A Model for Indigenous Language Revival

Brad Montgomery-Anderson

1. Introduction

If present trends continue, the majority of Native American languages will no longer be spoken by the end of this century. The process of extinction often happens so subtly and rapidly that the community is unaware of the imminent danger of language death. A language is endangered when children no longer learn it and is dead when the last elderly speaker passes away. Faced with this irreparable loss, some communities are determined to bring back their languages. Language Revival is the creation of a living language community where such a community has ceased to exist. Over the past two decades, language revitalization has become increasingly visible to the public eye as many communities try to reverse the steady erosion of their heritage language. Linguists and language activists, however, have not paid as much attention to the idea of bringing back a language after the language has already died. The data on language endangerment indicates that many Native American languages are moving from a language revitalization scenario to a language revival scenario. It is therefore time to discuss the distinct methods and processes involved in language revival. This paper will offer such a model. In the first section, I will establish the differences between revitalization and revival, and in the second section, I will use the features unique to moribund and dead languages to outline a three-step model for reviving such languages.
2. Typology of Language Viability

In order to determine what exactly revival means, it is first necessary to define the terms living language and dead language. In order to arrive at adequate definitions for these terms, we must first examine what it means to be fluent in a language and whether or not this is that same as being a native speaker of a language.

2.1 Language Viability Terminology

We can classify any language in any speaker's linguistic inventory as either the speaker's first language or as an acquired, or second language. This first language - also called the native tongue or mother tongue - is the L1. All other languages that are not a native language for the speaker I will refer to as an L2. Knowledge of an L2 language can run the gamut from a few memorized words all the way to near-native fluency. Some might use the terms proficient speaker or fluent speaker to refer to a given speaker's knowledge of a language. Although these terms can be hard to define precisely, for our purposes we can say that proficiency is limited to a good communicative command of a second language. The term fluent speaker, however, could refer to an L1 or an L2 speaker. David Crystal defines fluency as "smooth, rapid, effortless, accurate use of language." It is important to note, however, that the term fluent speaker is not synonymous with the term native speaker. A native speaker will be a fluent speaker, but a fluent speaker will not always be a native speaker. For example, we could imagine a college student who majors in French and then spends a year in an intensive immersion program in Paris. Such an experience could produce a fluent speaker but would not, by definition of the term itself, produce a native speaker. Our hypothetical foreign exchange student could conceivably speak and write French with near-native fluency, yet would not be able to produce puns, slang terms or poems. A native speaker is able to play and create with the language, whereas a merely fluent speaker would have a mastery of the language while at the same time not being able to create with it. This distinction will be important when we examine the difference between a dead language and a living language.

On a larger scale, a living language is a language that children are acquiring as their native language, whereas an endangered/dying language is a language that children are no longer acquiring as their native language. An extinct or dead language no longer has any native speakers. Keeping in mind the above definitions, we can see that a dead language can have fluent speakers and/or proficient speakers. For example, we can find many priests and scholars in the Vatican who have a superb command of Latin and who even speak it among themselves. None of these speakers, however, learned Latin as their first language. In like fashion, enthusiasts of dead Celtic languages (i.e. Cornish and Manx) have made these languages into
hobby languages but, as of the date of this writing, there have been no children who speak Cornish or Manx as their first language.

2.2 Categorization of Language Viability

Once we have established these terms we can create a typology of languages according to their level of endangerment. Michael Krauss of the Alaska Native Languages Center created the most commonly used classification. His system classifies languages on a scale from “Category A” - languages actively learned by the majority of children - to “Category E”-languages that are extinct. The determining factor in the classification is who speaks the language as an L1 language. In Category A, children are L1 speakers. In category B the parental generation is the youngest generation speaking the language as a mother tongue, while in category C only grandparents have retained the L1 language. Category D languages are, for practical purposes, quite similar to extinct languages: “Category D languages are those spoken only by a few of the very oldest people. These elders often do not have the chance to talk much to each other. The language may be completely out of use, or it may be only remembered, so not quite extinct”. A category D language is technically alive, yet the loss of speakers has already very much altered the language. The extinct languages are found in category E.

