

After the Return: Digital Repatriation, Language Revitalization and the Creation of Indigenous Knowledge

Synopsis

This project seeks to understand and theorize the impact of digital repatriation on knowledge creation, revitalization, and distribution within Indigenous communities. It examines how digital surrogates are used for cultural and linguistic revitalization projects within both Indigenous communities and in the collecting institutions from which the materials are received. Theoretically, this project asks how and if marginalized communities can reinvigorate their local knowledge practices through the reuse of digitally repatriated materials and distributed technologies. For this project, the PI, Dr. Kimberly Christen, will use a multi-sited ethnographic approach using extensive interviews, local consultation, and institutional reviews of at least ten cases of digital repatriation globally. Data from these qualitative studies will be coded, analyzed, and ultimately made available to the public through a project-funded database and website.

Framing Research Questions

Repatriation practices have been altered by digital technologies that allow low-cost surrogates of cultural heritage materials to be returned to host communities. But while scholars have focused on the ethical, legal and political ramifications of physical repatriation, digital repatriation has largely been viewed as an extension of physical repatriation, or ignored altogether. However, the specificity of digital resources—the ease with which they can be copied, distributed and revised—and their location within distributed technological networks, makes them distinct cultural objects. Because digitally repatriated materials can exist in multiple locations, the scope for digital repatriation projects for Indigenous communities and institutions alike moves from issues of *access* to *access and control*. Digital objects can co-exist in Indigenous archives and websites as well as in institutional databases (online or not). This coexistence often leads to concerns over who makes decisions about how the materials are accessed, circulated and understood across multiple settings. Returning digital materials to Indigenous communities foregrounds the need to contextualize and study the process of repatriation in regards to the access, control, circulation and revitalization of knowledge.

While the research on digital repatriation has focused on the *act* of giving back; less attention has been paid to *how* these materials are *circulated* and *accessed* once they are “home”; that is, *what* happens once digital materials are returned? How are they controlled and circulated within the community? Do they serve different purposes to local communities and other interested parties? Does the mode of access—an institutional online catalogue versus an Indigenous web portal—effect the practices of repatriation? How are these newly formed cultural materials used within local social and cultural systems? Are the materials used at all or forgotten once researchers leave? How are they understood, circulated, and re-mixed within the communities, individually and collectively? Can digitally repatriated objects facilitate new knowledge creation and the revitalization of endangered languages and cultural practices simultaneously? If so, how are they mobilized within these projects?

These questions are timely for scholars collaborating with Indigenous communities on digital repatriation projects, collecting institutions who seek new inclusive models for curation, and international organizations such as the World Intellectual Property Organization (WIPO) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) which are leading global efforts to protect, preserve, and promote Indigenous traditional knowledge and practices in their tangible and intangible forms. By addressing the questions above, this project will 1) theorize the role of technology-driven knowledge creation and language revitalization within marginalized societies, 2) document institutional roles in the revitalization of Indigenous languages and culture, 3) inform policy makers at international levels about the usefulness of digital repatriation in efforts to sustain Indigenous cultural heritage practices, and 4) provide an easily and freely accessible database and web site documenting digital repatriation projects and their outcomes globally, thus allowing scholars, Indigenous communities and institutions to evaluate the scale and scope of successful projects to fit their specific needs.

Project Description

One of the most promising and dynamic sites for anthropological collaboration with Indigenous communities has been in the process and practice of digital repatriation. In the last twenty years collecting institutions—museums, libraries and archives—have heeded the calls by Indigenous peoples to integrate Indigenous curatorial models and knowledge into mainstream museum and archive practices—from cataloging to display modes. With the growth of new digital technologies anthropologists, museum professionals and Indigenous communities have collaborated to produce new models for the creation, circulation and reproduction of knowledge and cultural materials. The recent development of Web 2.0 technologies grounded in user-generated content and bottom-up exhibition and display modes has produced a dynamic platform for sharing materials. Web-based photo-sharing platforms like Flickr, and, more recently, online publishing tools like Omeka, allow people to take advantage of low-cost or no-cost technologies to create exhibits and circulate physical objects in their digital form.¹

This newly animated digital terrain poses both possibilities and problems for Indigenous peoples as they seek to manage, revive, circulate and create new cultural heritage materials. While digital technologies allow for materials to be repatriated quickly, circulated widely and annotated endlessly, these same technologies pose challenges to Indigenous communities who wish to maintain traditional cultural protocols for the viewing, circulation and reproduction of these new cultural materials. Many Indigenous communities wish to maintain control over the circulation of certain types of knowledge and cultural materials based on their own cultural systems (Christen 2009; Hennessey 2009). Digital technologies and the Internet have combined to produce both the possibility for greater Indigenous access to previously-held material collections, as well as a new set of tensions for communities who wish to control these materials and thereby limit their access and circulation. Although many museums, archives and libraries have been quick to acknowledge Indigenous knowledge models and provide digital surrogates for communities who request them, these institutions

