologies should aid in the efficacy of these efforts. One application for language ideology research is greater understanding of the preferences a community has for use of cultural resources in digital formats and their accessibility on the Internet. Archives are one site that can facilitate Internet based dissemination of cultural resources. The public sphere is a lens to consider communicative discourse in public settings and this theory has been applied to the Internet as the digital public sphere.

### **The Public Sphere**

Theorization of the public sphere brings together additional concepts of voice and the social life of archival resources. The public sphere is a concept originating with Habermas (1989), which has been widely applied to the Internet and its use. It is necessary to address the processes of information dissemination now possible on the Internet as they relate to language documentation and dissemination. If use of archives can impact tribal sovereignty, today that impact will largely occur in relation to the Internet. The public sphere was originally conceived as a physical space of intellectual exchange and a refuge between the

home and the government. Habermas articulates that one of the defining qualities of the public sphere is that it encompasses a “domain of common concern” (22). Inclusivity and disregard of status were additional essential criteria. The modern public sphere is largely digital, reflecting that our lives have become increasingly dependent on digital information and access. Today, knowledge mobilization on the Internet, processes of information control, access and presence are areas of study in relation to the public sphere that encourages our design of the Internet and the spaces we create there to model openness and democratic participation. Bell, et al. (2013:11) cite the utility of Habermas’ theorization of the public sphere as it applies to digital spaces that create “a ‘communicative space’ through which collections are recontextualized by and for a community.” The modern, digital public sphere is a context for viewing public use of language resources and their management on the Internet.

According to Sider (1993:8), “Native American peoples have been forced to claim and to continually negotiate not only their public identity, but also their public ‘presence,’ and they have done so, from colonial times to the present, in ways that create substantial internal struggles.” As many tribes are seeking to reclaim ability to manage access and use of linguistic cultural resources, archives can provide ability for regulation and model cultural resource use and access preferences. Articulation of a “public presence” and demonstration of the preferences that Native communities have for use of and access to their digital cultural resources has become increasingly important on the Internet. In addition to the identification of language ideologies, expression of voice in public domains can contribute to success of language preservation efforts. Public voice is an important factor in influencing, if not managing public presence in the public sphere (Dalhberg 2001). Without the ability to

manage access to and contextualize their own digital heritage, tribal communities invite the possibility of others articulating these preferences for them. Loss of control over cultural resource use on the Internet can be seen as a loss of self-determination. This erosion of management capacity is already occurring in digital environments like museums, large archives and private collections where tribes have limited ability to impact sharing protocol. Many tribes have marginal familiarity with the extent of information sharing and sometimes the existence of digitally held cultural resources. The Northern Chumash example shows a tribe compelled to tightly control access to their archival language recordings in order to limit competing non-Native claims of identity. Unfortunately, digital resource access can be difficult to control once material is openly accessible.

Construction of a public presence on the Internet is one way for tribes to regain and assert their sovereignty and voice. Dinwoodie (1998) cites an example from the Tsilhqot'in First Nation of British Columbia where the community used their Native language to publically declare appropriate land usage rights and practices in their territory. The example predates widespread use of the Internet, but the concepts have application to current Internet based dissemination. The Tsilhqot'in declaration employed traditional information dissemination protocol and made indexical connections to creation stories to build internal authenticity with community members. Externally, the declaration was in both English and the Tsilhqot'in language and connected to a Western audience "in terms of the type of struggle recognized to provide the foundation of modern national-states and, by analogy, of many indigenous movements" (Dinwoodie 1998:205). For Dinwoodie, construction of public voice in the Tsilhqot'in community occurred through their public land claim declaration.

The efficacy of their declaration was enhanced through construction of public voice that is both understandable by Western culture and consistent with Indigenous values and practices of public dissemination. Dinwoodie (1998:196) uses the example from Tsilhqot'in as evidence of a "structure of voicing characteristic of Fourth World entry to the public sphere" for supporting claims of sovereignty. Dinwoodie argues that acts of declaration by Native communities assert sovereignty in public, while also constructing public voice. He sees significance in public acts of declaration by Native people, just as the act of declaration was meaningful for Thomas Jefferson and his nation.

The Tsilhqot'in First Nation's experiment in public declaration was successful in convincing the government to create a park in their territory that prohibited unwanted forms of development, while allowing traditional resource harvesting and ritual practices by the community. Their declaration was also successful in claiming voice to both internal and external audiences. Recently the community has won a precedent setting victory in the *Tsilhqot'in v. British Columbia* (2014) case by winning land title to this territory. While this example is based on a textual declaration, a clear extrapolation to construction of voice in the digital public sphere is relevant. Declaration is a public sphere action and one that utilizes culturally embedded linguistic information. Voice can be understood as having influence and control over one's public presence.

Construction of voice in the digital public sphere is important for communities to show who they are, and in some cases who they are not. Websites are one way to build presence in the digital environment and some tribal websites feature descriptions of the culture, history and potentially some multimedia in the Native language. Archives can be important sites for cultural presentation and can engage people in a pedagogical experience

more effectively than a static website. Participatory archives have demonstrated capacity to mobilize knowledge, debate ideas, allow contributions and build community (Huvila 2008; Linn 2013; Stenzel 2014).

The concept of the public sphere is subject to numerous important critiques, such as those made by Fraser (1990). The public sphere as described by Habermas was only accessible to individuals of a certain class, gender, and ethnicity and so it is impossible to claim democratic access if the space marginalizes large portions of society. I think the public sphere that Habermas wrote about was a product of its time (18<sup>th</sup> century), just as the Internet is today. Fraser's (and others) critique is important so the public sphere is not romanticized or left without critique as it is applied in modern contexts. Fraser's critique also invites important questions about the digital divide, equal access to technological literacy and particularly for marginalized communities, the ability to control intellectual property on the Internet.

Habermas (1989:52) states that the digital information age may create "nomadic" patterns of information use, where people feel no "loyal relationship to territory." When cultural information is mobilized on the Internet, the environments where information is housed can either build community, belonging and a sense of ownership, as we see in the example of Wikipedia (Kuznetsov 2006), or create virtual environments that do not foster engagement or attachment. A sense of community is beneficial for people engaged in language revitalization and the transmission of language occurs in inherently social experiences. The social relationship of language and be understood through application of Appadurai's (1988) theorization of the social life of things.

## **Social Life of the Archive**

The idea that things experience a “social life” through human interaction and valuation originates with the work of Appadurai (1988). Like the extension of the public sphere to the Internet, many things have now become digital entities making the digital life of things of interest. In many cases, the digitization of things may make them even more social due to technology that enables rapid exchange of information or files. In the context of language and the oral tradition, words, songs, stories and place names can all be seen as having social experiences. In relation to the archive, enabling space for digital heritage items to take on a “social life” can increase their utility and affirm cultural tradition. Application of archiving to language revitalization efforts may have reduced efficacy and for some communities may be out of synch with cultural protocol around knowledge dissemination without a built-in capability for recontextualization or resignification of digital heritage resources. Changing utilization strategies of the Internet reflect differing views on knowledge use and mobilization.

Since at least 2004, technology on the Internet has become more collaborative and interactive for general users. This shift, generally called Web 2.0, transformed the general Internet user experience from one of passive consumption of information from websites, to one where general users were increasingly able to create content themselves and interact with others. Blogs, wikis, online journals and social networking sites all flourished with the advent of user-generated content capabilities. Use of the Internet has increased accordingly, along with a feeling of heightened sense of ownership for both content creation and virtual environment participation (Moulaison 2008). Internet users, especially “digital natives” who grew up with the Internet, have come to expect high levels of interaction while online and the

ability to generate content. Internet users have also become accustomed to digital images, video and audio being rapidly shared globally, where these media seem to take on a life of their own or “go viral.”

According to Appadurai (1988), people attach meaning to things derived from their human interactions and particularly in how such items are used and circulated. The “social life of things” has been applied to orally based histories (Schneider 1995:196; Cruikshank 2005:78; Miller 2011:67) and in reference to data files in a language archive (Widlok 2013b:5). Oral histories acquire increasing layers of meaning as they are passed from person to person and shared over generations. The people, place and context in which stories are told continue to enrich them and ensure their currency, while retaining core teachings or information. For some endangered languages, archives may become the primary place where people interact with stories, songs, recorded conversation and words. It is the hope of staff at most endangered language archives I have experience with, that one day the language (hopefully aided by archiving) will become an everyday part of life in the community. Until that time the archive fills an important role. Archives can be implemented in ways that align well with cultural use practices and language ideologies. I argue that when archives lack capacity for users to recontextualize or resignify language based digital heritage there is greater potential for the resources to become static, hyper valorized (Hill 2002; Errington 2003; Meek 2007), disconnected from the human processes that imbue their meaning, and divorced from modern practices of interaction on the Internet. Mazzarella (2004) describes the importance of the “production of cultural space” for sites of culturally relevant media creation and storage. An archive that promotes participatory use can enable the additional

step of encouraging users to contribute new cultural resources that are based on existing digital heritage items.

An oral tradition is never static. Histories are passed down with astonishing accuracy, but the histories are never put on a shelf or in a time capsule. Reengagement and resignification of oral histories keep the material relevant and part of the lives of the community. Resignification is the practice of assigning new meaning to something already in existence through a new process of use. Hennessy (2010) provides an example of resignification in her description of digital heritage resource repatriation in a Dane-zaa (Alberta) community and their resulting processes of engagement. She finds that media are dynamic sites of cultural identity construction, production and maintenance, and that as knowledge and access to technology increases for Native people, so does their appreciation for the consequences of use. For the Dane-zaa, renewed access and community control of heritage items, now in digital form, created “culturally specific articulations of restriction” and appropriate ways to “keep media circulating in culturally appropriate ways” (Hennessy 2010:1-3). This process can allow resignification of how the community understands an item, its value and use.

Resignification can also avoid the pitfalls of language preservation described by Meek (2007) where young people and people learning their Native language for the first time are reluctant to speak their language because they only hear elders or recordings of elders speaking. Meek states that if one only associates a language, its oral histories and other materials with elders and scratchy old recordings, people learning the language may feel that use of the language is only appropriate for elders. Intimidation, concern over pronunciation and lack of ability to personally relate to archived linguistic materials may also be damaging

to language revitalization efforts. Models of community-based and participatory archiving are designed to allow a community to create more, not less, dialogue with and around their linguistic materials, stories and histories. Stories and other archival materials can only continue having “social lives” if people can interact with and contribute to them. Building participatory mechanisms, such as capacity for user content generation and editing, in an archive will hopefully enable those materials to more readily have lives outside the archive.

## **Conclusion**

Rapid language endangerment is forcing many communities to document their languages as quickly as possible, in whatever methods are available to them. For these communities, the work of academics and remaining speakers may allow the language to exist in the future. As language endangerment advances and the numbers of speakers diminish, the capacity for the current and future viability of the language becomes more dependent on the digital preservation of documentation resources. Archives have become a main site for language resource preservation. Ideologies within a community, including ideas about the public sphere, construction of public voice and participatory design all impact decisions on use and adoption of an archive. In the Lummi and Nooksack communities the political impacts of digital storage and access to language documentation is a primary concern. In both communities, but especially at Lummi, interest in educational application of documentation products is recognized as a vital element of language revitalization.

Archiving can be a technological and ideological hurdle for Native communities and many do not have the resources or ability to undertake designing complex access controls or dissemination efforts. There is an inherent danger that adoption of new technologies, data

storage methods and file formats can leave a community in “technological quicksand” where they are dependent on outside help and experts (Widlock 2013a:188). A flexible and secure archive solution is critical for facilitating these needs. Educational dissemination is not part of the mission of many large archives I have reviewed. However, the people I worked with for this study clearly describe interest in a solution that effectively disseminates and stores. If an archive only enables preservation then it is only meeting half the need. If the interest and urgency seen in efforts to maintain sovereignty can be turned toward language revitalization, even partially, there is great potential for progress.

When I initially heard the participants in my M.A. thesis focus group articulate “lack of access” as an obstacle to language learning at Lummi, I focused on family divisions and vestiges of class-based social stratification that could impede dissemination of language resources. While societal class factors continue to be relevant in Coast Salish communities that may not be the limiting factor for accessing language education resources. Many communities, such as Lummi, have a pressing need for culturally appropriate access to language resources that support practices of daily interaction and use. The archive has a role to play and the success of testing the Language Life site shows potential and interest. Past and current practices for addressing community needs at both Lummi and Nooksack can serve as a guide for future action.

Through study of Lummi community history, you see a people who place great worth in education and undertake initiatives that seem outsized for their population. They have a history of ambitious projects that always seek to strengthen tribal sovereignty and increase tribal capacity. The Lummi Aquaculture Facility is an example of a federal partnership that

created the largest tribal aquaculture farm.<sup>30</sup> This facility continues to provide employment, educational opportunities, revenue and food for the community. Northwest Indian College is another example of an educational project by Lummi to address needs for higher education in their community and Native people in the region. Development of a language archive and dissemination platform would again allow Lummi to use their strengths and act upon their ideals. The Lummi Language Department has already prepared materials for archiving – they just need the platform and support to create an opportunity for their community and potentially others.

For Nooksack, Mr. Adams represents the last opportunity to capture speech from someone who grew up speaking the language and who speaks it fluently. I cannot overstate the unique opportunity Nooksack has with Mr. Adams' linguistic capabilities and level of fluency. The current political battle over disenrollment has taken a toll on Lhéchelesem education efforts. An archive could provide a mechanism for his work to continue regardless of political instability. Outside of famous examples, like Hebrew and to some extent Miami, there are almost no examples of Indigenous languages rebounding after they become dormant. Language revitalization is a worthy goal in any community, but may not always be the most appropriate step. While it is commendable for Nooksack to undertake education efforts, thorough documentation and secure archiving of those data may be the most appropriate approach at this time. The Nooksack community is smaller and was federally recognized recently compared to Lummi. Their community displays less cohesion regarding

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<sup>30</sup> See Deloria (1978b) for an account of the “most spectacular development that ever occurred in Indian country” (142) written just after the facility opened. In subsequent years the need that Deloria raises about ongoing funding to ensure the success and sustainability of the facility were insufficient and the project has been less commercially successful than many hoped. According to Boxberger (1989) the aquaculture was never commercially successful, though it has functioned as a salmon hatchery (152).

their language and its future than does Lummi. Nooksack does not currently have a language department or dedicated employees, but its process of language revival has the potential to set a precedent for a language officially considered extinct. Internal divisions in the tribe are impeding the implementation of comprehensive language preservation efforts. An archive solution would allow both communities to have more control of their process of reintegration into management of their cultural resources.

