The Documentation Lives a Life of Its Own: The Temporal Transformation of Two Endangered Language Archive Projects*

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Abstract: In this paper we describe two digital language-documentation projects that we have been involved in where the source community's interest has changed significantly over about a ten-year period. In both cases, projects were originally undertaken with the full support of the community but without a clear commitment to making them locally applicable. In time, however, generational shift led to new community attention being focused on the language, reactivating the documentary materials and community-researcher relationships in ways that were not anticipated by anyone involved. When embarking upon documentation and revitalization projects, describing their products, or evaluating their social or scientific outcomes, it is important to remember that they are always works in progress, not least with regard to their significance for communities.

[Keywords: Communities, Cultural Repatriation, Digital Archiving, Digital Recordings, Ethnographic Archiving, Kinship, Web 2.0, Landownership, Endangered Languages. Keywords in italics are derived from the American Folklore Society Ethnographic Thesaurus, a standard nomenclature for the ethnographic disciplines.]

Introduction

In current endangered-language research, as with cultural preservation work more generally, there is an emphasis on developing products that will serve the source community's interests in order to ensure that the research is conducted responsibly and that the speaker community is not exploited to serve others' ends (Czaykowska-Higgins 2009; Rice 2010). But community interests can change over time, and there are a number of published cases, especially in the literature on North America, that describe the breakdown or unproductivity of community-based projects despite the project staff's best efforts, sometimes after years of painstaking work (Dauenhauer and Dauenhauer 1998; Debenport 2010; Hill 2002; Nevins 2004). At the same time, we know that communities are able to use and appreciate past materials irrespective of how or why they were collected (Macri 2010). Uncomfortable with the almost boundless political complexity of community-based language development projects and the huge investments of time and effort that such projects require, some linguists have argued that basic documentary research on endangered languages should go forward independently of community concerns (Ladefoged 1992; Newman 2003).

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What considerations like these make clear is that both the scholarly and social implications of cultural preservation projects unfold over time. Thus, the original aims and approach of the researcher and community can provide only a partial guide in assessing a project's value in the long-term time frame that we need to bear in mind when documenting endangered languages. In this paper we describe two rather different digital language-documentation projects that we have been involved in where the source community's interest has changed significantly over about a ten-year period. In both cases, projects were originally undertaken with the full support of the community but without a clear commitment on the community's part to making them locally applicable. In time, however, generational shift has led to new community attention being focused on the language, reactivating the documentary materials and the community-researcher relationship in interesting and encouraging ways that were not anticipated by anyone involved.

The Arapesh Grammar and Digital Language Archive Project (Dobrin)

When I went as a graduate student in the late 1990s to conduct fieldwork on the Arapesh languages in East Sepik Province, Papua New Guinea (PNG), I had no prior training in linguistic field methods or language documentation, and I did not understand what I was undertaking to be "language documentation" or "endangered language" research. My focus was on the Arapesh languages' unusually systematic form-based noun-classification pattern, and my primary goal was to record and analyze the phonological contrasts in which the noun classes were rooted. But once I arrived in the field, it quickly became evident that rural communities throughout the region were in the advanced stages of language shift to Tok Pisin, PNG's creole lingua franca, and that the language would probably not be around for further study with fluent speakers even 20 years hence. And so, in addition to the elicitation work that I had planned, I began to audio-record and transcribe texts of various kinds with mostly elderly fluent speakers in the hopes of creating a richer record of the language than existed at the time.

In 2005, with support from the National Endowment for the Humanities through a Documenting Endangered Languages grant, and in collaboration with digital humanities experts at the University of Virginia's Institute for Advanced Technology in the Humanities (IATH; see http://www.iath.virginia.edu), I began the process of digitizing and curating the originally analog materials that I had collected in the field. I also began preparing a digital lexicon and concordance. A modest archive catalog with some basic information about the language (a map, summary of the history of scholarship on the language, basic linguistic description, sample texts, etc.) was first published online in 2008, primarily with an academic audience in mind (see http://www.arapesh.org).