¹ Flickr is a photo-sharing site that allows users to upload, annotate, comment on and provide access to their personal photos. Omeka is an exhibition platform tool that allows individuals or institutions to use template-based sets to produce their own online exhibitions.

have not attempted to systematically track *how* or *if* these materials have subsequently been used. Have digital technologies and repatriation movements sparked a type of cultural renaissance? Have they been part of new Indigenous models for curation practices? Have they led to Indigenous language revitalization? Are they widely shared or is access limited? How have these user-friendly technologies and newly repatriated digital objects reframed the field of Indigenous knowledge making? Can these projects inform international debates concerning indigenous traditional knowledge protection and the promotion of indigenous intellectual property rights?

There is evidence from anthropologists, ethnomusicologists, and linguists that individual community-based digital repatriation projects have led to traditions being revitalized, language programs growing and new knowledge creation based on community input surrounding these objects' return. For example, Ruth Phillips, director of the Great Lakes Alliance for the Study of Aboriginal Arts and Cultures, shows how digitally repatriated objects inserted into a shared relational database at the University of British Columbia's Museum of Anthropology have led to new museum classification systems and taxonomies based on input from tribal elders (Phillips 2008). Working with the Maasai on a cultural heritage project, Wend Wendland, Deputy Director of the Global Issues (Traditional Knowledge) Division at WIPO, quickly found that what the Maasai wanted was a digital archive that would allow them to adapt their own property system to that of outsiders interested in their cultural materials. Repatriating digital objects to them was less important than them being able to control how those objects would be used in the future both internally and externally.³ Finally, at the 2009 American Anthropological Association annual meeting Dr. Aron Crowell, the Alaska Director of the Smithsonian Institution's Arctic Studies Center, discussed how their eight-year program, "Living Our Cultures, Sharing Our Heritage," has spawned an intense interest in Native language revitalization in Alaskan Inuit communities. Using digital materials and an interactive website to collect hundreds of hours of Native knowledge in both English and Native languages "spawned urgent grassroots efforts in bilingual education and Native language immersion programs in public schools." Recognizing both the loss of Native languages and the ability of digital objects to spark rich oral narratives, the Arctic Studies program is moving quickly to "adapt museum programs to support this community priority" (2009, 2).

Importance and Timeliness of this Research

Each of these individual insights points to the need for a systematic and comparative study of the outcomes and relative success or failure of digital repatriation projects and their impact on timely issues such as 1) endangered language documentation and revitalization, 2) the role of Indigenous knowledge in museum curation practices, 3) the place of public policy in the protection and promotion of Indigenous traditional knowledge and traditional cultural expressions, and 4) the processes involved in the creation and circulation of new Indigenous knowledge.

a. Endangered language documentation and revitalization

³ Personal communication November 13, 2008, Washington D.C.—American Library Association "Traditional Cultural Expressions" symposium.

Digital repatriation projects—either implicitly or explicitly—play a role in projects aimed at recording and revitalizing endangered languages. Endangered languages have been the focus of both scholarly and international policy over the last decade. With predictions that ninety percent of the world’s languages will be gone or endangered by 2100, endangered language documentation and revitalization has been of central concern to both Indigenous communities and scholars. Recently collecting institutions have also realized the part they can play to aid in this research. For example, the Smithsonian Institution recently launched “Recovering Voices: A Learning Archive for Endangered Languages and Indigenous Knowledge.” Discussing the project, Curator of Globalization at the National Museum of Natural History, Joshua Bell suggests that “museum objects in all their diversity are much more than their material form: they embody particular sets of skilled action, manifest ways of engaging and knowing the world, and make concrete knowledge about the environment” (2009, 45). With this key understanding in mind, the Recovering Voices project is one of several institutional and local projects that aim to use museum objects as sources for the documentation of endangered Indigenous languages. Understanding what communities do with the materials digitally repatriated during consultations and afterwards through the databases created to store their materials, will aid in answering the question of the success and sustainability of these projects, as well as the larger scientific concern with the methods by which knowledge (including language) is revitalized.

b. Indigenous Knowledge, Curation Practices and International Policies

Over the last several years international debates concerning the role of Indigenous knowledge in the curatorial practices of collecting institutions have merged with international policy making efforts in relation to the protection and promotion of traditional knowledge and traditional cultural expressions through legal and extra-legal means. Recent debates run along two intersecting tracks: 1) collecting institutions engaging with local communities to facilitate a mutually beneficial dialogue concerning the ethical and practical implications of repatriating collections and 2) international policy making bodies, most prominently UNESCO and WIPO, engaging with scholars and Indigenous peoples to create policy that would protect and preserve cultural heritage materials at the same time as they promote the dynamism of cultural traditions.