The next two chapters review selected major international archives, the Mukurtu archive platform, and small Alaskan community-based archives. Each example shows unique connections between the values and goals of those managing the archive, and the resulting design, functionality and use strategies. I find that negotiation of the public sphere and language ideology is evident in the culturally mediated choices about access and function of these language preservation projects.

## **Chapter 6: Archive and Archive Platform Reviews**

### **Introduction**

The next two chapters review six language and culture archives and one archive platform. My review intends to describe existing opportunities for language archiving, strengths of different approaches and what I see are shortcomings regarding the cultural and ideological compatibility for those communities I work with. It is valuable to identify existing resources in order to articulate needed changes. I initially began reviewing archive strategies because Lummi and Nooksack were searching for a solution to their own language documentation and dissemination needs. In order to provide recommendations it has been important for me to survey the range of solutions and approaches available. I find it useful to review various examples of archives and an emergent archive platform to provide scope of both the technology and values that impact language archiving. I find that just as ideology can shape an organization or project, the types of technology employed in archiving has capacity to structure use and efficacy. I distinguish archives for their adherence to the standards described by Bird and Simons (2001) such as institutional support and comprehensive data security. All the archives in this review generally meet these criteria. Underlying every digital archive is a software platform, which users and archive managers interact with. I have elected to review one example of an archive platform, Mukurtu CMS. The Mukurtu software platform is designed to serve as the architecture of an archive. There

are examples of the use of Mukurtu CMS to create archives (i.e. Plateau Peoples Web Portal)<sup>31</sup> though on its own, the CMS does not constitute an archive.

I have divided the archives in my study into three general categories: large international archives including DoBeS, PARADISEC, and ELAR; the Mukurtu CMS software platform; and small Alaskan community-based archives including the Ahtna Heritage Foundation Archive, the Gwich'in Regional Language and Culture Center Archive and the Sealaska Heritage Institute Archive. I was fortunate to interview project directors and staff for each. To contextualize my study I also interviewed Gary Holton, Director of the Alaska Native Language Archive (ANLA) at the University of Fairbanks and Andrea Berez, Professor of Linguistics and Director of the Kaipuleohone Digital Ethnographic Archive at the University of Hawai'i at Mānoa. This study did not allow for evaluation of either of these archives, but Drs. Holton and Berez have been instrumental in connecting me with the community archives.

I have reviewed large archives because they reflect established and well-known examples of archiving. Researchers from around the world interact with these archives on a regular basis, though utilization by language origin communities is less prevalent. These large archives are primarily focused on secure preservation language documentation and research. The access controls, ease of use and dissemination capacity of these large archives is not aligned with many of the interests expressed by both the tribal partners in my study. However, the large archives represent an important example to show the scope of resources

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<sup>31</sup> Plateau Peoples Web Portal: <http://plateauportal.wsulibs.wsu.edu/html/ppp/index.php>

available. In my research I found comparisons of these archives from an anthropological perspective lacking in the literature.<sup>32</sup>

Mukurtu CMS has only recently become available for public use and has attracted much interest from Indigenous communities. There is little published literature on the platform outside the work of its project Director Kim Christen, especially in regards to endangered language preservation. I review this technology to contextualize the use of the tool in my research and to show the potential of its application. I expect this platform will see extensive utilization for a variety of cultural documentation and preservation purposes and hope that my description helps others determine its efficacy.

The Alaska community-based archive examples in Chapter 7 coalesces many of the themes covered in this dissertation. These archives are distinct from the larger international archives in their scope, mission and practice. These archives display a close relationship between cultural values and management of culturally significant resources. Whereas the large archives may still exemplify an arena where Indigenous people are seeking to regain control of their cultural resources and participation in management of their use, the community-based archives are examples of reintegration of Indigenous resource control. In my interviews with staff from each archive, it was evident that the ability to manage language resources is a significant factor in the maintenance of tribal sovereignty.

The three large archives and Mukurtu CMS are accessible online, so much of my review examines their collections, access policies, platform interface and descriptive website information. The amount of published information on each is not equal and neither was my experience with the archives and Mukurtu platform. For example, I have been in

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<sup>32</sup> See Chang 2010 for an applied linguistics study which covers many international archives, including DoBeS, ELAR and PARADISEC.

conversation with the development team at Mukurtu for the past two years and utilized their platform for part of my dissertation research. None of the community archive language collections are accessible over the Internet and my funding did not permit visits to their physical locations. My review of community-based archives is primarily based on interviews. I will begin with a review of the largest international archive, DoBeS.

### **Review 1: Documentation of Endangered Languages (DoBeS)**

Documentation of Endangered Languages<sup>33</sup> or *Dokumentation Bedrohter Sprachen* (DoBeS) is a project of the Volkswagen Foundation in Germany and has become the world's largest international endangered language archive. Like ELAR, DoBeS has a funded research program integrated to its operation and requires funded documentation projects to deposit materials into the archive. Documentation project funding began in 2000 and continued through 2011. It is unclear when or if funding will resume for documentation projects. Over 70 separate documentation projects have been funded around the world through this effort (Drude, et al. 2012:169). The archive is housed at the Max Planck Institute for Psycholinguistics in Nijmegen, Netherlands. I interviewed the Archive Manager, Paul Trilsbeek, in early 2014 to inform this brief review.

The DoBeS archive has made important contributions to the field of endangered language documentation and is a recognized leader in advancing international best practices in data preservation. Data uploaded to DoBeS are managed to ensure the long term persistence of both the bit stream or pieces of information that make up a file, and the more difficult task of maintaining the interpretability of the files which package the bit stream. To

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<sup>33</sup> DoBeS: <http://dobes.mpi.nl/>

retain interpretability the files must remain compatible, useable and transferable over time and technology upgrades. Management of diverse file formats (for both data and metadata) representing years of documentation work throughout the world is a major challenge for archives to ensure those file formats are still accessible in years to come. All resources on DoBeS are backed up in seven separate locations throughout Europe to ensure data preservation. The project currently has a 50-year guarantee for bit stream data preservation by the Max Planck Gesellschaft, a German research society. Resources from approximately 200 languages are archived on the DoBeS archive.

The idea for what became DoBeS began in conversations between the Volkswagen Foundation and a newly formed group of linguists, the Society for Endangered Languages, in the early 1990s (Drude, et al. 2012). The group held a linguistic summer school in 1993 and began planning a funding project to support international documentation projects. Project funding would allow three to four years of data collection, analysis and archiving. In 1999 the first call for applications was made and the pilot documentation effort began the next year. The documentation fieldwork represented an early coordinated response by a funding agency and the linguistic community to address the newly identified magnitude of language endangerment. During the late 1990s, the Internet was in its infancy and audio/video documentation was still primarily in analog formats. The first documentation projects were funded and launched before an archive was constructed to house their data.

A technology team at the Max Planck Institute for Psycholinguistics began work to develop a digital archive in 2000. Simultaneously, the Institute worked to develop a metadata standardization tool and technology for rich annotation of recordings. DoBeS has recently begun setting up regional archives around the world that benefit from use of the archive, its

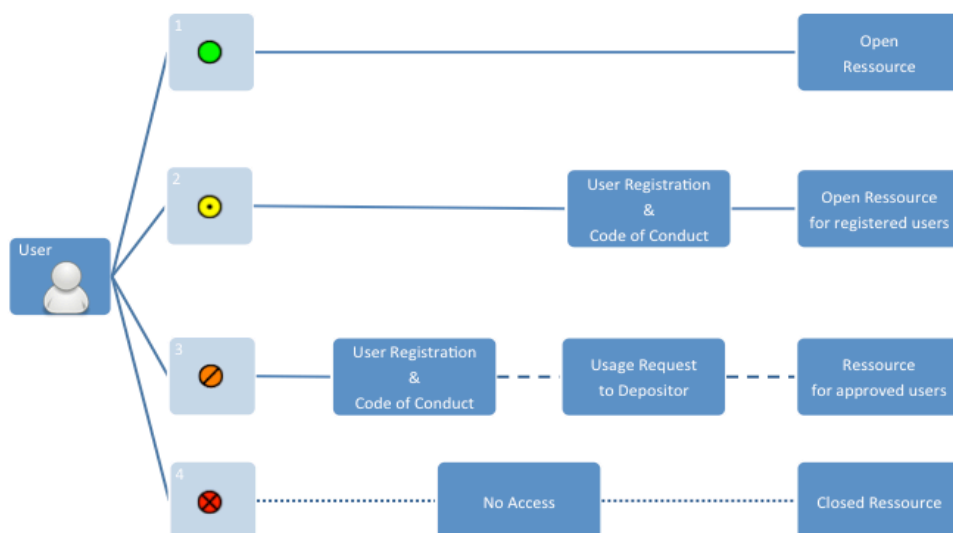
tools and data storage. There is recognized “tension between the general movement to open access to research data and the need to protect the individual and intellectual property rights of speakers” (Drude, et al. 2012:172). Users and contributors to DoBeS are almost exclusively linguists or other scholars.

## **Access**

Documentation work completed through DoBeS research initiatives and archiving efforts has made an invaluable contribution to language preservation. The products of this documentation are facilitating current revitalization efforts and have advanced academic understanding of language diversity. According to Mr. Trilsbeek, linguists and other researchers are the primary users and contributors to the main archive (personal interview, February 17, 2014). The design of the archive, process of contributing data and the types of available access controls are researcher focused and would, in most cases, be challenging for individual members of an endangered language community to utilize. As recognized by Drude, et al. (2012), there is a need for data mobilization and developing processes that make access easier for language origin communities.

Access on DoBeS is based on a four-tier strategy from full public access to no access (Figure 11). Public access allows any user, even those without accounts, to view and download content. The second access level requires an account, but still has open access. A third access level is restricted to approved users and those who have requested access and been approved by the depositor. Closed resources make up the fourth level, where use is restricted to only the depositor. Restricted collections are not displayed when searching the database, however all other types of content are searchable. Image files are downloadable,

while audio and video files are viewable, but not downloadable. The metadata files (EAF) can also be designated open or closed. Through my evaluation of the site, I found the majority of resources were designated as restricted to approved users, the third level of access. Collections seem to be mostly open or restricted, with less differentiation within a collection.



**Figure 11 DoBeS four tiered access strategy (<http://dobes.mpi.nl/>).**

## Interface

Access to the interface can be accomplished through one of two “portals” where one can search over 70,000 audio, video, image and annotations files from 68 languages. A search will display a long list of available resources with colored symbols designating their level of accessibility. This search portal is adequate for general inquiries about a topic or language and provides quick access to utilize resources. There are no features to filter search results based on language, media type or contributor and there is no feature to request access to restricted resources from the search portal results page. Most researchers and depositors connect to collections through the IMDI (ISLE Meta Data Initiative) browser, which enables searching in the full DoBeS collection and regional archives. The IMDI browser provides

advanced metadata search features, bulk downloading and bookmarking of resources. The Java-based interface looks antiquated and is noticeably cumbersome to use. Available resources are valuable to researchers, but most members of language communities will find they have limited utility (Arobba, et al. 2010). According to Schwiertz (2012), the IMDI browser has a lack of utility for many users because of its organizational and visual structure. The General Portal feature of the DoBeS archive is an attempt to attract more non-linguists to the archive resources and it will eventually replace the IMDI viewer completely.

### **Regional Archives**

Recently DoBeS has launched an initiative aimed at creating smaller regional archives that have access to DoBeS tools and data storage resources. There are currently 10 regional archives around the world in partnership with DoBeS. Mr. Trilsbeek acknowledges that it is difficult to convince some communities that “we are going to document your language and then send the data off to Western Europe. It is an old colonial idea of collecting data” (personal interview, February 17, 2014). The regional archives are still primarily researcher driven, but may be in closer collaboration with specific language communities. A regional archive run by an Aboriginal group in Northern Australia was attempted, according to Mr. Trilsbeek, but persistent technical difficulties forced them to eventually abandon the project.

DoBeS staff recognizes that the main archive is minimally accessed by members of language communities and hopes that the regional approach will facilitate greater levels of engagement. The regional archives listed on the DoBeS website are all accessed through the same IMDI browser used to search the main DoBeS collection. As described above, the

layout and functionality of the IMDI browser will continue to be a significant barrier to utilization by language community members. Like most other archives, DoBeS is not designed around the pedagogical needs of language learners. DoBeS did participate in collaboration with the Beaver First Nations (British Columbia and Alberta) to construct an educational frontend language teaching tool. It is unclear the degree to which Beaver First Nations community members are utilizing this technology for language acquisition. According to Mr. Trilsbeek, the maintenance requirements for this installation are unsustainable for DoBeS to expand to other language communities.

## **Review 2: The Endangered Language Archive (ELAR)**

The Endangered Language Archive (ELAR),<sup>34</sup> currently housed at the School of Oriental and African Studies (SOAS) at the University of London, is a program of the Hans Rausing Endangered Languages Project. The private Arcadia Fund, based in England, provides financial resources for both the archive and its language documentation program. ELAR supports language archiving projects worldwide, though North American Indigenous languages are underrepresented in their collection compared to other regions. My comments on ELAR are based on published materials, observations of the archive catalog and an interview with ELAR's former Digital Curator, Kakia Chatsiou, on February 18, 2014. The archive is currently independent, but it is expected that it will soon adopt some or all of the DoBeS archive architecture as part of a merger. ELAR recently underwent a review by its funder and the SOAS, where it was determined that changes were needed for cost savings and increasing efficiency.