Updates, improvements, and additions to the archive have been continuously, if irregularly, under way ever since. In 2007 I worked with an Arapesh speaker who was visiting the U.S., Andrew Moutu, to audio-record him reading a series of texts in the collection that had originally been dictated and so existed only in transcript. For the past several years I have been working with a retired missionary linguist, Robert Conrad, to digitize, describe, and gloss transcripts of around 75 Bukiyip Arapesh texts that he recorded in the 1970s. A draft of the Arapesh lexicon will soon become available through the site. The archive has recently incorporated a set of about 80 photographs that Reo Fortune and Margaret Mead produced during their fieldwork in the

Arapesh area in 1931-32; the images include scenes from significant moments in the anthropologists' fieldwork as well as scenes of daily life in the Arapesh region at that time. Since we have almost no contextualizing information about these images, during a visit to the area in July 2013 I presented them to members of the heritage community and recorded their commentary; the resulting recordings will be incorporated into the archive and will form the basis for a contribution to a traveling exhibit on the art of PNG organized by the University of PNG's Melanesian and Pacific Study Centre. My original field materials were collected with human-subjects oversight, but since Internet distribution was not a serious consideration at the time of research, for the moment, in consultation with community representatives, only a few of the texts I collected have been made publicly accessible through the archive website. After discussing the matter with community stakeholders in 2013, I have confidence in my judgment that it will not have negative repercussions to make most of the text collection publicly accessible.

While the Arapesh villagers with whom I lived in the late 1990s recognized and regretted that language shift was under way in their community, they took little interest in my documentation work. My reception by the village was on the whole quite warm, and as often happens in the process of fieldwork, I developed close, mutually satisfying relationships with a number of individuals and families. However, there was no clear sense in the community that they were experiencing a problem that linguistic research might help solve. In general, Papua New Guineans are pragmatic about matters of code choice. The villagers were proud of their village vernacular-language preschool, but they were even prouder of their offspring's success in education and ability to secure jobs in town, and the fact that these required the use of English was simply accepted as a reality of modern life (Dobrin 2008). Being more an ethnographer than a development activist in orientation, I did not see it as my role to take issue with their stance. I did distribute vernacular Arapesh translations of two prayers that were regularly recited in Tok Pisin during the village's Catholic church services. But as far as I know, though the villagers appreciated my efforts, these translations were never used.

Since completing my fieldwork I have maintained my relationship with the extended village community at a distance, following the local custom, through the grapevine, mail, and remittances. Over the years I have occasionally received inquiries from Arapesh people who came across my name or the project website while surfing the web, and though I always responded warmly, none of these grew into an extended exchange.

But in an interesting turn of events, over the past few years I have come into renewed contact with the village diaspora community. One member of that community in particular, Emmanuel Narokobi, has expressed serious interest in my work on the language and the digital archive, and with his participation, the project is now developing a new, community-focused component. A classificatory brother to me in local kin terms, he was away at a boarding high school in Australia at the time of my fieldwork. Though we met briefly at family gatherings in the PNG capital, Port Moresby, and when he returned to the village during school breaks at holidays, we did not develop more than a passing relationship at that time. But in 2011, an Arapesh woman living abroad named Sophia Soli, whom neither of us knew personally, began a Facebook group as a vehicle for people to "share, learn, enjoy and help preserve the Arapesh tokples [vernacular]" (from the "About" section of the "ARAPESH" (closed-group) Facebook site,

https://www.facebook.com/groups/Arapesh/, accessed December 7, 2013). She encouraged me to join, eventually extending the role of administrator to Emmanuel's classificatory brother Vergil Narokobi; another Arapesh man, Gregory Moses; and me. Many of the language-oriented interactions on the Arapesh site involved people asking for translations of English or Tok Pisin words and phrases, and in time, I found myself in the role I had long feared I would one day occupy: that of the outside expert whom Arapesh people would consult when they wanted to know about their ancestral language.