Anthropologists have been crucial in these discussions locally, nationally and internationally. Since UNESCO reached out to anthropologists and folklorists in the late 1990s, they have been key participants in the vexed questions arising from the international goals to protect, preserve and promote the living traditions of Indigenous peoples particularly in regard to their intangible cultural heritage (Dommann, 2008). These debates circle around questions of copyright (particularly fundamental divisions in notions of authorship and originality) and cultural property and devising the best ways to ensure the continued dynamic creation of traditional knowledge and culture in relation to both economic and social stability of already marginalized Indigenous communities. Wend Wendland, Deputy Director of the Global Issues (Traditional Knowledge) Division of WIPO, suggests that the “inherent ambiguity” of the meaning of “protection and preservation” of cultural heritage, traditional knowledge and traditional cultural expressions in institutional and legal terms has resulted in the slow pace of drafting international policies (2008, 153). In addition, he argues that heterogeneous Indigenous needs and demands for

“cultural sovereignty” make clear that policy and legal solutions are, and will continue to be, only one part of the calls for protecting and preserving Indigenous cultural heritage materials. In both cases WIPO and UNESCO have used digital repatriation and the production of digital archives and regionally accessible web portals, as practical ways to facilitate sharing knowledge, engaging local knowledge-holders, expanding collections, and promoting the use and creation of new knowledge and cultural materials. Collectively, the results of these projects have the potential to inform the creation of international policy regarding intellectual property rights and Indigenous cultural heritage, and at the same time reshape the practices of collecting institutions and anthropological data collection in relation to Indigenous materials. This proposed project will systematically study these individual projects using a multi-sited ethnographic methodology. The PI will collect data on multiple local projects from varied sets of participants (Indigenous people, collecting institutions, and scholars) and subsequently analyze the data resulting in a comparative study aimed at aggregating this disparate data.⁴

Scholarly Impact

In one of the only collections on information technology and Indigenous communities worldwide, Laurel Evelyn Dyson, Max Hendricks and Stephen Grant suggest that, “The multimedia capabilities, storage capacity and communication tools offered by information technology provide new opportunities to preserve and revitalize Indigenous cultures and languages, and to repatriate material back to communities from national cultural institutions” (2006, xvi). Unlike the few studies of Internet usage or basic computer literacy among Indigenous peoples throughout the world, this proposed study focuses on *how or if* Indigenous communities have used (and reused) digital materials as a catalyst for the preservation, revitalization, and the production of cultural materials and knowledge. The implications of understanding the practices and local adaptations of digitally repatriated materials on knowledge creation, circulation, and revitalization cut across anthropological sub-disciplines and into the Humanities and other Social Sciences.

First, this study will contribute to the ways in which anthropologists approach the terrain of repatriation in both ethical and practical ways. Digital repatriation is an issue that has been taken up within almost all of the sub-disciplines of Anthropology.⁵ From linguistic anthropologists aiming to document and potentially revitalize endangered languages to archaeologists seeking ways to encourage local input on and knowledge about heritage sites, a wide array of anthropologists are using digital repatriation (broadly conceived) as a means to engage local communities, document traditional knowledge, expand the scientific record, and enhance anthropological knowledge of community practices, languages and social practices past and present.⁶ By placing emphasis on the *practices* that emerge from digital

⁴ For the detailed plan see the “research and design” and “work plan” sections pp. 11-14.

⁵ By focusing on digital repatriation, this project brackets the question of the physical return of human remains. While a significant part of debate has been focused on this highly-charged terrain, this project takes as its main focus the digital repatriation of cultural heritage materials.

⁶ Linguists working with endangered languages have been among the most active in digitally repatriating and making available their corpus of linguistic documents. See for example: the Archive of Indigenous Languages of Latin America (AILLA: www.allia.utexas.org) and Documenting Endangered Languages (DoBES: www.mpi.nl/DOBES). The Chaco Digital Initiative is an example

repatriation, this study seeks to document the many and varied ways in which digital repatriation works (or doesn't) on the ground, while also theorizing the terrain of repatriation by documenting the day-to-day uses that grow from the practices of digital repatriation. Rather than emphasize the question of if these materials should be repatriated, this project focuses on already-digitally repatriated materials in an attempt to lay bare the *types* of cultural, linguistic, and social work these objects can do after they are returned. If digitally repatriated materials have unexpected uses and create new knowledge, then how do we understand the role of giving back and receiving in relation to material culture? How can we re-conceptualize the ethical questions of return when the objects themselves are not at stake but digital surrogates? A sustained analysis of multiple digital repatriation projects will allow us to answer these questions and formulate a theoretical framework for the scientific understanding of knowledge creation and revitalization amongst small-scale, marginalized communities.