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<sup>34</sup> ELAR: <http://www.elar-archive.org/index.php>

If ELAR does in fact merge with the larger DoBeS archive it would create a significant combined archive collection. At the time of interview Ms. Chatsiou was uncertain of the nature of the merger, only that it was happening. One possible outcome of the impending merger is that ELAR will become a regional archive of the DoBeS program. It is unclear if a merger will enable the current site's functionality to remain or if the site will become fully amalgamated into the DoBeS catalog. I hope the archive's innovative work around protocol and interface design will continue even if there is a merger with DoBeS. Merging content also means merging access sharing protocol and ownership agreements. It is possible that the site interface will remain, while back end storage capabilities are outsourced to DoBeS. This is the best scenario I can imagine for ELAR, but one that would be technically challenging.<sup>35</sup> David Nathan has directed ELAR since its founding and has published extensively on the archive. Given that Mr. Nathan has been a vocal advocate for the progressive functionality of the site and has a vision of even greater interactivity, his departure calls into question the future of these aspects of the archive.

ELAR was founded in 2005 and the current Drupal based online catalog was launched in 2009. ELAR works closely with the Endangered Language Documentation Program (ELDP), which facilitates direct language documentation in endangered language communities and is responsible for approximately 90% of the content in the archive (personal interview, February 18, 2014). ELDP provides small and medium sized grants to researchers through a yearly application based funding process. Over 300 documentation

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<sup>35</sup> At the time of writing, both Ms. Chatsiou and Program Director David Nathan have left ELAR. The recent staffing changes have left me unable to obtain current information about the merger, so the information presented here generally reflects the situation at ELAR as of February 2014.

projects have been funded through ELDP since 2003. All documentation products from the ELDP become part of the ELAR. The Endangered Language Academic Program (ELAP) is a related project that runs postgraduate courses in language documentation and field linguistics to support scholarly work (Nathan 2013). The remaining 10% of catalog data is derived from individual researchers and language communities that approach the archive directly to store and make their data accessible. ELAR does not currently charge for this service. Over 500 unique visitors per day visit ELAR's catalogue, representing over a million page views per year. Over 150 languages are archived on ELAR, comprising over 100,000 individual files.

ELAR maintains data security in similar ways to the other large archives. Resources are securely backed up maintaining bit stream data storage along with the continued readability and interpretability of the information that packages the bit stream. Like other major archives, ELAR is designed from a linguistic research perspective to enable research within a corpus as well as for comparative studies. The data access strategy found in ELAR does enable greater access controls than the other large international archives reviewed here.

## **Access**

According to Nathan (2013:23), typically archives have a "one way access strategy" for their data. ELAR tries to create a more reciprocal relationship between the archive and those consultants and communities that provide the language materials by increasing the accessibility of the archive and its access controls. According to Ms. Chatsiou, ELAR was the first archive to develop an access strategy that reflects community protocol around dissemination (personal interview, February 18, 2014). While not as fine-grained as the protocol options seen in Mukurtu CMS, the options in ELAR give increased choices to both

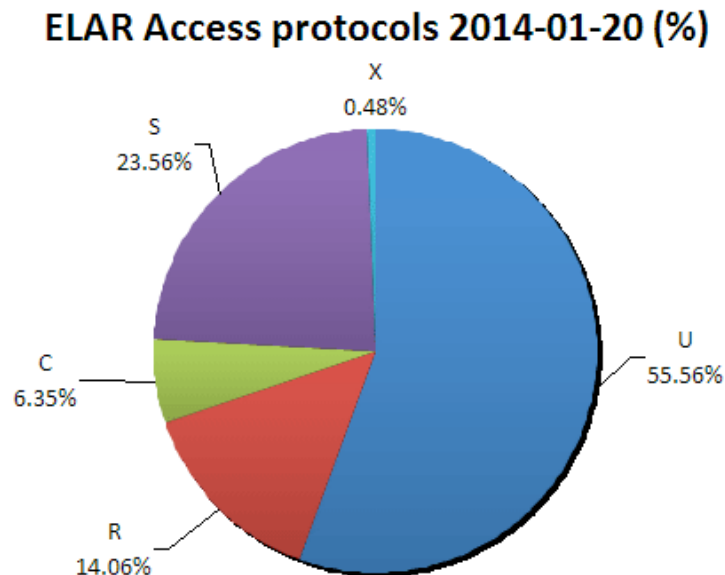
depositors and community members. Access rights are prominently displayed for users of the site at all times, reducing confusion and time spent determining ability to access a resource.

When viewing any resource in ELAR, the user is presented with relevant metadata describing the resource, its file type(s), and the access protocol restrictions. According to Nathan (2013:6), “the archive ‘plays out’ protocol throughout its interface, always letting users know which resources they can and cannot access, and offering a method for individual access to otherwise restricted resources through direct application to the depositor.” A free account is required to access content even with the most open (U) level access in ELAR. Every resource has a labeled access protocol code next to the resource file. Nathan says that the protocol system at ELAR provides “dynamic access via subscription” based on clearly defined levels of access (6). Access protocols are designated using the following codes,

- U = ordinary User (must have an ELAR account)
- R = Researcher role
- C = Community member role (for a particular deposit only)
- S = Subscriber role (for a particular deposit or resource only) (Nathan 2013:6).

Resources designated “U” are essentially public with access available to anyone with an account. The Researcher role provides access across collections with few restrictions and is often used for comparative research. The Community member access level is given to members of the language community and enables a resource to be restricted for community use. The Subscriber access level is an example of the “dynamic” protocol process. Any user can request access to a resource that is restricted. That request and the majority of content access decisions is approved or denied by the depositor. In ELAR 90% of depositors are researchers affiliated with ELDP. These depositors continue to have ability to edit the

metadata and access protocol of resources. In 2014, nearly 70% of content in ELAR is available for public use. About 55% of deposits are available at the User level and 14% are available at the Researcher level (see Figure 12). ELAR promotes this high level of access as evidence of the success of their program and access protocol controls.



**Figure 12 Access chart for ELAR collections ([www.elar-archive.org/about/statistics.php](http://www.elar-archive.org/about/statistics.php))**

According to Nathan (2010:2), if depositors are provided with binary open/closed choices for the accessibility of their resources, there is a tendency for limiting access. When more choices are provided and if the archive forms positive relations with language communities, there is more likelihood that “the most possible liberal access to data” will be employed. As described by Ms. Chatsiou, “one of our most important tasks is respecting the wishes of the communities. We are building a relationship of trust between the community,

the archive and the depositors” (personal interview, February 18, 2014). Ms. Chatsiou believes that material that would not normally get archived is being preserved by ELAR because of their relationships and access controls. An example is ethnobotanical information about traditional medicines that may be financially attractive to drug companies. This sensitive content is being preserved because sufficient access controls exist to satisfy the intellectual property owners. Collections can be designated as closed and only accessible by the researcher if information is considered too sensitive. Closed collections are not searchable and general users cannot request access to them. Approximately .5% or less than 500 files in the ELAR collections are currently designated as closed to public use.

When compared with Mukurtu, the protocol restrictions in ELAR are still limited. There is no capacity to restrict access based on gender, family or age, for example. Ms. Chatsiou was able to think of at least one community that felt privacy controls in the archive were insufficient for their needs and selected not to have material hosted with ELAR. Nathan (2010) has written about aspects of ELAR that resemble Web 2.0 social networking features. Users can request access to content they do not have rights to, in a process somewhat analogous to social networking, where people request “friend” status. There is potential for relationships to develop through this level of interaction, but in comparison to the community building aspects of sites like Wikipedia, this level of interaction is quite limited. I would only loosely classify ELAR as employing Web 2.0 technologies, though it does have capacity for more features of this type.

## **Interface**

According to Ms. Chatsiou, “our approach was to have as simple and intuitive of an interface as possible. In DoBeS you can drill down through layers of material only to find that you do not have access to a resource. We attempt to make it obvious to people what they can and what they cannot access” (personal interview, February 18, 2014). ELAR attempts to “level the playing field” by making the archive accessible and functional, rather than privileging researcher access and use alone (Nathan 2013:5). Another leveling feature is listing the recorded speaker’s name almost as prominently as the depositors. Searching can be conducted via the name of a speaker, providing increased accessibility for community members who may look for the names of relatives. Use of ISO language codes is not required since many languages have multiple names and language names can be sources of struggle for Indigenous communities.

According to Nathan (2013:15), “until now, access has more or less meant providing ‘insiders’ with the means to locate specialist materials by using constrained ontologies. ELAR has sought to help ‘outsiders’ to access content they hope to find or perhaps never imagined finding.” In my experience, I am more likely to search through contents of the site creatively and for specific research interests because of the user-friendly design of the site features. ELAR does not limit downloading of content because they feel browser level controls are inadequate means of protecting content online.

ELAR has been designed to facilitate searching content within a collection in addition to searching site-wide. Every collection has a homepage that describes the language community, locates the community on a map, details the collection contents, states the status of the collection and provides basic biographical information about the depositor. All the

same searching features exist within the collection as in the full ELAR catalog search process. The ability to search content within a specific collection is a great asset for directed research about a particular language. The language specific collection pages are a good example of interface design that increases the accessibility and functionality of this archive for individuals and communities. The archive is not designed pedagogically to facilitate dissemination, but there is increased utility for language learners when content is grouped logically and easily searchable. There is potential to use the ELAR database as a back end for supporting a language education initiative because of its Drupal<sup>36</sup> based architecture. Drupal is the same code base used to build Mukurtu CMS. While the Drupal platform is open source and so is Mukurtu CMS, the software architecture underlying ELAR is proprietary and not freely available or open to user contributions of software features. The interface design and protocol based access features represent significant advances in the functionality of an archive, both for researchers and specifically for language community members.

### **Review 3: Pacific and Regional Archive for Digital Sources in Endangered Cultures (PARADISEC)**

The Pacific and Regional Archive for Digital Sources in Endangered Cultures (PARADISEC)<sup>37</sup> is an international archive based in the Universities of Sydney and Melbourne and the National University of Australia. The archive was initially formed because there was no regional repository for archival collection storage in the Pacific region that could handle vast amounts of audio based data. PARADISEC primarily archives languages of the South Pacific and Australia, but they have some contributions from Europe,

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<sup>36</sup> Drupal: <https://drupal.org/>

<sup>37</sup> PARADISEC: <http://www.paradisec.org.au/>

Africa and North America. I was able to interview Nick Thieberger, the Co-Director of PARADISEC, on March 5, 2014 to inform this review.

PARADISEC began with a primary focus on digitization and preservation of analog field recordings from the 1950s and 60s. The archive continues to digitize historical collections in addition to providing archival capabilities directly to researchers. As of 2012, PARADISEC had archived over 7,000 items from 650 languages in 60 countries, totaling over 5.2 TB of data (Thieberger and Barwick 2012:249). Data are backed up regularly through a partnership with the Australian Partnership for Advanced Computing. These resources are organized into 163 collections, about half of which represent digitized field recordings from the mid 1900s and the other half are new research projects.

PARADISEC's work has been influential in directing attention toward the need to create secure storage of information held on tape-based analog media before it naturally degrades. The archive received funding for a digitization suite and construction of a metadata capable archive in 2003 and began accepting analog collections from individual researchers and academic institutions. According to Thieberger, they have adopted a "minimalist strategy" toward metadata because they recognize the time constraints researchers have for contributing to the archive and because many of the legacy recordings they receive have very little associated metadata. PARADISEC Co-Director Barwick (2003) identifies three problematic issues for analog recordings: Format obsolescence, physical deterioration, and separation of the recordings from the metadata. Analog media storage formats such as cassette and reel-to-reel tapes are increasingly incompatible with modern technologies and are subject to deterioration, especially when stored in tropical environments. Recordings lose great utility if their associated descriptive information becomes lost. The longer those

materials sit in boxes and file drawers, the less likely their metadata will remain associated and useable.

Thieberger describes the collection as fundamentally different from those of DoBeS and ELAR because PARADISEC has never had a research-granting component that requires grantees to deposit their research in the archive. PARADISEC continues to work through a backlog of legacy recordings in need of digitization, though they encourage researchers to upload content themselves whenever possible. The organization has a small budget and Thieberger commented several times about challenges to fund new initiatives and expand their scope due to budget limitations. He advocates for building archival curation funding into the budget of language documentation projects. PARADISEC generally charges for their digitization services, but not for hosting or storage of data.

## **Access**

PARADISEC does not require an account to search through their material, though you must have an account to view or listen to content. Accounts are free and will enable viewing of most content. A depositor can limit access to resources while still providing users ability to view metadata. Depositors can also designate an entire collection unavailable. Unfortunately, users are unaware of their access to a collection or item until they find the resource and attempt to view it. My findings support Thieberger's claim that most content on the site is publically available.

Like DoBeS and ELAR, PARADISEC collections are primarily composed of materials uploaded by individual researchers or the archive managers. There are very few examples of language communities uploading their own collections and correspondingly few

community groups actively using the collection. When requested, PARADISEC will copy a language collection for an interested community group, though these requests are infrequent. Thieberger stated that determining community permission to archive content is the responsibility of individual researchers and part of PARADISEC's depositing agreement.

According to Thieberger, eliciting community permission is challenging for some of its legacy recordings. In many cases the recording was made a half century ago and individual participants may not be known or still living. It is also possible that the researcher that made the recording may no longer be living either. There is a chance that language community members will find PARADISEC resources via the Internet and recognize the content or speaker, however this has not happened as far as Thieberger knows. It is a worthy effort to make any attempt possible to connect archival resources to their origin communities and obtain permission when possible. However, I recognize that this work would require time and resources not currently available to PARADISEC. A project of this nature may work better for a partnership, as it does not closely fit PARADISEC's mission. Thieberger's primary focus is creating access and ensuring preservation. He stated,

Our duty is to make our collections as discoverable as possible. An archive's responsibility is not to get involved in revitalization work. That is the community's responsibility. Our responsibility is making sure the information is curated properly, digitized, described, accessible and recoverable. If the archive starts getting into other things at the expense of that core mission it can be a problem (personal interview, March 5, 2014).

This conceptualization of the scope and mission of an archive is consistent with that of other large archives that are primarily built for and by the academic community. Community-based or participatory archives may be better equipped to engage in educational dissemination and

respond to language origin community interests. Staff members from all the community archives in this study stated that they are very interested in educational dissemination, but none have specifically designed such educational dissemination features.