Other scholars have created classifications of their own. Although they have different names, they all share a five-part classification. On Table 1 I have matched the various terms. Although each classification has a different emphasis, they all represent a five-part process:

Table 1: Comparison of Language Viability Typologies

<table>
<thead>
<tr>
<th>Krauss</th>
<th>Kincade</th>
<th>Wurm</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Viable</td>
<td>Potentially Endangered</td>
</tr>
<tr>
<td>B</td>
<td>Viable but small</td>
<td>Endangered</td>
</tr>
<tr>
<td>C</td>
<td>Endangered</td>
<td>Seriously Endangered</td>
</tr>
<tr>
<td>D</td>
<td>Nearly Extinct</td>
<td>Moribund</td>
</tr>
<tr>
<td>E</td>
<td>Extinct</td>
<td>Extinct</td>
</tr>
</tbody>
</table>
For this paper I have adopted the Krauss classification. On Table 2 we can see how this categorization represents an increasing aging of L1 speakers:

**Table 2: Language Viability Classification according to Krauss**

<table>
<thead>
<tr>
<th>Language Category</th>
<th>Viability</th>
<th>Children</th>
<th>Parents</th>
<th>Grandparents</th>
<th>Very Elderly</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>B</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>C</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>D</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>E</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

2.3 Distribution of Endangered North American Languages

For purposes of simplicity I will restrict my discussion of endangered languages to those found in North America; i.e. in Canada and the United States. Krauss states that of the 210 languages left, there are 175 in the United States and 35 in Canada.\(^6\) It is harder to determine how many languages native peoples spoke before the arrival of Columbus; estimates range from as low as 300 to as high as 600.\(^7\) I have charted these higher and lower estimates below:

**Chart 1: Distribution of Native American Languages by Viability - low extinction estimate**

\(^*\)Krauss, p. 17.
2.4 Contrasting Language Viability Categories

There are various ways we can contrast these different viability categories. The most obvious contrast is between healthy languages and endangered languages. The only category representing healthy languages is category A - all the other categories represent levels of endangerment. If the situation remains unaltered, these languages will eventually die because there is no one replacing the L1 speakers.

Another important distinction is between a dying language and a dead language. The main distinction here rests on the existence of L1 speakers. However, once the number of speakers becomes so small it is often the case the language has already died out as a community language. Moreover, these moribund or obsolescing languages have native speakers who are very old and/or have little contact with each other. The language no longer has productive native speakers and there is no longer a language community.

It should be noted, however, that the distinction between a dying (yet still technically living) language and a dead language is not always so clear. Even though there are L1 speakers, they may rarely speak their native tongue. The language has withdrawn from various domains (legal, religious, school or ceremonial, just to name a few) and has become restricted and fossilized. No one speaker could possibly know all the nuances, variations, vocabulary, and slang terms, not to mention the wealth of verbal arts - stories, puns, songs, poems - whose meaning is tied to the language itself. In *Vanishing Voices* Daniel Nettle and Suzanne Romaine highlight this process of fossilization that accompanies a seriously moribund language:
We all rely on certain repeated phrases in our everyday speech. As children, we are generally taught to say “hello,” “thanks,” and “how are you?” and have simply memorized these things as formulas. However, fluent speakers of a language can also easily create new utterances on the spot. They constantly say new things they have never said before. Speakers of a dying language, however, depend much more on routine and formulaic speech rather than on spontaneous conversation. Limited productive competence in a dying language forces terminal speakers to rely more and more on fixed phrases and less and less on creative new utterances.

A few people are an inadequate repository for the richness and complexity of a human language. In many respects these elderly speakers are losing their native grasp of the language and it is beginning to resemble the more fixed and formulaic speech of an L2 language. The language has ceased to be something that speakers can play with and use in new and creative ways – people simply strive to remember it. Because of this blurring between living language and dead language, the most important contrast for our purposes is between living languages and moribund languages. I will refer to Category D and E languages as languages that are dead from a community perspective. The ways in which community members can revive these moribund and dead languages is the subject of this paper.