Secondly, this study will contribute to the ways in which cultural anthropologists and science studies scholars understand the integration, adaptation, and reuse of digital technologies and digital surrogates through the use of local cultural protocols. Cultural anthropologists and science studies scholars share a theoretical imperative to understand how technologies (broadly conceived) are put to use, reworked, and created in conversation with local social systems and cultural protocols. Discussing the role of new technologies in Indigenous cultural production, anthropologist Faye Ginsburg argues that, "Rather than destroying Inuit cultures as some predicted would happen, these technologies of representation – beginning with the satellite television transmission to Inuit communities of their own small-scale video production – have played a dynamic and even revitalizing role for Inuit and other First Nations people, as a self-conscious means of cultural preservation and production and a form of political mobilization" (2002, 41-42). Similarly, this project asks: How does the digital format propel us to understand the ways in which new technologies can impact the creation of Indigenous knowledge at the same time as it re-imagines the role of technology? Answering this question will allow us to theorize more generally about the structures of technological change, creation and adaptation. While the emphasis is on digitally repatriated materials specifically, the work reaches outward to explore the contours of technological remix more broadly. Digital repatriation projects that rework accepted technological nomenclatures provide insight into the practices of technological adaptation and creation by local communities who are often assumed to only have the choice of accepting the given market place or opting out. By tracking these projects of adaptation and reuse, this study intervenes in the narratives of technological determinism and will provide a theoretical framework for grappling with technological remix in relation to cultural knowledge, networks, and protocols.

Thirdly, this study will provide a practical assessment of the terrain of digital repatriation for museum studies scholars and collecting institutions writ large. Following the global self-determination movements of the 1970s, Indigenous peoples banded together and emphasized many common goals uniting them in their struggles for self-determination and sovereignty. One shared issue was the repatriation of cultural heritage materials from national and

of an archaeological digital initiative aimed at synthesizing local and scientific knowledge about the UNESCO World Heritage Site, Chaco Canyon (www.chacoarchive.org).

international collecting institutions. Since the mid 1990s, museums, archives, libraries, and universities worldwide have recognized the need to direct their energies towards outreach to and inclusion of Indigenous communities in the curation process. Many archives and museums have signed Memorandums of Understanding (MOUs) with Indigenous communities promising access to and support in retrieving and repatriating materials. Digital technologies have provided innovative ways to harness the collaborative potentials between collecting institutions and Indigenous communities for the reciprocal curation of collections. Discussing this potential, Museum Studies scholar Ruth Phillips argues that while virtual repatriation does not and should not replace the need for physical repatriation, it nonetheless helps “restore connections to collections that remain in museums, reopening channels of knowledge that were closed off by the massive collecting projects of the first museum age and to which community members have a moral right” (2005, 108). Museums and museum studies scholars have wrestled with established hierarchies of collections management, the role of “expert” knowledge in curation practices and the potentials for expanding and invigorating their collections through the insertion of Indigenous knowledge.⁷ Digital repatriation projects have made visible Indigenous cataloging systems, information management preferences and culturally relevant archival models. In doing so, these projects help museum studies scholars and museum professionals reassess the viability of accepted curatorial models. Documenting these practices and making clear the benefits to both Indigenous communities and collecting institutions, this study seeks to define the museological terrain of digital repatriation and offer a practical guide and assessment of the field of Indigenous curation models and knowledge practices as they relate to digitally repatriated materials.

Finally, this study will provide a comparative theoretical assessment of local case studies in digital repatriation to increase the knowledge base of UNESCO and WIPO, which both promote and fund the use of digital archives to preserve, protect and promote Indigenous cultural heritage. In the documentation of their “Creative Heritage Project” for example, WIPO suggests that, “New technologies provide communities with fresh opportunities to document and digitize expressions of their traditional cultures, meeting the strong desire of communities to preserve, promote and pass on their cultural heritage to succeeding generations.”⁸ Meeting this need, WIPO is currently working with several Indigenous communities, universities and collecting institutions to fund projects that promote the use of Indigenous protocols and intellectual property systems within the design and implementation of digital technology solutions. Similarly, UNESCO’s “Convention for the Safeguarding of the Intangible Cultural Heritage” documents and programs emphasize efforts to maintain living heritage practices and processes. Specifically, UNESCO has championed the protection and revitalization of endangered languages as part of intangible cultural heritage “The 2003 Convention recognizes the vital role of language in the expression and transmission of living heritage. All intangible cultural heritage domains – from knowledge about the universe to rituals, performing arts to handicrafts – depend on

⁷ See for example the Reciprocal Research Network based out of the University of British Columbia (www.moa.ubc.ca/RRN/) as well as the Great Lakes Alliance for the Study of Aboriginal Arts and Cultures (https://grasac.org/gks/gks_about.php).