Thieberger calculates a conservative estimate based on published academic papers that approximately 50 language documentation projects have been undertaken each year from the 1960s on (Thieberger 2012). This should have produced language documentation for about 2,500 small languages as of 2009. The vast majority of these projects would have used analog recording devices. Given this high number, he believes there are hundreds of archival collections still in need of digitization and curation, and years of work for the PARADISEC team. They plan to continue large and small digitization projects to protect these resources.

## **Interface**

PARADISEC has an easy to search catalog, though there are fewer options for search refinement using available metadata compared to ELAR. Collections-wide searching is efficiently accomplished through the keyword search field. A search based on a particular word will return results if that word is found anywhere in the metadata. I was successful in keyword searching based on researcher name, place, resource name and consultant name. The efficacy of keyword searching is dependent on the metadata supplied by depositors, which varies significantly. Resources on the sites are predominantly audio and image based. PARADISEC did not initially support video streaming due to expense and bandwidth demands. PARADISEC has been active in extending the searchability of its catalog through helping create the Open Language Archives Community (OLAC) and the Digital Endangered

Language and Music Archive Network (DELMAN). These organizations share best practices and crosslink resources to increase access to content.

#### **Review 4: Mukurtu Content Management System (CMS)**

The Mukurtu Content Management System (CMS) is an Internet-based platform designed to enable archiving of digital cultural resources. Design work on Mukurtu began in 2005 by founder and Washington State University Professor Kim Christen. The platform is compatible with a range of media, but its functionality is optimized for print media, like images and documents. The platform is built to enable implementation of flexible culturally based access and use controls, or protocol. The fine-grained protocol controls in Mukurtu reflect an overall focus on culturally compatible design targeted toward Indigenous community archive implementation. At least initially, individual language communities were expected to install and operate the Drupal 7-based, open source platform themselves. The rapid growth of cloud based site hosting in the past three years has led Mukurtu to rethink its project scope and refocus its resources as a hosted service (personal interview March 20, 2014). Mukurtu will still make their CMS available for download and independent hosting as initially planned, and the open source nature of the project can still benefit from collective programming and feature improvements. The new hosted service is called CoMunn<sup>38</sup> and is designed to target both individuals and communities interested in online management of personal or group media collections.

This review is mainly based on my experience using Mukurtu CMS within their hosted development server. Mukurtu has made the beta version of their CMS available to

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<sup>38</sup> CoMunn: <http://www.comunn.net/mukurtu-mobile/>

interested groups, prior to the first fully stable release version, which is expected in late 2014. Those using the beta version have largely done so using Mukurtu's development server, though there are several early partners who are already running their own stand alone installations. I have conducted this review of Mukurtu CMS in partnership with my tribal partners and was fortunate to interview Kim Christen in early 2014.

Design features of Mukurtu CMS enable communities to control access to digital cultural resources like images, audio and video files while still adhering to cultural protocol governing dissemination. In many Indigenous communities, including the Coast Salish communities I work with, cultural protocol dictates appropriate sharing of cultural information such as songs, stories and names. Particularly in oral societies, knowledge is power and what you know about place names, genealogy, resource rights, territory and spiritual powers are directly connected to status, wealth and influence (Suttles 1987; Miller 2007; Thom 2003). Many of these cultural traditions have continued relevance, even as language use and ideology change. In some communities protocol dictates that certain types of cultural information may only be appropriate for community elders, or only women, or only particular families. When these songs, stories and names become recorded, those people fluent in cultural protocol often lose the ability to maintain appropriate use restrictions. When platforms, and the archives they support, enable capacity to affirm cultural values like protocol, they facilitate processes of decolonization and Native self-determination (Viatori and Ushigua 2007; Christen 2012; Mawani 2012). According to Christen, "Mukurtu's heart and soul is protocol. Everything else radiates out from there" (personal interview March 20, 2014). For some, the idea that an archiving platform for the preservation of cultural resources would limit access to content based on age or gender may appear contradictory to the goal of

dissemination. As described by Christen (2012), providing tools that limit access to information on the Internet can also raise concerns for proponents of open access information sharing. Mukurtu is designed around Indigenous community needs, so it is not a surprise that some of its design features are uniquely responsive to this population.

I primarily used Mukurtu CMS version 1.5 and to some extent Mukurtu Mobile version 1.0 between 2012-2014. Mukurtu is a product of a research relationship between Kim Christen and the Warumungu Aboriginal community in Tennant Creek, Australia that began in 1995 (Christen 2008). Between 2001 and 2005 Christen collaborated with the Warumungu as they opened a community art and culture center, and began acquiring both physical and digital objects in need of curation. Christen and her community partners found members of the community and others, like teachers, missionaries and miners, had media collections dating back to the 1930s. In addition, the community was in a multi-year process to digitize photographs of materials repatriated from museums. By 2002, Warumungu had identified thousands of resources in need of a comprehensive system in which to archive them locally. Photographs represented the most significant type of media needing curation (Christen 2008). Christen recounts, “I happened to be there and said ‘I’m sure we can just buy some software.’ This was 2002 and there really was nothing out there to meet their needs, so I got involved in the project to build this tool” (personal interview, March 20, 2014).

Christen obtained initial funding and began development on the project in 2005. The initial platform design focused on meeting identified community needs like “variable user access, community-focused metadata and search categories, user-generated comments and tags, restricted content based on Warumungu protocols, and the ability to print, edit, and/or remix content for their own use” (Christen 2008:21). The development team also recognized

that ease of navigation and use was essential to ensure that community members with low levels of technological literacy could use the platform independently. Overall, the Mukurtu platform emphasizes cultural protocol-based access control, flexible templates, multiple licensing options, and free and open source software (Christen 2012). According to Sun and Davison (2012:8),

The project leaders recognized, from the outset, that archival work is value-laden and that information systems often have built-in assumptions about access and representation that can threaten the core goals of cultural heritage preservation work. Where communities' ability to represent themselves – via descriptions and images of artifacts, places, and people – become threatened, so do core human values of individual and collective sovereignty.

Development of Mukurtu has been a joint initiative of Christen and the Center for Digital Archeology<sup>39</sup> at the University of California Berkeley.

My experience with Mukurtu started in 2011 when the CMS was still under active development. I was looking for a language archiving tool to trial with my tribal partners who were interested in secure language documentation and dissemination capacity. Due to the cultural restrictions on knowledge sharing in the communities I work with, the site would need to enable protocol based access restrictions. The Mukurtu program offered much of what I was seeking and unlike the product I envisioned, this actually had funding. I began conversation with their Development Director and was able to participate in some early previewing and testing of the CMS. I initially obtained free educational hosting on Dreamhost.com for my site, thinking I would host my own installation. I was able to install the 0.7 version of Mukurtu in 2012. I quickly found that without a programmer or someone

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<sup>39</sup> Center for Digital Archeology: <http://codifi.org/>

to help me with server maintenance, I was spending too much time with technical management. Instead I began using Mukurtu via their hosted development server.

Mukurtu contracts with Pantheon<sup>40</sup> for their development server hosting and the new CoMunn project. Christen describes that, “cloud based hosting has changed the landscape so much in the past few years, that we are having to adjust this product” (personal interview, March 20, 2014). The new CoMunn project is designed to provide a hosted option for individuals and communities that want to control access to digital resources, without the need to manage a server installation. At the time of writing, this service is still in development, so I am not able to comment on its functionality. The current version of Mukurtu is available for download via GitHub<sup>41</sup> and can be installed on a Drupal compatible server or hosted service of your choice.

## **Access**

Access control in Mukurtu starts with the construction of community groups and their use parameters. Any combination of communities can be created on the site and their application is flexible. For my project, I created a community for each of the language groups I was partnering with, in addition to a few for testing. When setting up a community you must determine if resources attributed to that community are open to everyone or are restricted to only members of that community.

User level permissions are the next way to control access. Users are generally linked to particular communities (unless they are administrators) and their access can be restricted

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<sup>40</sup> Pantheon is a large data management company specializing in hosting Drupal based websites.

<sup>41</sup> GitHub is a website that enables download of program package files.

to a specific community they are associated with. Users can also have cultural protocol attached to their account for further control of access. According to Christen (2012:2885), “the crux on Mukurtu CMS is its emphasis on cultural protocol, both at a core level of its architecture and in all areas of its functionality.” When a user is linked to a cultural protocol those pieces of digital heritage with analogous protocol are available to them, those without are restricted. Individual content items in Mukurtu, like images and audio files, are termed digital heritage. The rationale for this design feature is based in Director Christen’s work in the Waramungu community, where cultural beliefs restrict some information and locations to certain individuals. Christen reports members of the community feeling “anguish over the violation of cultural protocols observed by the Warumungu people in the distribution, circulation and reproduction of cultural materials and knowledge” (2885). Protocol restrictions are not required, but were important for the communities I worked with. The protocol work quite effectively in my experience, but they should be well thought out and tested. Changes to protocol settings can create cascading changes throughout the collection.

The process of adding a piece of digital heritage brings the protocol choices into action (see Figure 13). There are two main protocol choices every time a piece of digital heritage is added. The first is what community the item will be attached to. If communities restrict access to only their members, then an individual can only add content to the community(s) they are a part of. Cultural protocol is the next choice when adding content. Here the user can select from any of the available protocol that have been created and apply one or more to the item. For example, if a song or story is only appropriate for elders in the community, then the user could designate this limitation in the cultural protocol menu. Protocol choices are highly modifiable by the site administration team for users to select

between. Depending on the complexity of the user access and protocol structure some archive platform installations will require more time for setup and ongoing maintenance. According to Christen (2012:2885), “protocols are not rigid; they assume change, they accept negotiation, and they are inherently social – not given, neutral, or natural.” Once the flexible protocol is attributed the heritage item can be uploaded and saved. There are numerous other metadata fields and licensing options available. All access settings, including protocol, can be altered over time to reflect changing beliefs or changes to the status of individuals. Mukurtu provides two options for attributing licensing to content. Neither licensing options limits access, but inform users about the intended use preferences for these digital files.

## Create Digital Heritage

### 1. General

Title \*

Media:

Choose a file to upload from your computer, or select a file in the library.

ADD ANOTHER ITEM

Description

Path: p

Disable rich-text

Text format

Filtered HTML

• Web page addresses and e-mail addresses turn into links automatically.

• Allowed HTML tags: <a> <em> <strong> <cite> <blockquote> <code> <ul> <ol> <li> <dl> <dt> <dd>

• Lines and paragraphs break automatically.

(DC Description field) This is the primary field for describing the item. Include physical characteristics (examples: Photograph (lantern slide); manuscript; typescript; newspaper clipping) and content information (for an image, what is depicted; for a text item, what is it about); also give additional date information or other relevant details.

### 2. Traditional Knowledge

Traditional Knowledge

### 4. Mukurtu Core \*

Communities

Select Some Options

Select the communities that should be allowed to see this content.

Cultural Protocols \*

Select Some Options

Select the cultural protocols associated with this content.

Category \*

☐ Animals

☐ Around the House

☐ Birds

☐ Dance

☐ Greetings

☐ Images

☐ Numbers

☐ Place Names

☐ Sea Life

☐ Sentences

☐ Songs

☐ Words

☐ -Animal Names

☐ -Tree Words

Choose one or more general cultural categories that best describes your material. This field can be used for content browsing.

Keywords

Insert keywords associated with this item. Keywords make it easier to browse and retrieve the content.

Sharing Protocols (group content visibility) \*

Use group defaults

Choosing a sharing protocol will define who can access this item.

### 5. Standard Metadata

Figure 13 Mukurtu add digital heritage screen.

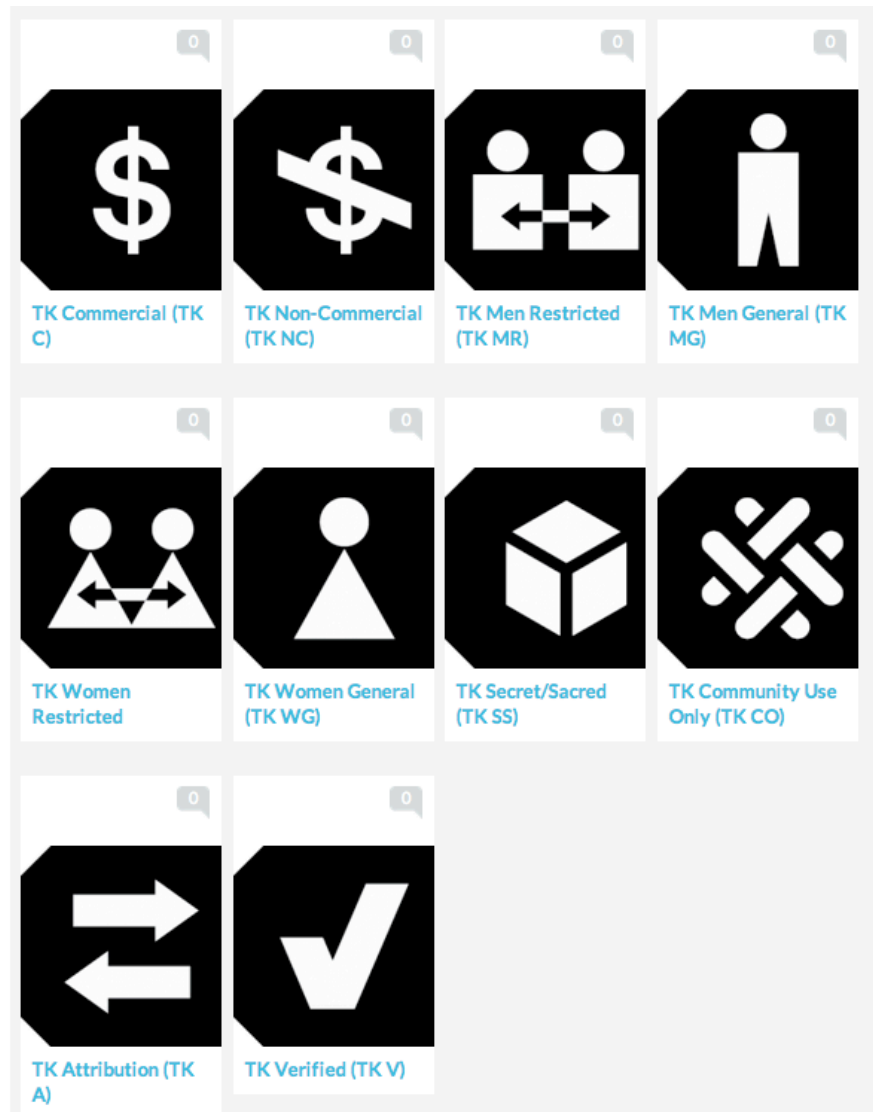
## Licensing

Content added to a Mukurtu site can have Creative Commons (CC)<sup>42</sup> licensing and Mukurtu's own Traditional Knowledge (TK)<sup>43</sup> licensing applied (see Figure 14). Applying CC and/or TK licenses details the intended use of the resource, such as limiting or allowing commercial use in the case of CC or TK classifications that describe use more specifically based on tribal community needs. CC licenses primarily identify permissions around

<sup>42</sup> Creative Commons licensing: <http://us.creativecommons.org/>

<sup>43</sup> Traditional Knowledge licensing: <http://www.localcontexts.org/>

commercial usage and ability to distribute adaptations of the resource. TK is meant to work independently or in addition to CC labels. The CC and TK licensing models are important ways to identify intended use and the TK model, in particular, has potential to address the complex ownership and access needs of tribal communities. TK is very new and CC, while it has been around since 2001, is still unknown to many. Neither system has legal authority behind it, but each label system prompts the person possessing a resource to think about the nature of their relationship to that resource and how they would like other people to utilize the material.