Emmanuel became an active participant in the Facebook group, asking frequent, pointed questions about the language and following them up with further probing. When the opportunity arose for me to invite a community stakeholder in the Arapesh archive to a workshop that I was hosting in Virginia in spring 2012, Emmanuel immediately came to mind. I invited him, and he enthusiastically accepted. What led Emmanuel to become interested in the language after a lifetime of being content with his primary identity as a global citizen, urban Papua New Guinean, and speaker of English and Tok Pisin that those identities implied? Understanding this change requires some discussion of Emmanuel's ambitions in light of his culture, his structural position in relation to his father's village kin, and recent changes in community composition that have led him to feel that position more acutely.¹

Emmanuel is known in PNG for his public voice on the high-traffic Masalai blog (masalai.wordpress.com), where he posts on PNG politics and arts (tagline: "acting locally looking globally"). A lawyer by training who works as a businessman, he owns an information technology company based in Port Moresby, Masalai Communications (masalai.com.pg), which specializes in digital-multimedia design and development. While from one perspective this interest in technology and active embrace of social media are, of course, a response to modern developments, an openness to adopting new technologies borrowed from elsewhere is also a traditional Arapesh cultural trait (Mead 1938), and to succeed in importing new customs to one's community is read culturally as a sign of the broker's political acumen (Dobrin and Bashkow 2006). Observing the ubiquity of digital media in more developed parts of the Pacific, Emmanuel reasoned that it was only a matter of time before these would find their way to PNG, in which case he might as well be part of the avant-garde actively ushering them in. The strategy seems to have worked, and his reputation and business are thriving. Among the projects undertaken by Masalai Communications between 2009 and 2013 were the construction of a supplier database for an Exxon Mobil Liquefied Natural Gas project, development of a mobile banking interface for the Bank of the South Pacific, and the implementation of social media and SMS services for a candidate and a political party before the 2012 general elections. The blog associated with the business receives over 13,000 hits a month.

Although Emmanuel was born and raised in town and educated overseas, like most other members of the village diaspora he nevertheless maintains a close connection to his family, clan, and village. Built around a primary family unit of co-resident brothers whose children are classified as siblings, the traditional network of kinship ties has been maintained to a large extent among the village diaspora (despite fractured residence patterns) through mutual aid, the continuing practice of mortuary distributions (gəbə feasts) that retrace key lines of kinship, and gatherings for modern events such as children's birthday parties. Village family and clan

structure is semi-hierarchical and based in part on birth order, with the eldest brother ideally positioned to take up the mantle of leadership as he matures.

Themselves both trained in law overseas, Emmanuel's father, Camillus Narokobi, and his elder brother Bernard Narokobi played an important leadership role in the leading Abahinem clan to which they and their sons belong (the clan name is itself the Arapesh term for 'elder brothers'). The two worked together closely to shape clan and village agendas until Bernard's deeply-mourned passing in 2010. It would be hard to overstate the significance of Bernard's loss for the extended village family. A highly respected lawyer, politician, philosopher, and author, who was instrumental in the transition to national independence and who had a hand in composing PNG's constitution, Bernard strove to maintain an intimate relationship with the people of his home community, and they in turn valued the positive image of their community that he projected in the province and nation. Following Bernard's death, Emmanuel lent his support to Bernard's eldest son Vergil, the key party responsible for organizing and carrying out *gəbə* on behalf of his family and clan. The two also began to discuss plans for the long-term stewardship of Bernard's intellectual legacy.