⁸ <http://www.wipo.int/tk/en/folklore/culturalheritage/community-cult.html>, accessed December 12, 2009.

language for their day-to-day practice and inter-generational transmission. In the domain of oral traditions and expressions, language is not only a vehicle of intangible heritage, it is their very essence.”⁹ As part of their work, UNESCO is currently funding projects that include digital databases and the digital repatriation of language materials from scholars and collecting institutions. In both cases, WIPO and UNESCO, as the leading international policy makers in relation to Indigenous cultural heritage, have promoted the digital repatriation of materials as one of the ways in which language and culture can be revitalized and produced in contemporary Indigenous communities worldwide. International policy will be informed by these local cases. Both institutions, then, would benefit from a theoretical overview of these processes as well as clear, empirical documentation of the lifespan of projects already completed. This proposed study would provide these organizations with just such a guide and would give Indigenous communities access to a comparative set of projects to view as they embark on their own digital repatriation programs. Such a comparative set of data will give both communities and institutions a framework for successful collaborative models, an understanding of attainable goals and a model for best practices thus allowing for sustainable and ultimately interoperable projects across space and time.

History of Project

As a cultural anthropologist and ethnographer I have worked with the Warumungu Aboriginal community in Central Australia and with the Yakama, Umatilla, and Coeur d’Alene nations in the United States. The majority of my fieldwork has been conducted in Central Australia where I have worked since 1995. Over the last five years I directed and participated in digital repatriation projects with Indigenous communities in Australia and the United States. Ranging from interactive websites to cultural-protocol driven digital archives, these projects have all taken as their basis the use of digital surrogates to act as a catalyst for Indigenous cultural revival and production.¹⁰ As part of this work, I have engaged with local, regional and national archives, museums and libraries; worked individually with local Indigenous stakeholders; and have acted as a liaison between collecting institutions and the Indigenous communities whose materials they hold. My research has explored the ethical dilemmas facing collecting institutions as they balance the need to make collections public with the need to respect Indigenous peoples’ protocols surrounding the viewing of many of the materials held in their collections.

Beginning in 2005, I collaborated with the Warumungu of Central Australia to produce the Mukurtu Wumpurrarni-kari archive (www.mukurtuarchive.org)—a local, adaptable, browser-based digital archive. The archive contains images, audio and video files and documents repatriated from missionaries, schoolteachers, researchers and national archives and museums. The impetus for the creation of the archive was the community’s insistence that these newly repatriated objects—in their digital form—conform to the same sets of cultural protocols for the viewing, circulation and reproduction of cultural knowledge that physical objects do. While commercial-off-the-shelf digital archives and content

⁹ <http://www.unesco.org/culture/ich/index.php?pg=00136>, accessed December 12, 2009.

¹⁰ These projects include: Digital Dynamics Across Cultures: <http://www.vectorsjournal.org/issues/3/digitaldynamics/>, the Mukurtu Wumpurrarni-kari archive: <http://www.mukurtuarchive.org/>, and the Plateau Peoples’ Web Portal: <http://libarts.wsu.edu/plateaucenter/portal/>. I will discuss the last two in detail in this proposal.

management software systems provided archival storage, they did not account for varied sets of social relations to the materials in the archive. Thus, the community's solution was to collaborate with researchers, software engineers and database designers to produce their own local digital archive and thus manage the circulation of their newly repatriated materials.

The Mukurtu archive allows Warumungu people to dictate the terms of access to and distribution of *their cultural materials* through an interface that links each community member to each piece of content via an extensive user profile. All content is linked to a set of cultural protocols defined by the community as significant for circulating cultural materials and knowledge. When community members access the archive using their password they essentially produce their own "mini-archive" of material to which they are related and over which they have the responsibility to maintain, circulate and reproduce. The archive also promotes community discussion by allowing people to comment on the content and flag content that they believe has been tagged incorrectly. More than just "holding" these digital items, the archive's design encourages the production of community histories through features that allow for individual community members to add stories (as text, audio or video), tag the content, edit "expert knowledge" fields and generate individual collections, thus re-mixing the archival content as part of new material forms (Christen 2008).

Similarly, over the last two years, I have worked with several Plateau nations in the U.S. Pacific Northwest, local and national collecting institutions including the Smithsonian Institution, and the Plateau Center for American Indian Studies at Washington State University to produce the Plateau Peoples' Web Portal. The current beta version of the portal holds 75 collection items, the original metadata from the academic sources of the collectors, "tribal knowledge" added by tribal representatives through a password protected login mechanism, and comments by the general public. The system allows the tribes involved to add metadata, narratives (written and oral) and tags to the content. The site highlights the layered history for each piece of content, linking histories of collection and colonization with those of survival and adaptation and thus expanding both the historical record and the range of expert voices online. For example, the Chalcraft-Pickering lantern slide collection digitized as part of the first phase of the project contains images from the Chemawa Indian School in Salem, Oregon. This collection spans tribal affiliations showing the connection of Plateau peoples' histories and colonial encounters in the American Northwest. One image in particular, of the bakery, spawned a lengthy textual entry by a Yakama tribal member and two audio links by Umatilla tribal members. Accessing the image, users can read about the boarding school and its history, see the site on the map, listen to contemporary Umatilla elders remember the food served at the school and read the catalogue record. Thus, one image digitally repatriated gave way to multiple new sets of cultural materials—digital audio files, text files and tribal metadata. As more material is added to the site, the potential for growth is exponential.