**Figure 14 Mukurtu Traditional Knowledge licensing.**

Controlling access to information on the Internet is a contentious issue for people that promote open access on the Internet. Christen has faced criticism (see Christen 2012) from Internet users that see the types of controls in Mukurtu as regressive and have linked the effort to digital rights management (DRM) technologies, that are seen as negatively limiting user freedom on the Internet. In the context of endangered language archiving and dissemination, the issue of restricting content is tempered by competing needs to make

resources available to language learners, while also protecting intellectual property. I agree with Christen that Indigenous experiences with intellectual property documentation and dissemination, both physically and virtually, are not comparable to DRM restrictions aimed at practices like limiting music sharing. I am an advocate for making language resources as accessible as is culturally appropriate for that community. Technology that enables maintenance of cultural practices, like protocol, is part of cultural sustainability and revitalization. When Native communities publically declare approved uses of intellectual property and dissemination practices that are aligned with their cultural values, they are performing an act of self-determination.

## **Interface**

Like other archive platforms, the interface and functionality of Mukurtu CMS reflects the design needs of the community it was originally developed for. This community was primarily interested in storage and dissemination of digital versions of visual media, like photographs and documents. Accordingly, the content uploading, organization and display functions of the platform are best suited for visual rather than audio media. The release of Mukurtu has generated great interest from Indigenous communities around the world and the Mukurtu development team has traveled extensively showcasing their product. It is very common for communities to ask about language archiving and dissemination capabilities, states Christen. “Everywhere we go, people say ‘what about the kids,’ how are they going to learn the language” (personal interview, March 20, 2014). In my experience, the CMS has potential for innovative use around language documentation, but at least in the present version, the functionality limits the possible uses.

It is important to note that the platform is not yet realized in the capacity its developers intend and I expect the forthcoming releases over the next year will improve its capabilities for language documentation. In particular, development of Mukurtu Mobile version 2.5 is expected to bring important enhancements for language documentation work. Pedagogically based dissemination capacity represents a greater challenge for Mukurtu, and one that is only partially in their current mission scope. As mentioned before, the power of open source software is that others can build improvements and new components to enhance the base product. The platform could also be developed into a tool that is focused on dissemination.

My trial of Mukurtu CMS mainly involved uploading audio, but also some PowerPoint, PDF and text files. There is a 100MB file size limit for any individual upload and a large variety of file types<sup>44</sup> are supported. I found uploading worked fine for approved file types, but that not all approved file type playback is equal in the media player. For example, I uploaded a number of small WAV audio files and found their playback buffering was very slow and would not reliably start. Once I realized that MP3 files were playing without a problem, I converted all the files to MP3 and did not have any more playback issues.

Playback and viewing of most media works quite well and streams quickly. Images display once clicked on and audio files play directly on screen via a simple media player. PDFs, documents, and PowerPoint type files must first be downloaded, then opened. I like that digital heritage items can support multiple media files, which can promote pedagogical learning processes. I could also attach a video file, text file and other audio files to enhance

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<sup>44</sup> Supported file types: JPG, JPEG, GIF, PNG, TIF, TIFF, TXT, DOC, TEXT, XLS, PDF, PPT, PPS, ODT, ODS, ODP, MP3, MOV, M4V, MP4, OGG, WMV, WEBM, ICP, WAV

the main piece of media. This capability supports ability to link a transcription to a recording, post multiple pronunciations (dialect, gendered, etc.) of a word, or connect multiple versions of a story or song. This feature invites the richness and indexicality of speech onto the archival page. Without assistance from a programmer or Drupal expert I found my ability to effectively organize audio-based media a challenge. The basic content page display was not very intuitive, well organized or conducive of learning, for an “off the shelf” installation, though with some expertise Drupal is very modifiable.

Ability to contribute rich metadata is a clear strength of Mukurtu CMS. The platform supports international metadata standards, such as Encoded Archival Description (EAD),<sup>45</sup> Machine Readable Cataloging (MARC)<sup>46</sup> and Dublin Core,<sup>47</sup> as well as flexible rich text fields, such as “Traditional Knowledge” and “Cultural Narrative,” for narrative based descriptions. Standard metadata fields including Date, Identifier, Language and Contributor are all available. Additionally a mapping feature is available, which works especially well with content uploaded from a GPS capable mobile device. All metadata fields are optional, with the exception of access protocol choices, and can easily be filled in at later dates when more time and resources are available.

Resources can be imported individually or in a batch, as can users, cultural protocol, communities and categories. Once you become familiar with the process it can save lots of time. Batch imports in any CMS must always be done very specifically and Mukurtu CMS is no exception. I found the learning curve steep to make the process really save me time.

Uploading a large number of files is quite easy, but connecting those files to their metadata

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<sup>45</sup> EAD: <http://www.loc.gov/ead/>

<sup>46</sup> MARC: <http://www.loc.gov/marc/>

<sup>47</sup> Dublin Core: <http://dublincore.org/>

requires some finesse. Close attention to the structure of the CSV file and a “cleansing ritual” of first uploading the CSV to Google Docs and then downloading it, proved a successful strategy. The batch upload requires careful data entry into a spreadsheet and will be most useful for large collections. Batch creation of users, categories and protocol is much simpler.

### **Upcoming Developments**

In Director Christen’s view, Mukurtu is far from complete. The current 1.5 version has limitations, especially in the media player. Funding for upgrades and completion of their product development roadmap has, so far, been dependent on grant resources. While they have been quite successful at obtaining grants, they realize the long-term unsustainability of being solely grant funded. They envision that the CoMunn project will develop a consistent revenue stream able to support continued operation. Mukurtu is working from a product roadmap that will take them from the current 1.5 version up to version 2.4, a process they expect to complete before the end of 2014. A recent \$499,186 grant from the Laura Bush 21<sup>st</sup> Century Librarians Program will help fund this work. Mukurtu expects to achieve a stable codebase in the 2.4 version that will realize the potential of open source architecture, where users can participate in development. This will enable contribution of custom built modules or components to the platform.

A second \$319,331 grant from the NEH Digital Humanities Implementation program will support development of Mukurtu Mobile from its current 1.0 version to 2.5. Christen sees Mukurtu Mobile development as integral to their growing support of language documentation. The 1.5 version mobile application does not support audio or video as it, like the rest of Mukurtu, was designed around print media. According to Christen,

If language is going to be a part of Mukurtu in a really robust way, we need the mobile application and we need the audio capabilities so that people can record, they can transcribe, they can add protocols to their resources – do this on the fly and upload it to their instance of Mukurtu, while knowing that it is safe (personal interview, March 20, 2014).

The 1.0 version of Mukurtu Mobile contains simple versions of some of these described features. At the time of writing, version 1.5 was released, supporting some of the proposed improvements. I am not able to provide a review of this new application. Christen expects a significant increase in utilization by linguists and language preservationists once the mobile application is upgraded. A quality mobile application is an important part of any strategy to encourage young people to interact with digital heritage resources.

CoMunn will be fee-based and available for fully hosted and customizable digital heritage storage. Christen originally created Mukurtu with the expectation that individual language communities would want to download the software and manage their own instances to retain exclusive control of the data. Over the past few years, she has learned that most groups value centralized management and data storage – something now more possible due to cloud-based technology. However, many community groups do not have the budget, server space and technical expertise to manage an archive themselves, even a user-friendly product like Mukurtu. Christen understands that some highly protective communities will still select to manage their own archive running Mukurtu software. These groups will continue to have Mukurtu support and benefit from platform upgrades. I expect the benefits of centralized storage and support will be attractive to many others. CoMunn will be run by the Center for Digital Archaeology and hosting for a community starts around \$3,500 a year for a 10-user license. Fully customized hosting plans are available as well. I expect most

communities will opt for fully customized plans to enable for more users and flexibility. Christen sees the CoMunn product facilitating the evolution of Mukurtu as “a tool built primarily around controlling access, to one that serves a growing need for preservation” (personal interview, March 20, 2014).

There is at least one example where Mukurtu CMS is being used directly for educational dissemination. The Pascal Sherman Indian School in Eastern Washington worked with Mukurtu to create an iPad application that connects to their community’s Mukurtu archive. Students are able to see English and Interior Salish word lists and view accompanying videos of elders speaking to enhance their learning. Christen reports that the school is seeing examples of student repurposing or resignification of archival content for student projects where, for example, students are using legacy archival materials in new iMovies. The next step is getting them to post that material on the community instance of Mukurtu so that students see themselves creating knowledge and adding to their community archive. This type of reuploading is still getting off the ground but Christen sees possibilities for it to increase. Connecting archives to educational dissemination is the true testament of their potential and value in my opinion. Platforms like Mukurtu enable this work and innovation through their design and values.

Mukurtu is being used around the world. Its platform flexibility creates opportunities for managing collections of a variety of media, though its application for audio based documentation does not yet equal established language archives like ELAR. With sufficient funding, I am confident that the platform architecture can be modified to create an exceptional a documentation and dissemination platform. Currently several Indigenous

communities and organizations are using the platform and I expect to see many more in the future.

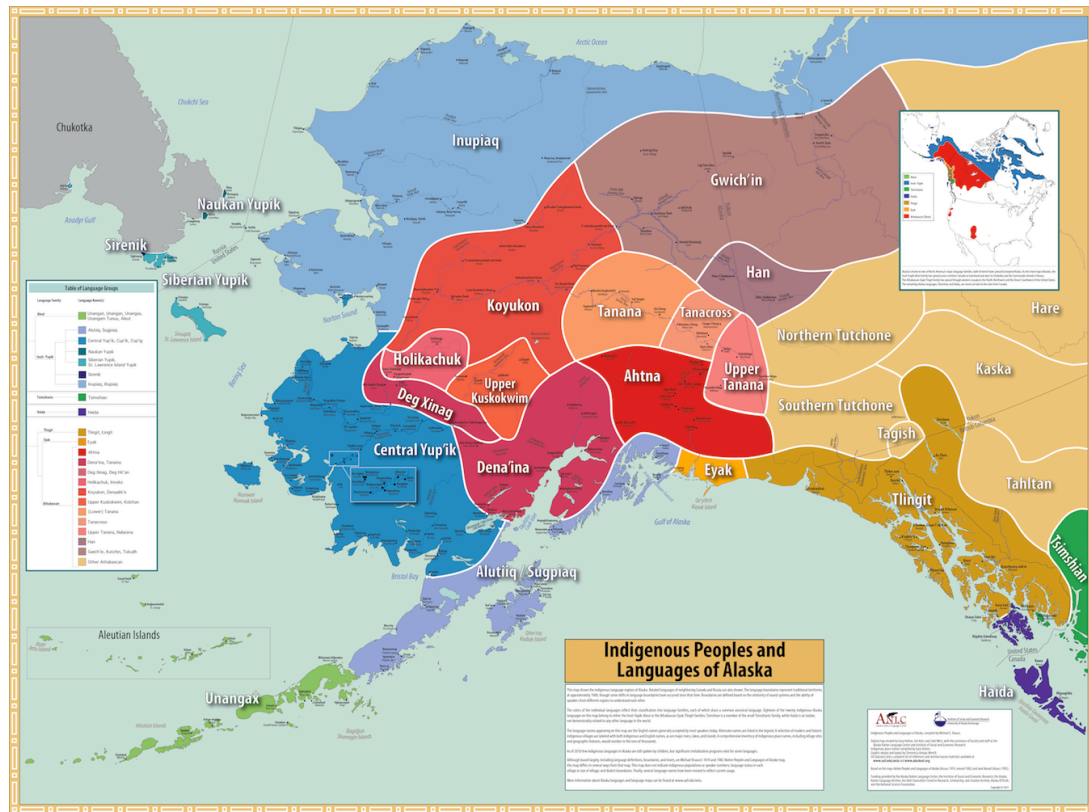
## Chapter 7: “The Digital Archive is Meaningless”

### Community Based Archives

This chapter describes three community-based archive examples in Alaska that are run by Alaskan Native groups. The reviewed archives are: *C'ek'aedi Hwnax*, managed by the Ahtna Heritage Foundation and based in Glennallen; *Dinjii Zhuh K'yaa*, managed by the Gwich'in Regional Cultural Center and based in Fort Yukon; and the Sealaska Heritage Institute Archive based in Juneau (see Figure 15). A review of community archives is relevant to this dissertation because they show many concepts discussed previously, like the importance of sovereignty and culturally based resource access strategies. Community archives are becoming more prevalent as technological barriers decrease and individual language communities feel greater need to control their own archival materials, but that alone does not translate to greater efficacy for dissemination. I have focused on examples from Alaska because I have connections to these language communities and they provide examples of collaboration with the Alaska Native Language Archive.