With this as background, we can begin to see that, in recent years, Emmanuel has found himself rising into a traditional leadership role that belongs to him structurally as an eldest son of the leading clan in his generation. But feeling that responsibility has also raised his awareness of the traditional knowledge he does not have that would let him fully inhabit the role. Forming a foundation to deal with the legal rights to a relative's written works is within his skill set. But participating adroitly in traditional politics is quite another matter. Of greatest concern to him is not his linguistic skills per se, but the cultural knowledge embedded in certain Arapesh linguistic forms that is critical for him to be able to manage his family interests, especially in the interrelated domains of kinship and land.

There is no activity more central to Arapesh culture and politics than the ongoing, often contentious discussions that take place regarding village, clan, and family land rights: who can build houses, make food gardens, or profit from investments on what tracts of land, and what historical events and past social transactions provide the justification for each claim. Embedded in these discussions are the proper names of numerous individuals and sections of land (see Dobrin and Berson 2011:192-193 for a text fragment that illustrates this), and presupposed by those place names are the stories that give them their meaning (Basso 1996 beautifully describes a similar phenomenon in Apache culture). Fluidly manipulating this domain-specific vocabulary is an ability that effective leaders exercise in order to discursively support their claim to authority on the issue at hand.

The other culturally significant linguistic facility that Emmanuel felt he lacked to his disadvantage was control of Arapesh kinship vocabulary. Again, it was not the linguistic elements per se that he missed but the knowledge of social relations that are embedded in the kinship vocabulary's paradigmatic structure (for example, what it means that a female relative of his parents' generation is spoken of as $makik^w$ 'aunt' as opposed to dabeikwi $amakek^w$ 'big mother' or yamo 'one's own mother') and the ability to comprehend and project the pragmaticaffective stances that the system implies when it is creatively extended. Self-knowledge in

Arapesh society presupposes knowledge of everyone else, and this relational knowledge is represented linguistically and acquired culturally through the use of kin terms.

These, then, are the domains in which Emmanuel has expressed an interest in advancing the archive framework to serve community interests. Our joint efforts are therefore now focused on two projects. One is to annotate and make accessible the major historical narrative that provides the foundational warrant for the village's relationship to its lands. The other is to develop a digital resource that people can use to model and learn the kinship system. I should point out that these are areas of particular concern not only to Emmanuel but, for the same fundamental reasons, to many members of his generation who were raised and acculturated in town.

To these ends, the villagers, members of the diaspora community, and I are now preparing to develop a multimedia, multivocal representation of the village history centered on an unpublished book-length exposition that Bernard composed. By complementing the core narrative with solicited comments, alternative versions of the story, audio-recorded interviews contained in the archive, and cultural maps supplemented by georeferenced data points, we hope not only to document information that is critical for village leaders to manage family land interests but to address one of the serious epistemological challenges of preserving traditional oral-historical knowledge: how to represent a set of perspectival and interested discourse events without recasting them as a fixed, monolithic standard modeled on Western written forms. Preparations are now also under way to construct a multi-dialectal, interactive Arapesh kinship chart that codes information in a way that will be accessible to Arapesh people who are firstlanguage speakers of English and Tok Pisin (and also to anyone else who is interested; see http://www.arapesh.org/kin_chart_sketch.html for a taste of the draft concept). Funded and hosted by IATH, designed and developed by Emmanuel, and based on my documentation of Arapesh kinship terminology and its use, the chart is intended to serve not only as a reference tool but as a mechanism for teaching the set of contrasts in which the system is based (elder vs. younger, same vs. opposite sex, own vs. other's relation, etc.).

It is, of course, doubtful that either of these projects will result in a full-fledged revitalization movement arising in the Arapesh diaspora community, at least in the near term, and I am all but certain that they will have little impact on daily life for those at home in the village. But perhaps they will serve the need felt by the emerging generation of leaders for authoritative knowledge in certain key cultural domains, and I am hopeful that they will give the wider community confidence that the resources exist should they at some point reach the conclusion that their language is again worth learning.