Tribal members, scholars, students and general Internet users see the same materials on the site, but interact with them and define them based on different knowledge sets. Tribes, affiliated scholars and institutional affiliates can upload content, add metadata, map content,

and add narratives. Rather than assume a view of “crowd sourcing” that presumes all knowledge to be equal, this portal highlights the unique knowledge sets of Native peoples of the Plateau *alongside* scholars who have contributed to these collections. Visitors to the site can add comments, tags and create individual “myCollections” areas for future research. Whereas in many museum and archive settings knowledge is “given” by experts, and tags or comments are seen as anecdotal, here we have aimed to create a space to open dialogue and allow Native views and academic information equal space. Thus, the portal aims not to “correct” the record, but expand the knowledge base to show the range of historical and contemporary narratives and knowledge surrounding cultural materials.

One of the most significant areas in which the Plateau tribes involved in the project are interested is the ability to record and document their languages. To this end, Kim Matheson of the Coeur d’Alene tribe has recorded elders speaking about the photographs digitally repatriated to the project by the National Anthropological Archives at the Smithsonian Institution. Matheson suggests that the new digital images have been the catalyst for elders’ to record not just their stories, but also their language. Recognizing the loss of their language steadily over the last several decades, these elders have used these digital photos as a way to document their language.¹¹

Over the five years I have directed and been involved with these digital repatriation projects I have seen local benefits, institutional dilemmas, collaborative tensions and the success of new technological methods for anthropological inquiry. In the last two years as I have presented the outcomes of my own research I have met with and begun collaborations with scholars working on similar digital repatriation projects globally. Ramesh Srinivasan and Robin Boast have collaborated with the Zuni to find ways to use Zuni ontologies to catalogue digitally repatriated materials in museum collection databases. Kate Hennessey’s work with the Doig River First Nation (Dane-zaa) in northeastern British Columbia over the last several years has shown that “the transformation of Dane-zaa cultural heritage from analog into digital form provided opportunities for participation in cultural production and creative engagement with new media. Connections between elders and youth were strengthened as they worked together to record content and evaluate the websites throughout their production. [The] “Dane Wajich” [website] facilitated a reconnection to cultural heritage documentation that had not always been accessible, despite the circulation of many analog copies” (2009,6). Working with the Vanuatu Cultural Centre and National Museum to produce a culturally relevant database for Indigenous digital materials, Haidy Geismar suggests that “Seeing photographs becomes not just a question of what is proper or appropriate but a political act, and having the power to control the visibility of images, it is hoped, may facilitate the devolution of other kinds of power and authority” (2009). In these cases, the repatriation of digital materials sparked negotiations of cultural protocols, debates and tensions over institutional versus Indigenous knowledge management systems and lead to a reworking of Indigenous knowledge practices within the contours of relations with outsiders.

In every case the lessons learned point to the need to systematize our results, share data and produce documentation that can be used in successive projects. These worldwide digital

¹¹ Personal communication October 2009.

repatriation projects lead logically to questions concerning the reuse and adaptability of digitally repatriated cultural heritage materials within Indigenous communities, the role of collecting institutions in knowledge creation, and the impact of digital surrogates on the formation, revitalization and documentation of cultural knowledge, practices and language.

Research Questions

- 1) How do digitally repatriated materials effect the creation, revitalization and distribution of cultural knowledge and practices?
- 2) How do Indigenous communities use digitally repatriated materials within their communities? What are their goals and assumptions about how these materials will function?
- 3) What role do digital surrogates play in the revitalization of language and traditional knowledge?
- 4) Do digitally repatriated materials become the basis for new forms of cultural expressions, knowledge and materials? Is there an indigenous re-mix culture?
- 5) How do infrastructure and community development, more broadly, affect the ways in which digitally repatriated materials are received, circulated and represented? What is the relationship between the gatekeepers of repatriated digital objects and their uses in particular communities? What factors limit the circulation (and subsequent use) of digital objects?
- 6) Do digitally repatriated materials lead to new Indigenous knowledge—in tangible and intangible forms?
- 7) What role do institutions play in shaping or limiting the resources available to Indigenous communities?
- 8) Why do digital repatriation projects fail? What does failure mean to the community, the institutions and the organizers?