These archives also demonstrate diverse approaches, rationale and outcomes of community archiving in one region. The languages and communities represented by these archives are quite distinct as are their archive choices. The three archives described are projects of five different Native communities, three language families and two Native corporations. I find that community-based archiving facilitates tribal interests in language education, community engagement, cultural resource management and political and legal self-determination. However, all are challenged by design of technological infrastructure, funding and application of archival language resources for educational purposes. All archives

reflect the cultural values of the community they represent, but this is particularly visible at the community archive level.



**Figure 15 Indigenous Peoples and Languages of Alaska (ANLA 2011).**

## Review 5: Ahtna Heritage Foundation Archive

Ahtna, Incorporated is one of 13 Alaska Regional Corporations formed as part of the 1971 Alaska Native Claims Settlement Act (ANCSA). Ahtna, Inc. governs affairs for eight federally recognized tribes composed of about 1,800 individual shareholders (the term used for Alaska tribal members within Regional Corporation governance). The Ahtna language has four main dialects and is part of the Athabaskan language family. Approximately 80 speakers of the highly endangered Ahtna language remain and all are estimated to be over the

age of 55 (Ethnologue 2014a). The Ahtna Heritage Foundation is funded through Ahtna, Inc. and supports cultural education, activities and the community archive, C'ek'aedi Hwnax or Legacy House. The archive is first “Indigenously-administered” language archive in North America that is compliant with the Open Language Archive Community (OLAC) guidelines for digital language archive management (Berez, et al, 2012:237). They house over 500 rare audio and video recordings that are available to people in the community.

I interviewed the Executive Director of the Ahtna Heritage Foundation, Liana Charley John (Ahtna), Curator of C'ek'aedi Hwnax archives, Taña Finnesand (non-Native), and Andrea Berez (non-Native), a University of Hawai'i linguist and Director of the Kaipuleohone Digital Ethnographic Archive at the University of Hawai'i at Mānoa. Professor Berez was instrumental in founding the archive and conducts language documentation fieldwork in the community. C'ek'aedi Hwnax began in 2009 through a grant-funded project to bring together Ahtna language recordings held by different institutions around the state. The Alaska Native Language Archive at the University of Fairbanks (ANLA) had a substantial collection of Ahtna records that they shared with C'ek'aedi Hwnax. Other collections were also obtained from institutions around the state and private researchers, like Professor Berez. C'ek'aedi Hwnax staff listened to the recordings, digitized them, described their contents and documented the metadata. The archive formally opened two years later in 2011.

According to Ms. Finnesand, they continue to gather Ahtna materials, digitize them and add them to the archive. Most of these newer recordings come from families, individuals and private organizations, many of which are recorded on phones and other mobile devices. A community archive is well suited to respond to new and informal documentation practices

and encourage this type of community participation. Like many Native communities, Ahtna has cultural protocol that describes proper sharing of intellectual property. Community interests in adhering to cultural protocol around information dissemination were a motivating factor in creating the archive. According to Ms. Finnesand, “we are happy that ANLA has been a partner – providing materials and backing up our data, but people here really wanted to manage that material here. There have been so many abuses of our information, just like in other places, [so] having more control is important” (personal interview, February 11, 2014). This is not to say that ANLA has misused resources, they are highly regarded by all the individuals that I spoke with, however there is a preference for local management. According to Berez, et al. (2012), Ahtna community members were aware that language recordings had been made in the past, but did not necessarily know where or if they still existed. Now that these recordings are housed in the Ahtna community their “cultural importance” has been greatly extended. Community control also means community access. Many Ahtna people have increased use of archival recordings in their archive compared to when the content was residing at ANLA only. Especially in a small and remote community, proximity is a critical factor in facilitating access.

To Director Charley John, the archival collections are personal in addition to their value to the community. She described becoming excited about this project when she saw her grandfather’s name on one of the recordings. Never having known her grandfather, discovering his recording was and still is emotional. According to Director Charley John,

I was able to go to the archive and pull up a recording of him and hear him speak in his own language and talk about a mourning song that he had made for his older brother. That was one of the most powerful experiences I have ever had in this job. And I know that there are other people that have been

able to hear the voices of the people that they miss and learn directly from them. It is awesome and so powerful (personal interview, February 27, 2014).

Archives do not represent an abstract past for Native people; they are the voices of immediate family and friends of recent generations. The attachment relationship between Native people and archival collections containing their culture's recent past is markedly different than the relationship a researcher or a member of the general public would have with an archival collection.

Ahtna does not have a formal language education program, but archived resources are utilized to support some language and culture revitalization efforts in the community. The Ahtna Heritage Foundation is working to support a Master-Apprentice program, Ahtna Language Gatherings and an Ahtna Language Teacher Development Program. All these projects are interconnected with C'ek'aedi Hwnax. There is no direct educational dissemination feature of the archive, but resources can be accessed or shared as needed. The archival collections also allow Ahtna to conduct their own research on topics of importance. According to Director Charley John, "there have been a lot of legal battles around traditional resource use. We have specific recordings from the 1970s that describe traditional resource use and territory and I can see potential for using this [archive data] to support our claims" (personal interview, February 27, 2014). For example, resources in the Ahtna archives were used to support traditional use claims and sacred sites in a region that was slated for hydroelectric dam construction. Research on cultural use is mandated by the state for large earthworks projects and archival recordings produce much of these data. In this case, Ahtna recorded new interviews to support their claims for territory in addition to using historical

records. Ahtna requires that any new recordings about Ahtna culture be deposited to the archive.

Ms. Finnesand cited a recent Breath of Life workshop and a song workshop they hosted in 2013 as examples of use and engagement with the archive. “We had songs in our collections that our elders had not heard ever or for a long time. We collectively translated the songs, talked about their meaning and the protocol surrounding them. That information went back into our archive. What a great way to do language and cultural revitalization” (personal interview, February 11, 2014). This application of archive materials to support community education initiatives is a simple, but good, example of the capacity of archives with community control. Professor Berez admits that lack of funding may result in lower utilization of Ahtna collections than initially anticipated. C'ek'aedi Hwnax is partnering on projects that increase use of the archive and public exposure of the language. The Ahtna Inc. website has audio recordings available for public use of fifteen common greetings in each of the four language dialects. In addition, the Ahtna Heritage Foundation has partnered with a local radio station to record and air an Ahtna language “phrase of the day.” The archive is also promoting itself as a destination for cultural education visitors.

Most of the Ahtna language collections are available via networked computers in the archive building. The archive has not put content online because of concerns over how that information may be misused and how to implement appropriate access protocols. According to Professor Berez, the Ahtna archive would not have been possible without community control due to adherence of protocol. According to Christen (2012:2847), “In many indigenous communities, cultural knowledge is conferred and transferred based on systems of obligation and reciprocity.” In the Ahtna culture certain people or clans have rights to

specific types of information. Ahtna people are familiar with management of these protocol systems, but not, necessarily, in digital environments. Protocol systems are possible to implement in digital content management environments, as shown in the Mukurtu CMS. At Ahtna, lack of technological and staffing infrastructure is an impeding factor in creation of a protocol management system for digital cultural resources. There is also a lack of community consensus on how to manage this issue.

Ms. Finnesand expressed interest in increasing online access to some archive collections over time. A possible first step toward greater online capacity may be extending archive access to Ahtna villages that can be more than a two-hour drive from C'ek'aedi Hwnax. According to Ms. Finnesand, some community members are in favor of doing away with all the protocol, with some elders in the community promoting open access. However, others are really uncomfortable with the current access they have at C'ek'aedi Hwnax. Increasing ease of access to the archive for all Ahtna villages would enable substantially greater engagement and potential for expanded use and contribution. Consistent use of an archive maintains its currency and utility, and may increase its potential for sustainable operation.

The original grant for the Ahtna archive paid for equipment consulting and staff. The archive continues to be supported by Ahtna Heritage Foundation, but it operates on a small budget. One of the biggest challenges is finding technical staff to help manage the digital collections. According to Ms. Finnesand, “we are in very rural Alaska and we can simply not get people with these skills to work here” (personal interview, February 11, 2014). The technical staff limitations make the idea of putting content online and building in mechanisms for protecting cultural protocol even more daunting. In my conversations with

Gary Holton of ANLA, he recognized the work of C'ek'aedi Hwnax as a model for other communities interested in archiving because of its community engagement and the continued growth of the archive (personal interview, February 8, 2014). For Director Charley John the importance is clear:

I feel that we have the most comprehensive recordings of the Ahtna language and that is how it should be. It is our knowledge, our collective history, our voices. We own it. It does not belong to the university or the state or the BIA or whoever may have made the recordings. These are our people, our own ancestors and it is very much a part of sovereignty, our right to own our own knowledge and to say how it can be used and shared (personal interview, February 27, 2014).

Archiving is as personal as it is political for the Ahtna. The archive reflects their goals, values and cultural practices. The archive staff has interest, though not technical expertise, to expand access to regional village sites. Centralized, cloud-based archival data storage using a platform that enables control of access and dissemination may address many of the interests identified at Ahtna.

#### **Review 6: Dinjii Zhuh K'yaa Language Center and Archive**

Dinjii Zhuh K'yaa is an example of community archiving by the Gwich'in Nation. They have, in part, modeled their archive after the Ahtna example. The Gwich'in Nation is based in Fort Yukon, Alaska and comprises multiple bands living primarily above the Arctic Circle in Alaska, and Yukon and the Northwest Territories in Canada. (see Figure 16). These nations comprise eleven separate communities, including six in Alaska. The Gwich'in language is still commonly spoken in some communities, but is endangered due to lack of

intergenerational transmission. Gwich'in is part of the Athabaskan language family and has around 700 speakers out of a population of approximately 9,000 (Ethnologue 2014b).

Gwich'in people were traditionally migratory, following seasonal caribou resources throughout their territory. Fur traders established forts and trading posts in the region during the late 1800s which decreased migratory settlement and resource gathering for some. While Gwich'in people reside in permanent settlements today, migratory game continues to provide an important source of food and clothing (Peloquin and Berkes 2009; Kofinas, et al. 2010).

The Gwich'in are unique in Alaska for their opposition to ANCSA. Unlike most Alaska Indigenous nations, the Gwich'in opted out of ANCSA and did not form a corporation to govern their tribal affairs.



**Figure 16 Northern Dené language map showing Gwich'in territory (<http://chinook.kpc.alaska.edu/>).**

Cultural traits and politics are both factors that influence the design and implementation of the Dinjii Zhuh K'yaa archive. Executive Director Edward Alexander manages the archive in Fort Yukon. I interviewed him about the role of the archive in his community and their language revitalization efforts. Like other community archives in Alaska, the Dinjii Zhuh K'yaa collection began through a partnership with the ANLA. According to Alexander, the recordings held by ANLA in Fairbanks were virtually unknown to his community. As an example, he found a recording made by a now deceased relative in the collection that no one in his family knew existed. The personal connection to the

collection is just one reason the Gwich'in partnered with ANLA to transfer a copy of all related Gwich'in language materials from the ANLA to Dinjii Zhuh K'yaa.

To Alexander, the archive is both a reflection of his community's ideology and a way for them to disseminate language using culturally appropriate methods. He stated:

The whole archive is an expression of our sovereignty. Our ideology is about sovereignty. The other Native communities in Alaska are fundamentally different because they participated in the 1971 Alaska Native Claims Settlement Act. We have a different relationship with sovereignty because we did not sign that act and retained more land, not money (personal interview February 14, 2014).

In addition to the personal connection, local control of archival recordings means the Gwich'in have resources directly at their disposal if needed to support legal claims or rights to resources. In particular, the Gwich'in oppose the proposal to further develop oilfields throughout the North Slope of Alaska, including the Arctic National Wildlife Refuge (ANWR). The Gwich'in oppose oil development in ANWR largely because the region is vital habitat for the caribou herds they depend on.

Local control of the archival resources also enables the community to preserve and share their language based on the guidance of their elders and community values. According to Alexander, preservation is dependent on access. "We use our traditions to inform how we share. Our elders said we want our language available" (personal interview, February 14, 2014). Their modest funding makes projects like online archive access financially challenging, but they are open to innovation. The archive staff makes use of free public social media outlets like Twitter, YouTube, Facebook and WordPress to connect with users. For a small, remote archive, Dinjii Zhuh K'yaa staff are also making impressive use of

innovative technology such as locative media and augmented reality (see Brown 2007; Champion and Dave 2007) for language dissemination.

Augmented reality refers to computer based sensory information, such as audio, images, and text that is layered or supplemented into a person's real world experience. The technology is intended to enhance a user's experience of an environment or object. Examples include use of the camera and GPS capabilities of a mobile device to provide additional information related to a person's physical location. As shown in Figure 17 a mobile device is being pointed at a building and the user is being offered information based on their location and the online resources connected to the physical building. The newly released Google Glass<sup>48</sup> product is another example of augmented reality. This tool is a wearable computer that projects information on a small screen in the field of vision. Google Glass will provide supplementary information based on where a person is looking. This product will also record audio, video and allow voice based control of many of the features of a smartphone.



**Figure 17 Sample augmented reality display  
([www.images.google.com](http://www.images.google.com)).**

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<sup>48</sup> Google Glass <http://www.google.com/glass/start/>

Locative media is a term to describe information and media that is place dependent or connected to a particular location. Locative media presents a number of possibilities for contextualized language learning opportunities that connect to content in a language archive. According to Refsland, et al. (2007:410) “location-aware wireless devices will hypothetically permit an immersive experience in which users will be able to browse layers of digital information encoded to a particular place.” An example of a locative media project is collaborative mapping, where users can collectively add information about a location on a virtual map to describe or build “spatial culture” and “virtual heritage” (414-415). Locative technologies even have potential for limiting participation to certain individuals through use of “intelligent social filtering” or “narrowcasting” (411). Locative media and augmented reality technology are generally used in combination. These are still emerging technologies, but have wide ranging potential for language education work because they can connect physical objects and environments with educational language resources to provide contextualized learning opportunities.