The Dena'ina Archiving, Training, and Access Project (Holton)

My first experience of the Dena'ina Athabascan language occurred not in traditional Dena'ina territory but rather on the campus of the University of Alaska Fairbanks, some 500 miles to the north. In 2002, a handful of dedicated speakers and students of Dena'ina had joined with representatives from six other Alaska Athabascan languages to participate in the Athabascan Language Development Institute, a three-week summer language camp funded by a U.S. Department of Education Title VII grant program (Marlow 2006). Given the deleterious effects

of colonial educational policy on Alaska Native languages (Dauenhauer 1980), it is somewhat ironic that the seeds of modern Dena'ina Athabascan language revitalization began to germinate under the auspices of a federal government program—a point to which I will return below. The institute incorporated courses on conversational language, grammar, teaching methods, and curriculum development. The intensive, compressed format was in part intended to develop relationships between speakers and learners that could be sustained as long-term learning relationships, as in mentor-apprentice programs. I participated as an instructor for the Athabascan grammar class and as a student in the conversational language classes.

From the start Dena'ina participants were troubled by the necessity of having to leave the Dena'ina region in order to participate in language revitalization efforts for their language. While Dena'ina shares much linguistically with the Athabascan languages of interior Alaska, it is quite distinct culturally, being among other things the only Alaska Athabascan language with a saltwater border. Discussions of how to develop revitalization efforts locally, within the Dena'ina region, were common during the 2002 institute and continued to build during the following winter. It was during this time that I became involved in leveraging existing grant programs to create a locally-hosted language institute.

In June 2003, a short language workshop was held in Nondalton, in the heart of the Dena'ina region. Though shorter in duration than the Fairbanks summer institute, the Nondalton workshop attracted nearly 30 participants, far more than the handful who were able to attend the Fairbanks summer program. The location of this meeting in Nondalton had a significant effect in bringing together urban and rural Dena'ina. As occurs with many Alaska Native languages, Dena'ina revitalization efforts were challenged by a significant rural-urban demographic divide in the source community. Most of the people interested in learning Dena'ina were living in urban areas including Anchorage and Kenai, while most of the remaining fluent speakers were living in Nondalton and other rural areas. The Nondalton workshop established a number of personal and institutional relationships that would have an important role in bridging this divide. Following the workshop, many language-learners remained in regular telephone contact with speakers in Nondalton.

The Nondalton workshop also helped to cement important institutional relationships. Participants included the director of the Alaska Native Heritage Center; the director of cultural programs at the Kenaitze Indian Tribe; the language coordinator for the Interior Athabascan Tribal College at the Tanana Chiefs Conference; and myself, representing University of Alaska Fairbanks and the Alaska Native Language Center. At the same time that personal language-learning relationships were being developed, institutional relationships were being developed that would help to realize grassroots language-revitalization aspirations. In 2004, the Kenaitze Indian Tribe, the Alaska Native Heritage Center, the Interior Athabascan Tribal College, and the University of Alaska partnered to host the first-ever Dena'ina Festival, drawing more than 100 participants from across the vast Dena'ina territory, including a majority of the remaining fluent speakers of Dena'ina. The Dena'ina Festival was followed immediately by the Dena'ina Language Institute, a three-week language camp modeled on the Athabascan Language Development Institute. The Dena'ina Institute was held in a camp-like residential setting in Kenai, within traditional Dena'ina territory. Young and old were brought together to live and learn, both in class and around the campfire (Gaul and Holton 2005). The setting facilitated hands-on language-learning

opportunities, such as place-name hikes, gathering of native plants, and tours of archaeological sites.

This history is important because it shows us that modern efforts to revitalize Dena'ina were neither fully top-down, university-based nor fully bottom-up, grassroots community efforts. Rather, in many ways, 21st-century Dena'ina language-revitalization efforts began as a model partnership between community and academia.