Research Design and Implementation

This project uses a multi-sited ethnographic approach involving in-depth, one-on-one interviews with the principal informants, small group discussions with local communities, formal surveys of community participants and institutional advisors, comparative analysis of the type and duration of repatriation projects within communities and by institutions, and data-analysis of the type and scale of repatriated materials, goals and project results.

Familiarity with the local community members is essential to the success of this project. I will serve as the project PI and principal researcher while working with local communities with which I have previously worked in Australia and the United States. In Year Two, when I accompany additional scholars to their local field sites (see work plan below), I will rely upon their cultural expertise when I collect data concerning their digital repatriation projects, while also individually interviewing and listening to community members on their own in order to gain a thorough understanding of the projects from its many participants. Moving between locations with local Indigenous community members and knowledgeable scholars will ensure both a multi-sited ethnographic field approach and a multi-authored set of data. In this way, the expansive nature of digital repatriation projects can be studied and analyzed in relation to the socio-cultural systems from which the projects arose as well as in relation to diverse sets of systems globally. In other words, this approach allows me to both

understand the very local sets of relations and knowledge systems within digital repatriation projects, and also produce a comparative analysis that allows scholars to understand the divergent ways in which these projects are envisioned, produced, and ultimately succeed, fail or produce unexpected outcomes.

Data analysis will include longitudinal studies of each individual project focusing on the outcomes in relation to the stated goals and the intended practices. Each case study will become part of the larger database of digital repatriation projects defined by their scale, scope, and outcomes. The database will allow for comparative analysis of project models, project goals, projects outcomes, and best practices. Looking at these projects comparatively and through a systematic set of research questions (listed above) will allow us to better understand the role of digital surrogates in process of human knowledge creation, language revitalization and cultural production.

Work Plan

To answer the research questions posed and begin to see trends in the cultural and linguistic impact of digital repatriation this project will use a multi-sited ethnographic approach over three years involving 1) in-depth interviews of scholars who have carried out digital repatriation projects through specific local case studies, 2) on-site visits of local case studies accompanied by scholars and or local representatives of the project, 3) institutional reviews of major collecting institutions that have been involved in multiple and far-reaching digital repatriation projects and 4) the creation of a freely accessible digital repatriation database and website gathering best practices, institutional reviews, and local cases studies for use by scholars, institutions and Indigenous communities as they continue to engage in these activities.

a. Scholars' Interviews

In addition to my own work in Tennant Creek, NT, Australia and the Plateau region of the United States, I will work directly with scholars who have been involved in digital repatriation projects over the last decade. These scholars include linguists, ethnomusicologists, archaeologists, and anthropologists:

- Dr. Linda Barwick: University of Sydney; Minjilang (Croker Island) Northern Territory Australia
- Dr. Chip Colwell-Chanthaphonh: Denver Museum of Nature & Science; Zuni, New Mexico
- Dr. Aron Crowell: Arctic Studies, National Museum of Natural History, Smithsonian; Alaskan Inuit
- Dr. Jennifer Deger: University of Sydney; Yolngu, Northern Australia
- Dr. Haidy Geismar: NYU; Vanuatu Cultural Centre
- Dr. Aaron Glass: Bard; Kwakwaka'wakw (Kwakiutl), British Columbia
- Kate Hennessey: UBC; Doig River First Nation, Canada
- Dr. Ruth Phillips: Carleton University Ontario; Great Lakes Region First Nations
- Dr. Timothy B. Powell, University of Pennsylvania Museum of Archaeology and Anthropology: Ojibwe (Minnesota).

- Dr. Mark Turin: Cambridge; Nepal.

These researchers' work is significant because of their: 1) long-term work in Indigenous communities, 2) focus on repatriation and 3) on-going work and relationships within the communities and with collecting institutions. The research will involve several interviews with each of these scholars over the course of six months. These interviews will seek to understand: 1) the impetus for the repatriation, 2) the process of repatriation, 3) any tensions involved 4) what happened to the digitally repatriated materials—new projects, unexpected dilemmas, projects, programs, etc., and 5) how have the new materials been used, have new cultural materials been created? Have languages revitalized, to what extent and how is this measured? Have traditions been altered or adapted?

This information will be used to create the datasets for the comparative database. Each scholars' project will be a unique set within the database allowing us to see patterns across the range of projects and make comparative analyses concerning the scale and scope of knowledge creation, language revitalization and the production or alteration of cultural materials. The interviews (audio, video and text transcripts) will also provide the basis for the documentation of a set of best practices for local digital repatriation projects.

b. Local Case Studies

After the scholars' review process, in Year Two we will follow up with the scholars and I will accompany them and the local Indigenous representatives on the project to interview both the community leaders and the community members to whom the materials were repatriated.¹² Similarly we will use interviews, and on-site discussions to understand 1) the impetus for the repatriation including community goals and intended outcomes, 2) the process of repatriation, 3) any local tensions involved between community members or extended communities 4) what happened to the digitally repatriated materials—new projects, unexpected dilemmas, projects, programs, etc 5) how the new materials have been used – have new cultural materials been created? Have languages revitalized? Have traditions been altered or adapted? and 6) Did the repatriation project meet or exceed the goals and needs of the community?