Dinjii Zhuh K'yaa staff makes use of augmented reality technology and locative media to place digital content overlays on physical objects such as their Cultural Building. Someone with a mobile device can detect embedded digital material on the building and interact with the linked content. When pointing a mobile device at the Cultural Building, the user is alerted that digital content is connected to that physical object. The user can then listen to audio recordings made available by the archive. While augmented reality technology is still developing, Dinjii Zhuh K'yaa staff saw a way to create engagement opportunities for people and their collections. According to Alexander, “the elders want the language everywhere” (personal interview, February 14, 2014). He states that his staff is looking at the

possibility of using Quick Response (QR) codes at playgrounds and culturally significant sites so youth can scan the code and listen to content that is relevant to that particular place. Another project is using geocaching to create scavenger hunts using words and places in the language. Geocaching relies on GPS coordinates and a mobile device to follow clues to a physical location and can be done as a group or individually. This sophisticated mobilization of information connects language with daily life and creates highly contextualized experiential learning opportunities that appear to be consistent with Gwich'in language ideologies.

According to Alexander, the Gwich'in historically maintained few physical possessions and valued wealth differently than Salish and other coastal societies whose permanent habitation allowed more accumulation of physical possessions and elevated the importance of physical wealth.

The Gwich'in had to carry everything they owned while following caribou so physical objects were less important. The basis of our society is about having open relationships – we are required by our culture to share. If you do not share you will be ostracized. This sharing carries no expectation of reciprocation as in the American concept of sharing (personal interview, February 14, 2014).

For the Dinjii Zhuh K'yaa archive, this means there are few restrictions on access and sharing of language resources. Archdeacon Robert McDonald, who worked as a missionary in the Gwich'in community between 1862 and 1904, also influenced community ideology around language sharing and ownership (Moore 2007). McDonald was responsible for developing the first orthography of the language and creating high levels of Gwich'in language literacy in the community through translation of religious texts used in church and training teachers

to make use of the written language. Public oral and written use of Gwich'in during the early period of cultural assimilation may contribute to an ideology of openness around language use and access that continues today.

At the Dinjii Zhuh K'yaa archive there are some highly sacred items in the collection that will never have online access, but the archive staff welcome ways to make their collections more accessible. As is the case with many smaller archives, digital streaming is financially challenging, but the archive website does have some language education videos available via YouTube. Local control of the archive means staff can continue adding to the collection and broaden its diversity. Staff are interested in collecting multiple tellings of stories and songs to affirm the diversity of their community.

For Director Alexander, the archive itself is important, but its value is formed by the opportunities it creates. He states,

The digital archive itself is meaningless - it could be stored in the root of a tree in the forest for all I care. Without the access it creates, it is useless. Our digital archives are only useful if they enable us to have analog meetings and connections between actual people conversing and sharing (personal interview, February 14, 2014).

This statement identifies a vision for the role of archiving in endangered language communities – facilitating meaningful connections between real people in their language. The role of the archive as a tool to facilitate dissemination is clear for Alexander and represents a capacity that is lacking in most language archive examples. The archive also meets a closely linked goal of continued self-determination.

Like the other community archives reviewed here, Alexander articulated the importance of the Gwich'in archive in supporting claims to sovereignty. He stated that many

of the same reasons that the U.S. government has national archives in Washington, DC apply to the Gwich'in. The construction of an archive brings a codification of legitimacy to the materials preserved in the archive. The Gwich'in have been vocal in their opposition to development of the oil rich Alaskan North Slope reserves and the resources in their archive help document the ways that their cultural practices are dependent on its caribou. At the Dinjii Zhuh K'yaa archive, staff are making use of new technologies to connect material in the archive to community members and preserving cultural resources to support their political and cultural objectives.

### **Review 7: Sealaska Heritage Institute Archive**

The Sealaska Corporation was formed in 1972 as one of the Alaska Regional Corporations as outlined by the 1971 ANCSA settlement (Figure 18). The Sealaska Corporation represents and governs the political, legal and economic affairs of the Tlingit, Haida and Tsimshian people in Alaska. Sealaska, like other Native Corporations formed by ANCSA, is a for-profit entity. The Sealaska Heritage Institute was formed in 1980 by the Sealaska Corporation and manages cultural activities, including the archive collections,<sup>49</sup> for these languages and the people connected to them. Management of cultural resources for three distinct language communities is a complex operation. The Tlingit language is part of the Na-Dane language family. Tlingit has a declining speaker population of about 500, in an ethnic community of about 10,000 (Ethnologue 2014d). There are 6 distinct dialects of Tlingit. The Haida language is an isolate with two main dialects. The language is highly endangered, though immersion educational programs have potential to increase the numbers

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<sup>49</sup> Sealaska Heritage Institute Archive <http://www.sealaskaheritage.org/collection/index.htm>

of speakers. In 1995 there were about 55 speakers reported and this number is now estimated over 200 out of an ethnic population over 2,000 (Ethnologue 2014c). There are four Tsimshian languages, Nisgha, Gitksan, Coast Tsimshian and Southern Tsimshian (Sturtevant 1978:322). Tsimshian has approximately 350 speakers out of an ethnic population of 6,780 (Ethnologue 2014e).



**Figure 18 Southeast Alaskan Native languages (www.images.google.com).**

I interviewed Sealaska Heritage Institute Archivist and Collections Manager Zachery Jones (non-Native), in early 2014 about the archive. The Institute's archival collections include physical cultural objects, books, field notes, images and audio recordings. Some of the collections (no audio or video) are accessible via their website and most collection content metadata is searchable online. According to Jones, the Institute does not have

funding for creating full online access to its collections, nor does it have a directive from their governing boards. Streaming media content is costly and should not be the expected standard that archives strive for in Jones' opinion. In addition, Internet access to language recordings is not a priority because of concerns about proprietary intellectual property and public knowledge dissemination.

Mr. Jones describes management of the archive and their access policies akin to any university special collections, with addition of some special cultural protocols. The archive staff encourages people to visit and interact with their collections and as needed they will copy particular resources for individual tribal people or villages. The archive has recently been involved in a grant funded project to digitize its audio language recordings. Staff have been able to work with fluent speakers to review the recordings and describe their contents. Like other community archives reviewed here, Sealaska Heritage Institute received relevant recordings from ANLA and they continue to partner on projects. As materials are digitized and annotated, Sealaska Heritage shares back metadata and digitized files for mutually held recordings to ANLA. ANLA provides an important continued partnership with each of the archives described here and provides complete data backup support from its University of Fairbanks location.

Collections are actively used to support Native rights and community efforts to maintain sovereignty, according to Jones. A common use of language-based cultural resources is in relation to federal and state land use permits. While written documents and reports are often utilized for these purposes, oral history recordings are used even more.

According to Jones,

Some of our collections are entirely legal in nature. This collection is comprised of many documents but more than half the collection [is]

recordings of stories, songs and place names. For us, most of the claims that these records are used in are for documentation of territory and land use for the conveyance of ANCSA lands and for the protection of historic sites (personal interview, February 18, 2014).

In addition to the funding challenges of placing recordings online, Mr. Jones is concerned about misinterpretation of content. In legal cases with the state or other parties, there is a danger that cultural knowledge could be used against Sealaska. If materials are going to be made accessible online, Jones would first like the Institute to work with speakers to contextualize and describe their contents. Without contextualization by the communities, the materials are in too much danger of misuse, in his opinion. A participatory-based archive could enable the contextualization described by Jones and increase both the accuracy and utility of materials in the archive.

## **Conclusion**

Community-based archives have the unique ability to facilitate processes of local control of resources and application of those resources to support language revitalization, legal challenges, and demonstration of indigeneity. The examples of community based archiving reviewed here are surprisingly diverse, given that they are all based in Alaska. Each of the archives reflects culturally mediated decisions about access, use and dissemination of their language resources. Study of these decisions and their rationale provides a window into cultural values and language ideologies. I found it useful to compare archives in one region. Each of the archives has a collaboration with ANLA and are impacted

by ANCSA. Staff at each community archive reports use of recordings to support land and resource use claims in relation to state and federal permitting processes.

The three Alaskan communities are culturally unique as are their experiences with ANCSA. Both the Ahtna and Sealaska archives have more funding through their corporate structures in comparison to the Gwich'in archive. Archives connected to corporations have greater capacity for funding, but may have more pressure to display and maintain visible markers of indigeneity. As described in Alaska (Dombrowski 2001, 2001, 2004), with the Lumbee (Sider 1993) and in the Pacific Northwest (Deloria 1978a) Native communities experience pressure to maintain and display aspects of recognizable indigeneity to maintain rights and resources. I expect that such pressures increase as Native communities and governing bodies that represent them derive increased financial stability. Both in Alaska with timber and mineral wealth, and in reservation communities that possess casinos, the influx of money can lead to increased scrutiny and internal divisions. Some communities may find themselves under more pressure to preserve and display identifiable aspects of their culture, like language. Archives can effectively facilitate this process. For some communities the increase in wealth may also mean they have more to lose if their cultural resources are misused or misrepresented. While there are many factors impacting cultural resource access decisions, I found archives connected to corporations are more cautious about the public accessibility of their resources. An expanded research study of community archives would be needed to make definitive generalizations.

Each of the archives reviewed in this study displays causal links between the choices made around archiving language resources and the cultural values of the organization they represent. For example, the Gwich'in value openness and portability; accordingly they have

embraced public social media and innovative mobile technologies. The Sealaska and Ahtna archives practice more restrictive access, due in part to concerns about misinterpretation of materials relevant to litigation and permitting. Particularly in the context of a legal case, if information is taken out of context or unfounded conclusions are drawn from oral histories the implications can be detrimental for self-determination, according to Professor Bruce Miller (personal communication, September 12, 2014). For example, in the Makah Whaling controversy, groups like Sea Shepherd and People for the Ethical Treatment of Animals exploited any discrepancies or divisive claims associated with traditional knowledge or elder beliefs to drive wedges between community members and oppose the practice of a tribally held treaty right (Martello 2004). Just as these groups and the media exploited perceived differences of opinion and history, legal teams could use oral histories out of context and draw damaging conclusions (e.g. traditional territory and resource ownership practices; see Reid 1987). Given their differences, members of all the archives saw a strong connection between management of digital cultural heritage and their ability to affirm and support sovereignty.

Conversely, the international archive directors did not identify instances where collections were used to support community efforts to protect sovereignty, territory or resource rights. Large international archives like DoBeS, ELAR and PARADISEC are all designed by linguists and funding organizations that privilege language documentation, data storage, access and linguistic research. Linguists and other researchers comprise the vast majority of their users. Many archival organizations believe that in creating greater access to the data held in their collections they are enabling transcription and analysis in the form of dictionaries and grammars. The focus on access is considered warranted because these

products can aid in language revitalization. According to Dobrin and Holton (2013) it is well recognized that documentation and dissemination efforts in Native American communities are fraught with complexity and potential for failure. In response some linguists (c.f. Ladefoged 1992) advocate “documentary research on endangered languages should go forward independently of community concerns” (140). The suggestion that outside experts would make decisions about use of intellectual property that disregard community expectations fuels mistrust and hurts potential for successful collaborations.

There is a logical connection between greater access to language resources and increased potential for language revitalization. Though this logic may be correct, these goals may be at odds with the values and needs of the communities that supply the linguistic information. Additionally, while data in the archive could be used to support direct language education, this practice was not common in any of the large archives I sampled. Mukurtu CMS represents a platform most equipped to enable educational dissemination, but that capability has not yet been realized. As the information in large archives become increasingly mobilized through the Internet, the level of access and downloadability of language resources may not only be culturally inappropriate, but potentially undermine the capacity of Native communities to maintain their sovereignty.

Archiving and digitization are not “neutral activities,” (Widlok 2012:17). The power of large-scale database collections is that they enlarge the ability of a single researcher to collect and present data. The downside is that communities have a reduced capacity to influence that product over time. The access to and control of data in large archives privileges the archive and depositor and it becomes increasingly difficult for communities to have influence, especially since Native communities are composed of complex and often

divisive networks of families that do not always have a unified voice. All the large archives reported very little use (either use or contribution of content) by language community members. The low levels of community control of content and knowledge of what content exists on an archive results in low levels of engagement and potentially perpetuates colonial power structures.

Each of the reviewed large international archives has unique strengths and facilitates work on endangered language preservation. These archives were designed for language documentation and research and are effective at those tasks. In most cases the functionality of these large archives do not address the specific needs of Indigenous cultural resource management, especially in relation to access controls. I find that the DoBeS and PARADISEC archives offer similar, mostly binary, access restriction controls. ELAR provides increased options, though it does not enable protocol restrictions based on cultural values like age, gender or family. Interface design and ease of use are also important factors in determining the efficacy of an archive for application in an Indigenous community. ELAR's interface and search functionality is clean, powerful and intuitive. PARADISEC has a user-friendly interface, though searching functions are less powerful, including inability to search within language groups or determine access privileges from search fields. The user interface of DoBeS is the most cumbersome to work with from the perspective of a new user. The future of ELAR is unknown at this time as they review possibilities of merging with DoBeS. The open source availability of the Mukurtu CMS may enable small communities to create and manage their own archives.

The Mukurtu CMS platform has the potential to address many of the concerns and objectives that Native communities have in relation to cultural resource archiving. In

particular, Mukurtu has practically limitless access and control capabilities to address diverse information dissemination protocol needs. The CMS is still a work in progress and platform functionality for language preservation still feels secondary to the platform's capacity for digital print media management. I expect that the planned enhancement of the mobile application will provide significant new capabilities for language documentation work. The development of the platform and the new CoMunn service will be closely watched. The open source nature of the platform allows modifications and new features to meet specific needs and interests. Since additions and modifications to the CMS platform can be shared with other users, there is potential for fostering collaboration to continue improving the platform for language preservation needs. In particular, development of educational dissemination features will be of interest to many communities.