The success of the Dena'ina Festival and the first Dena'ina Language Institute inspired something of a renaissance in Dena'ina scholarship. This was due in no small part to the participation of Alan Boraas, professor of anthropology at Kenai Peninsula College, where the festival took place. Boraas worked closely with Dena'ina elder Peter Kalifornsky (1911-93), one of the last speakers of the Kenai Peninsula dialect and perhaps the most accomplished Alaska Native writer. Kalifornsky's book, A Dena'ina Legacy (1991), remains the most extensive published collection of original writings composed in an Alaska Native language. Because of Kalifornsky and Boraas, the Kenai region has unique appreciation for archival documentation. Kalifornsky's efforts to develop a Dena'ina written tradition have given special prominence to writing, whereas elsewhere in Alaska the oral tradition is much favored. Besides Kalifornsky's book, there are few other text collections published by the Alaska Native Language Center (the premier publisher of Alaska Native language materials) that were originally composed as written documents. Rather, almost all represent edited transcriptions of recorded oral narratives. Even before Kalifornsky's passing, Boraas was teaching classes in Dena'ina language that focused on writing. Students learned to read and write using archival resources, including an unpublished grammatical description and a draft dictionary. In these classes, conversational ability was secondary to the ability to express oneself in writing. Boraas's students in Kenai found much success, composing poems, eulogies, and other expressive forms. Many of these students participated in the first Dena'ina Language Institute, bringing with them their experiences with written language and archival sources.

The Dena'ina speaking territory is the most expansive and diverse language region in Alaska. Four major dialects span from Alaska's urban center of Anchorage to the remote upper-Stony-River area, restricting contact between elder fluent speakers in rural regions and younger urban learners. Meanwhile, in the mid-2000s, a rich record of linguistic documentation housed at the distant University of Alaska remained largely unused in community language-revitalization efforts owing to lack of access. Additional language documentation, particularly audio recordings, was held by the Lake Clark National Park, whose cultural resources program had been actively involved in language and culture documentation in the Dena'ina region within and adjoining the park. While Dena'ina people were generally aware of the existence of these resources, they had little knowledge of their extent or of how to access them.

Preservation of and access to language materials generally, especially in digital form, was at the time an increasingly important issue, as the scholarly linguistic community began to recognize that not only languages themselves but also the resources documenting those languages were in danger of disappearing. Many archival resources were recorded on fragile media such as magnetic tape, and many newer resources were recorded in digital form without clear preservation standards (Bird and Simons 2003). The Open Language Archives Community

(http://www.language-archives.org) and the EMELD (Electronic Metastructure for Endangered Languages Data) project (http://emeld.org) were both started in 2001 with the aim of developing standards for language archiving and resource discovery. As a participant in both of those efforts, I saw the merits of applying a standards-based approach to address the identified need for greater access to Dena'ina language archival resources. As plans for the first Dena'ina Language Institute developed, I worked with colleagues at the Linguist List (http://linguistlist.org) to create the Dena'ina Archiving, Training, and Access (DATA) project. With funding from the National Science Foundation Arctic Social Sciences Program, the DATA project set out to create a digital repository of Dena'ina language materials while also providing technology training to the Dena'ina community. One of the primary outcomes of the project was to be a web portal that the Dena'ina community could maintain (Berez and Holton 2006).

The DATA project was implemented as a partnership between the university, the Alaska Native Heritage Center, and the Kenaitze Indian Tribe. A memorandum of agreement signed by each organization laid out the financial and in-kind contributions expected from each partner. Community meetings were held across the Dena'ina region in order to help set project goals and to determine protocols for access to archival documentation. There was widespread agreement that archival materials should be widely available for use by language-learners. At a February 2004 planning meeting held at the Alaska Native Heritage Center in Anchorage, Dena'ina elder Andrew Balluta made an impassioned plea for greater access to Dena'ina recordings:

You know, all these recordings ... if we don't get it out and learn about it, where are we going to learn from? These are old recordings. We want to get it out and teach our younger children what the elder people are talking about. I think that's a very good idea for getting it free so we can listen to them.