This information will provide a second axis of comparison within the database allowing us to measure the goals and outcomes of each project from differing standpoints: scholars, community leaders, and community members. In addition we will be able to track and show the outcomes of each project from multiple standpoints. Delineating each type of collaborator within the project's scheme and showing these comparatively will demonstrate the scale of these projects, how they effect members differently and the range of "success" or "failure" in relation to knowledge production, language revitalization, and cultural production. The data,

¹² Year Two will fall on the PI's sabbatical year, the NSF additional funding will allow the PI to use the entire academic year for the international fieldwork component of the research (see also Budget Justification form).

thus, when comparatively studied, will provide a distinctive view of the landscape of knowledge creation in concrete terms broken down by user type, goals, project type and specific outcomes. Analyzing the data we will be able to define a clear set of best practices and project types that promote knowledge production, language revitalization and the production of cultural materials. These best practices then can be extrapolated and used to infer the contours of generative knowledge-making practices across small-scale societies.

c. Institutional Reviews

I will work directly with the collecting institutions that hold the cultural heritage materials of the Indigenous communities in these specified regions. Using extensive interviews, I will examine each institution's digital repatriation policies, their goals, their work to date, and an overview of the materials that have been digitally repatriated. I will work closely with the institution staff to document both their digital repatriation histories (if known) and the histories of the use of the materials in the host communities to which the materials were returned. For each institution, I will conduct in-depth reviews of at least two sets of repatriation materials for each institution in order to generate a large enough dataset for comparison between institutions.

Institutions include: National Museum of the American Indian (Jennifer O'Neal), National Anthropological Archives (Dr. Robert Leopold), Library of Congress (Michael Taft and Judith Gray), South Australian Museum (Dr. Philip Jones), Australian Institute for Aboriginal and Torres Strait Islander Studies (Sue Emerson), MAA Museum of Archaeology & Anthropology Cambridge University (Dr. Robin Boast), National Museum of Natural History (Dr. Candace Greene), Museum of Anthropology at the University of British Columbia (Dr. Sue Rowely) and Canadian Museum of Civilization (Dr. Norman Vorano).

Institutional reviews provide a key dataset within this study. While institutions have been, by and large, willing to provide digital surrogates to host communities, their role in the actual production of knowledge creation and language revitalization has been largely ignored and under-theorized. Each institution and their individual repatriation projects are a key variable within this study. The data from each institution will provide the basis for a comparative analysis of the institutional role in knowledge production and language revitalization. Analyzing the data comparatively will also allow us to produce a set of best practice guidelines for digital repatriation projects thus eliminating some of the guess work in the conception and production of local projects.

d. Creation of Digital Repatriation Database and Website

Year Three will be dedicated to the production of the database and analysis of the data. We will work with database programmers and website designers to create a user-friendly, freely accessible database and website of the data collected during the study. The data will be divided into: 1) specific case studies that highlights in-depth

analysis of digital repatriation projects, 2) institutional reviews focusing on collections' management and collaboration models, 3) individual scholars interviews (audio, video and text) detailing successful projects and lessons learned 4) best practices for digital repatriation projects including digitization standards, citation practices, and institutional standards 5) links to current projects including a feedback loop for comments. The site will be set up to be expandable and readily updatable so that individual scholars, institutions and local Indigenous communities can both access the current materials and provide data for future analysis and comparison. The database, in that way, is meant itself to also be a generative source of knowledge for all interested stakeholders and a viable, sustainable resource for long-term tracking of digital repatriation projects.

e. Three Year Timeline

- a. Year One: September 1, 2010-August 31 2011
- b. Qualitative research design
 - i. Questionnaire preparation
- c. Preliminary interviews
 - i. Scholar interviews
 - ii. Institutional interviews
(*Clustered around region to cut down on travel costs)
- d. Data Review
 - i. Initial conceptual mapping and data analysis
- e. Year Two: September 1, 2011-August 31 2012
 - i. Case studies
 - ii. Initial trips plus follow up after data review
 - iii. Data analysis
 - iv. Initial data sets developed
- f. Year Three: September 1, 2012-August 31 2013
 - i. Follow up scholar and institutional interviews
 - ii. Data analysis
 - iii. Database design
 1. Database entry
 - iv. Website design and construction
 - v. Website user-testing
 1. Adjustments based on user feedback
 - vi. Dissemination
 1. Conference presentations
 2. Public website launch
 - vii. White paper distributed to international organizations, collecting institutions and scholars involved in the project