Archiving a language is a very time intensive process and benefits from collaborative work, both on creating features and contributing data. None of the archives I reviewed employ user-based knowledge mobilization features, like Wikipedia, or other collaborative databases. However, highly modifiable archival platforms, like Mukurtu CMS, have potential for experimentation and innovation. Locative technologies and augmented reality provide exciting opportunities for increasing user participation with archive resources and enable ways to contribute information back to the archive as well. The Regional Gwich'in Archive is currently employing some of this type of innovation. Any archive flourishes through use and is vulnerable to obsolesce if it becomes a "data cemetery" (Widlok 2013a:185). Creating social networking capabilities where users build community and connections is another way to engage community members and youth. Social media can also capture information about endangered languages that might be left out by conventional archiving methods (Arobba, et

al. 2010). Making archives collaborative and interactive may increase their utility, power and ultimately their sustainability.

Connecting an archive to educational processes creates high levels of engagement along with rich potential for new contributions to the archive. Archives, like language and culture, grow, change and evolve over time. A static archive is likely a non-sustainable archive. None of the archives reviewed here or the Mukurtu platform have pedagogically developed language dissemination capabilities, though all the community-based archives expressed interest in using archival materials to further language education. I see a natural connection between the power of the archive and the potential to educate, but for many archives this is outside their scope, capacity or expertise. Archive managers, like Nick Thieberger of PARADISEC, are practical when stating that education is not the focus of their archive, nor should it be (personal interview, March 5, 2014). Many archives are simply not designed to support language learning and their funding and staffing are insufficient for such a dramatic increase in scope. However, there is utility in questioning the long-term efficacy of archiving content without effective means for dissemination.

The capacity for pedagogically designed dissemination features in the archive exists in some instances. Paul Trilsbeek of DoBeS reports one project with a Dane-zaa community in Canada that has an educational user interface that connects to their database, but use of the site is less than anticipated by the community and there are no plans for replication due to lack of resources to sustain it. A Mukurtu-based community archive in Washington State is used with reported success at the Pascal Sherman Indian School for teaching purposes, but according to Director Kim Christen, these features are not currently transferable elsewhere.

Software like Rosetta Stone<sup>50</sup> and Internet-based language education solutions such as Livemocha<sup>51</sup> and Duolingo<sup>52</sup> certainly exist, but their application to endangered languages is underdeveloped. The Rosetta Stone Endangered Languages Project<sup>53</sup> has applied their software to language education projects in five North American locations. Rosetta Stone is not an archive and the efficacy of the five endangered language projects by Rosetta Stone needs further study. Additionally, the FirstVoices site is an example of Internet-based language education. Their model may not be cost effective outside of Canada and the site efficacy, outside a small number of successful examples, needs further evaluation. It is relevant to consider these Internet based language education examples in context of language archiving. There is significant potential to expand the capacity of archives to transform their rich resources into quality educational experiences. However, this educational dissemination will have greatest efficacy when aligned with the language ideologies in a given community.

The final concluding chapter provides a list of recommendations for future archive development and implementation based on this study. A detailed description of a pedagogically designed archival platform is the subject of future work, but I will note concern for archives, especially community based ones, that do not implement measures to facilitate high levels of engagement with their community. The vast information storage capacity of computers and the Internet is only useful when it is applied. As described by Edward Alexander of the Gwich'in Archive, the information in the archive has no relevance to him unless it helps to create connections between people and opportunities for language resources to transcend from the digital sphere into everyday interactions (personal interview

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<sup>50</sup> Rosetta Stone: <http://www.rosettastone.com/>

<sup>51</sup> Livemocha: <http://livemocha.com/>

<sup>52</sup> Duolingo: <https://www.duolingo.com/>

<sup>53</sup> Rosetta Stone Endangered Languages Project: <http://www.rosettastone.com/endangered>

February 14, 2014). No archive wants to turn into a “digital dumping ground,” where information is housed in vast quantities but not used (Widlok 2013a:186). Any archive loses utility if it does not receive enough use and application. Community archives have smaller funding bases and serve smaller populations than large international archives, making them more vulnerable to disuse or “digital cemetery” effects.

Existence of archive resources alone does not mean those resources are appropriate for educational use. In many cases collaboration between educational professionals, archivists and language practitioners is needed to develop archive resources into educationally relevant materials. Well-designed processes of educational dissemination can ensure application for these resources, while maintaining control of digital heritage. Unfortunately, there is a significant unmet need for development of educationally relevant teaching and learning resources that are based in or make use of archival resources. Archives are far from a panacea for language shift or protection of sovereignty, but their role is important and their potential contribution to these efforts is underdeveloped.

## **Chapter 8: Conclusions**

In this dissertation I have sought to address an issue that I have struggled with both academically and professionally: how can endangered language documentation best serve language origin community interests and enable the revitalization of their endangered languages? When I first started working with tribal communities, I expected this answer to be obvious and could not comprehend the disparity between the importance tribal people attributed to their languages and the ongoing reality of language shift. My M.A. research (Shepard 2007, 2009) documented both the significance people in the Lummi community attribute to their Native language and the belief that future generations will have ample opportunity to continue meaningful language use, even given the high level of language endangerment facing the community. This research helped me conceptualize the existence of culturally situated ideological values that have capacity to determine the efficacy of language preservation efforts. The gaps between interest, perceived potential, existing language documentation and the actual number of new speakers in the community has, in part, precipitated my continued research.

I have investigated the capacity language ideologies have to impact decisions around language documentation, archiving, access and application. To contextualize my inquiry, I have researched the implications of the management, performance and use of Indigenous language in relation to political and legal rights, treaties and capacity for self-determination. Through examples from North and South America, I have shown how performance of language and management of archival language resources can support or erode the perceived indigeneity of a community and how their right to access resources is dependent on

demonstration of alterity. These findings are consistent with accounts by Deloria (1978a), Sider (1993), Dombrowski (2001) and Miller (2003) that recognize the unique pressures felt by Indigenous communities to be simultaneously modern and traditional. The Northern Chumash community example provides a view of the complex considerations about language resource access, use and control. That community makes these decisions in the context of, sometimes competing, interests in language revitalization, federal recognition and resisting ethnogenesis. As shown in examples from Hawai'i and Lummi, and the work of Hill (2002), Errington (2003) and Dorian (2010), experiences with control of language and participation in articulating a language's public use also impact the accessibility of language resources. These descriptions of Native communities managing linguistic cultural resources are contextualized through application of Daniel Boxberger's model of Native economic resource management (Boxberger 1989).

I did not initially intend to determine the efficacy of applying Boxberger's cultural economy theory to linguistic resources, though during my research I found myself continually returning to his early work and his later claim that the model could be applied to cultural resource management (Boxberger 2007:62). In the communities I have worked with, I find that the experiences Native people had with control, colonial use, suppression and revitalization of their languages are analogous to experiences of control, participation, exclusion and marginal reintegration in the salmon fisheries. Just as past experiences with participation in the salmon fisheries colors current policy decisions around this resource, the past (especially colonial) experiences with Native language use impacts current management decisions.

Prior to colonization Native communities largely had control over language use and access. In most colonial experiences, Native languages initially had a degree of integration in colonial life and those Native communities participated in teaching and translating their languages with colonists. A process of exclusion followed this period for many Native communities where their languages were suppressed along with their agency to determine the future of this resource. For some, like the Lummi, exclusion and suppression drove use of the language underground and has resulted both in severe endangerment and some preservation. For others, like the Hawaiians, their language experienced a florescence of public use and accessibility during early colonialism. I find that experiences during the exclusion period have particularly lasting repercussions on current language ideologies and the reassertion of control and use many Native communities are currently trying to develop. Successful language preservation programs will find greater efficacy in first identifying existing language ideologies that influence and shape decisions around cultural resource management.

In chapters 4 and 5 I describe my ethnographic observations in both the Lummi and Nooksack communities and their experiences using a Mukurtu CMS based platform for language resource documentation and dissemination. This work highlights the pressing need in each community for language archiving and the related necessity of mobilizing those archival resources into pedagogically designed educational materials. Factors including maintenance of sovereignty, organizational influence over language policy, orthographic selection and political instability all impact ideologies and chances of language sustainability. The experience using the documentation site helps illuminate the ideological values and technical capacity needed in an online environment that intends to enable both language archiving and dissemination.

In the final two chapters I review three large international archives, the Mukurtu CMS platform and three small Alaskan community archives. These reviews show the technical capacity and application strategies of diverse approaches to language preservation. Through interviews with archive managers and project directors I am able to describe the values and objectives influencing each organization. The large archives play an important role in language preservation, but one that privileges academic interests over language community control and decision making about their language resources. In many parts of the world extending ability to control digital resources may not be a high priority, as ability to make use of digital resources may be low. However, Native American and First Nations communities in North America largely have ability to make use of these resources if given the opportunity and some technological support. In the community archive examples I find that the design and function of each archive reflects the cultural values of the community it represents. Staff at each community archive expressed the importance of the archival records in support of their ability for self-determination and maintaining connections to their past. In each case interests in greater educational use and dissemination of archival resources was identified, though technical capacity and staffing limited implementation of this goal. There is important opportunity for language policy planning in coordination with archives to address mutual goals.

My research has produced a series of recommendations that aim to increase the efficacy of the preservation of endangered language resources and their utility for educational dissemination.

- Capacity for use and management of language resources by Native groups can enhance or erode capacity for maintenance of sovereignty. Ability to manage language resources in an archive should be available to every interested language

origin community. Community and participatory archives are valuable models to replicate. Models of collaborative knowledge building and mobilization, such as Wikipedia, have shown the capability of this concept in the digital public sphere.

- A language documentation and dissemination solution should support fine-grained cultural protocol management, apply documentation pedagogically, enable recontextualization of materials, support ongoing documentation and conform to archive industry standards of data preservation. This archive should be centralized administered and supported to alleviate concerns about technical staffing, data management and product development.
- A significant opportunity exists for collaboration between educators, curriculum developers, language practitioners and archive managers to develop documentation products into rich educational resources.
- Identification of language ideologies can enable more efficacious language documentation and facilitate dissemination that is aligned with core community values.

Archives are far from a panacea for language sustainability, but in many places there are very limited options for facilitating language engagement. Archival management in concert with ongoing documentation and dissemination form the basis for effective language preservation. As shown in my research, there are a number of archive solutions available for language resources, however, few of these facilitate use and participation by members of the language community and even fewer archives offer the integration of educational dissemination capability. It is a mistake to assume that creation of an archive, even under community management, enables mobilization of resources for education.

There is an important opportunity for curriculum developers, instructional designers and other educational professionals to partner with archivists, community language resource managers and language practitioners to create culturally relevant educational resources.

There is value in centralizing development of educational lessons and multimedia that are transferable between language communities. This is an excellent opportunity for an academic institute or non-profit organization to coordinate people and resources for a common objective. The need for educational content development could be partnered with an archive initiative designed specifically for endangered language communities. From my experience, a well designed archive platform needs to, at a minimum, support capacity for self-determination through fine grained control of access and protocol, enable community participation in generation of archive content and connect to the educational dissemination of resources. The platform will need high quality support, ease of use and scalability as well. Delivering this capacity while making the resource affordable should be considered a matter of cultural justice.

I find that the existing archive models are either primarily designed for linguists, like the larger international archives reviewed here, or are designed to facilitate preservation of cultural resources other than language, such as Mukurtu CMS which is primarily designed for print media. Further research on community archives is needed to identify successful models and best practices, but the community archives I worked with have limited or no capacity to manage protocol, enable content generation from community members or engage in direct educational dissemination. The scalability of the community archive model is questionable. The Mukurtu CMS platform has the greatest potential to meet these needs, though not necessarily as it is currently configured. Since the platform is open source an organization could build upon the existing framework, saving valuable development resources.

An archive and its content is only as useful as it is applied and any archive should consider creating rich opportunities for engagement with resources, whether this occurs as contextualizing materials to support a legal claim, development of curriculum or critical evaluation of content accuracy – this everyday connection to language fosters learning. As the Gwich'in example demonstrates, mobile devices have created new opportunities for informal learning and language use. Locative media and augmented reality technology enable digital placement of language resources on objects and landscapes. A smartphone, iPad type device or emerging wearable technologies such as Google Glass allow users to interact with information in new, highly contextual ways. As so succinctly stated by Edward Alexander, Executive Director of the Dinjii Zhuh K'yaa archive, "The digital archive itself is meaningless . . ." unless it creates opportunities for people to interact with the content that comprises the archive (personal interview, February 14, 2014).

In each of the communities I worked with for this dissertation I found that conversations about archiving and language preservation always connected back to self-determination. Because archives, and language documentation work in general, is deeply associated with an issue of paramount importance, there is both high potential for failure and great capacity for success. Archives need to allow communities to protect and share their linguistic resources as they see fit and in ways they believe are mutually beneficial to a multiplicity of competing objectives including education and protection of sovereignty. I find that application of Boxberger's model provides a valuable way to contextualize historical resource management experiences and articulate current implications. Indigenous community control over language use and access policy will not alter the expectations that governments and mainstream culture have about indigeneity and the need to maintain cultural continuity

for preservation of treaty rights. However, greater management ability may provide those communities with enhanced capacity for cultural expression that they find meaningful.

The scholar Vine Deloria had unique appreciation for the holistic and interconnected context of cultural continuity, political representation and legal frameworks in Native America. His quote warrants repetition: “language is the key to cultural survival and can not be considered in isolation; it is and must be the substance of self-determination” (Deloria 1984:251). Considering ideology around language preservation and dissemination is one way to avoid positioning these issues in isolation from cultural context. Reintegrating Native people as managers of their cultural resources is part of affirming self-determination.

Archives that enable Native people to facilitate their educational aspirations and be authors of their own future are practical and timely endeavors. They are projects that attempt to address a longstanding history of Native people being pushed to the periphery of decision-making and influence over self-representation of cultural resources. Well-designed archive initiatives can address the pressing need of language preservation while leveraging group strengths and capacity. Reversing chronic underdevelopment in Native communities is a complex task requiring capital, infrastructure and education. Native people are acutely aware that sustainable self-determination requires economic development, political organization and agency to define their own identity. Management of linguistic cultural resources can be understood as an integral aspect of the substance of community development and cultural sustainability.

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