Though he perhaps was not aware of it at the time, Balluta's remarks closely paralleled a statement made by Kalifornsky many years earlier:

[The young people] should be aware of the old people and retain all of their language work. They should learn without writing... Study the words, the remaining words, And all the different songs, And the place names that they made long ago. And they should compare all the living things, how living things grow. [1991:7]

The DATA project and the Dena'ina Language Institute intersected directly in the summer of 2004, when institute participants received training in web design and tools for digital language archiving. Many students created content for the Dena'ina web portal. When it eventually debuted in 2005, the Dena'ina Qenaga web portal (http://qenaga.org) provided access to nearly 500 Dena'ina-language archival documents and recordings as well as to a wealth of pedagogical materials, some of which had been developed specifically for the site. The project infrastructure adhered to existing best-practice guidelines for digital archiving and language documentation (Holton, Berez, and Williams 2007). Site visitors were greeted with news of upcoming events and with short audio clips of a Dena'ina word-of-the-day. The site showed the promise of serving as a platform to support Dena'ina language revitalization efforts across the increasingly digitally-connected Dena'ina region.

Yet this promise quickly proved hollow. As project funding ended, site updates by community members decreased to a trickle. While the site remains largely functional, it lacks the type of interactivity and social functions that have come to be standard in today's Web 2.0 world. At the same time, funding for the Dena'ina Language Institute also was coming to a close, and the 2006 institute was to be the last funded by the Department of Education grant. The institute continued in 2007 and 2008 on a much smaller scale in a reduced format. But as with the DATA project, the Dena'ina Language Institute was difficult to maintain without the structure of federal funding. Within a span of just five years, Dena'ina language-revitalization efforts had blossomed only to collapse again. The DATA project, though apparently built on a firm foundation of partnership and community involvement, had nonetheless crumbled, suffering the same fate as many top-down, externally-driven projects.

Given the stagnation of Qenaga.org and the demise of the Dena'ina Language Institute, it is tempting to consider these projects as just more examples of the failure of well-intentioned top-down language-revitalization projects. One could argue that beneath the veneer of university-community collaboration was a lack of true grassroots buy-in. Yet this characterization obscures some real and significant efforts that have taken place in the community in the years since the DATA project ended. As academics including myself mulled the failure of linguistic repatriation efforts, a new Dena'ina language effort emerged on the digital frontier.

I became aware of it as people started contacting me at the Alaska Native Language Center for permission to reuse materials from the Qenaga.org archive. Technically, these requests were unnecessary since the materials were already freely available and repurposable, but they had the significant effect of opening a dialogue between the community and the archive. Some of these requests were made by people who were already aware of the archive, who even in some cases had collaborated with me on the archive project or the Dena'ina Language Institute. In other cases, the archive served as the vehicle that connected people to me and to other resources at the Alaska Native Language Center. That is, the archive served as a vehicle both to continue existing relationships and to build new ones.

Kohanic Broadcasting, an Alaska Native-owned and -operated media company, created a website of Dena'ina stories, combining audio recordings with historic photographs and commentary by Dena'ina language-learners (http://denainalifeways.org). The result also aired as a series on a local radio station. Shortly thereafter, a group of Dena'ina language-learners based at the Alaska Native Heritage Center created the Naqenaga YouTube channel to provide access to language lessons incorporating total physical response (TPR) and other interactive language teaching techniques (http://www.youtube.com/user/Naqenaga). These lessons evolved out of those used at the Dena'ina Language Institute and archived at Qenaga.org. Another group of learners and speakers worked with the Smithsonian Arctic Studies Center to develop online materials that bring together speakers and learners in the context of cultural artifacts. These materials are now available online on YouTube and iTunes via the Recovering Voices Project (https://itunes.apple.com/us/itunes-u/recovering-voices-documenting/id467414957). These digital efforts have even influenced the off-line world in tangible ways: witness the new Dena'ina Convention Center in Anchorage, which incorporates local place names and language history into its architecture.

Scratching below the surface, it becomes evident that all of these efforts trace back to the DATA project in one way or another. Sites such as that developed by Kohanic draw on archival digital-audio materials. The creators of Dena'ina YouTube videos honed their conversational skills developing materials for the DATA project and the Dena'ina Language Institute. New digital projects continue to rise like a phoenix from the ashes of Qenaga.org. Far from being a failure, the DATA project eventually became the impetus for ongoing language-revitalization efforts.

The lesson here is that the repatriation of cultural and linguistic materials is not a finite objective. Instead, it is a step in an ongoing process of transformation. While I had originally viewed Qenaga.org as the end product of the DATA project, in fact, Qenaga.org was just a means to an end, providing access to primary-language data and helping to develop language-technology capacity in the Dena'ina region. Key to this process was the establishment of strong community relationships. The DATA project not only brought together community and university partners, it also effectively bridged the gap between urban language-learners and rural speakers. Later projects were able to draw not only on the materials that the DATA project developed but also on established community relationships. These relationships will provide a foundation for current and future Dena'ina language efforts, as they continue to transform materials in ways that the founders of the original DATA project never imagined and that we still cannot foresee today.

Conclusion

At first glance, the two projects described here may appear to have little in common. Arapesh and Dena'ina are about as different as two languages can be, with very different contact histories and contemporary language ecologies. Yet both languages are endangered due to the source community's embrace of languages of wider communication: Tok Pisin (and English) in PNG, and English in Alaska. Moreover, in both cases there are significant corpora of extant linguistic documentation that community members previously could not access. Although the Arapesh and Dena'ina digital archives both had the potential to facilitate the repatriation of cultural material and were certainly intended to make existing documentation more readily accessible to the language communities, neither archive initially generated much community interest. Only later, as individuals became involved in language development for reasons of their own, did the archives begin to realize their potential. In the case of Arapesh, the spark was the relationships that were created through a community Facebook group; in the case of Dena'ina, the spark was a group of language-learners starting a YouTube channel. These independent digital efforts led in turn to greater community interest in the materials that were held in their respective web archives. Most importantly, these efforts led community members to interact with the archive and the archivists—in new ways.

While language-preservation efforts are, of course, planned and develop through the intentions and actions of researchers and community members, documentation and repatriation are not bounded events but emerge in response to the vicissitudes of history. They are not necessarily under the control of any given stakeholder. Both the material products and the interpersonal relationships developed through projects can transform over time, in positive ways, as in the cases described here, and in less positive ways, as with projects that break down. The Arapesh

and Dena'ina examples suggest that the digital format of documentation may lower the barrier to revisiting and potentially reactivating materials, because it allows users to access materials from a safe distance without strong commitments; materials in this format also can be readily shared. These examples also show that digital access must be understood to include access to people and not just to information or products. The relationships created as a part of the research and preservation process are an important resource in their own right because of their future generative potential.

Because much of the language-documentation work that is being carried out at present is premised on the loss of linguistic cultural knowledge as a consequence of language endangerment, this work necessarily takes place against an extended temporal background. While we are in the midst of any one part of a project, it is easy to lose sight of this fact. But projects can move from active to dormant, from exhilarating to disappointing, from exploitative to empowering and back again, or the other way around. When embarking upon documentation and revitalization projects, describing their products, or evaluating their social or scientific outcomes, it is important for all stakeholders to remember that they are always works in progress, not least with regard to their significance for communities.

Note

1. The comments below summarize issues that Emmanuel and I [Dobrin] have been discussing over a period of years. I am honored and humbled by the openness with which he, his family, and the wider village community have welcomed me into their world and shared with me their concerns. Though I cannot claim to fully represent their perspective, I do my best here to relay empathetically some of the key elements of their experience of cultural and linguistic change that I have heard them speak about and seen them struggle with.

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