2.5 Language Revitalization vs. Language Revival

The similarities between moribund and dead languages become more apparent when we examine methods for reintroducing these languages. In both cases there are no longer language teachers available, at least in the normal sense of the word. Remaining L1 speakers will be extremely advanced in years and unable to teach in a classroom setting. These speakers will be incapable of raising a generation of L1-speaking children. In both situations (moribund languages and dead languages) it is necessary to create a new generation of adult speakers (L2 speakers) who will in turn become teachers to L1-speaking children. Keep in mind that children represent the crucial distinction between a natural, living language and a dead language, no matter how many fluent speakers that dead language might have (i.e. a hobby language). In order to bring a language back to life, it is necessary to create a situation in which children will acquire the language as their first language.

The conditions necessary to create such an environment are fundamentally different from those we encounter with the B or C-Category endangered languages. In those situations the community needs to make a decision to start teaching the heritage language; the heritage language is alive in the community, but the community has for whatever reason not taken steps to transmit it to the children. For our category D and E languages, however, the community needs to recover the language itself before passing it on to the children. For this reason I will use the
term language revival to refer to, a) languages that are extinct and, b) languages in such a serious stage of obsolescence that the community no longer uses them as a living tool of communication. Language revitalization is what happens when a community realizes that their language is losing speakers and decides to focus its resources on teaching a new generation the heritage language. In language revival, on the other hand, the community language is already dead. In other words, all the knowledge of the language is contained in archives or remembered by a few remaining L1 speakers.9

The revival of a Native American language thus faces a number of serious issues beyond those associated with reversing language shift in a language revitalization situation. There are either no speakers left to teach the language, or there are a few elderly speakers who are not only limited in how much and how many people they can teach, but who also may represent only a part of the entire linguistic heritage of the community. In addition, there are practical issues such as funding. Michael Krauss points out that for the extinct languages, “there is some question from the point of view of the Administration for Native Americans, which administers funding under the Native American Languages Act of 1992, as to whether programs should be funded to revive languages that are entirely extinct, but for which there is good documentation.”10 In order to present a case for working on such languages it is necessary to have a clearer understanding of the language revival process. In section three I will propose a three-part model to demonstrate how this process works.

2.6 Goals of Language Revival

A community must have a clear idea of its goals before attempting either language revitalization or language revival. In both cases there are three possible goals. The most ambitious goal is the creation of Native Speakers. According to our criteria, children need to learn the language as their first language in order for this to happen. A less ambitious but still demanding goal is creating Fluent or Proficient Speakers. This goal is possible if committed individuals learn their heritage language as an L2 language. Many communities, however, may opt for the third goal, creating Symbolic Speakers of the language. In this situation the community will reintroduce words into various aspects of everyday or ceremonial life but will not actually produce any speakers. In this paper I will limit my discussion to the most ambitious goal – the creation of native speakers.

3. A Model for Language Revival

3.1 Creating Archives

The first step in language revival is gathering and preparing our database of the language. Databases come in two varieties: human and recorded. Table 3 lists
the possibilities of available material. Keep in mind that various combinations of these categories can exist as well. A question mark indicates that the possibility of revival is ambitious and/or dependent on the quality, quantity and accessibility of those materials. We can base our goals for language revival on the quality of material we have to work with:

Table 3: Material Availability and Language Revival Goals

<table>
<thead>
<tr>
<th>Quality of Available Material</th>
<th>Language Revival Goals</th>
</tr>
</thead>
</table>
| A few elderly speakers, but no real language community. Speakers have strong knowledge of language along with repertoire of various verbal arts (poems, stories, songs, etc.) | Native Speakers  
Fluent Speakers  
Proficient Speakers  
Symbolic Speakers |
| Elderly speakers with passive or semi-forgotten knowledge. Knowledge of verbal arts is small or non-existent. | Native Speakers (?)  
Fluent Speakers (?)  
Proficient Speakers (?)  
Symbolic Speakers (?) |
| Video, audio and written archives                                                 | Native Speakers (?)  
Fluent Speakers (?)  
Proficient Speakers (?)  
Symbolic Speakers (?) |
| Audio and written archives                                                        | Native Speakers (?)  
Fluent Speakers (?)  
Proficient Speakers (?)  
Symbolic Speakers (?) |
| Written archives                                                                  | Native Speakers (?)  
Fluent Speakers (?)  
Proficient Speakers (?)  
Symbolic Speakers (?) |
| Word lists                                                                        | Symbolic Speakers |

3.1.1 Recording Speakers

In the case of a moribund language there are native speakers of the language, yet their knowledge may be incomplete or half-forgotten. The most immediate concern is documentation of these speakers. A few elders are a fragile depository for a medium that took a community thousand of years to evolve, and it is of the utmost important to document, through audio and video, these speakers’ knowledge of their language. When they are gone these archives will be an invaluable foundation for language revival. At the same time, younger community members
want to learn the language from the last native speakers available. They wish to establish a living link with the past. Leanne Hinton describes this desire to not just preserve a language, but to keep it alive as a part of the community:

... Indians in California and elsewhere have been guiding their own future in an active way, and in the process they have lately begun to change the outlook of their languages and to cause a change in the way linguists work with language as well. In this new climate, the word “preservation” has taken on a new meaning, and in fact is a term despised by many Indians; terms such as language survival” or “language restoration” are preferred. Native language activists maintain that it is not their goal to see the language “preserved” through documentation (although documentation must be an important part of any program of language survival); instead, it is their goal to see their languages survive through actual use and through their active transmission from one generation to another. A language without speakers is only “preserved” in the same sense that a dead organism in formaldehyde is preserved.\textsuperscript{11}

We can get a much better feel of a language learning it from an actual person; moreover, it is possible to learn such non-verbal cues as gesturing and body language.

3.1.2 Creating Learning Materials

The term “sleeping language”\textsuperscript{12} is an aptly optimistic metaphor for the process of language revival. In the case of moribund languages, we are anticipating the language’s hibernation in such a way that it can emerge again at a later date as unaltered as possible. Thus we are presupposing in our model that the language will skip a generation; in other words, there will be a gap in the chain of fluent speakers. Creating good archives as well as learning material is a good preparation for this period of hibernation. The longer the language has been sleeping will affect revival attempts: the length of hibernation in addition to the quality of documentation will determine how much of the language linguists will need to reconstruct. Reconstruction entails 1) creating new words for items or concepts that did not exist in the language’s past life, or 2) reconstructing words and structures for which there is no documentation. In California, Quirina Luna and Natasha Warner created Mutsun phrases for “Hello”, “goodbye” and “thank you”, expressions that linguists had not previously documented in Mutsun. Using their knowledge of the language, they created words to express these ideas. Leanne Hinton remarks that, “It is funny, poignant, and thought-provoking to realize that the most commonly used words in Mutsun right now are words that never existed when the Mutsun language was still alive”.\textsuperscript{13} In both cases the linguist will create
new forms using an analogy based on the phonetic and grammatical structures of documented forms.

The need to reconstruct a language in order to learn it and speak it raises interesting questions. David Crystal asks a very pertinent question concerning the desirability of reconstruction: "Can dead languages be revived in this way? And, if such efforts are made, might not a Frankenstein's monster of a language be the result?" This question raises issues of linguistic purism and attitudes about language change. In some situations the more traditional-minded would prefer their language to die a "dignified death" and would rather associate it with a time and culture that have disappeared. In all cases, of course, it is necessary to respect the wishes of the indigenous community. The language is, after all, uniquely theirs. However, if the community does wish to revive their language there are important considerations to think about. The language will become a new entity in words, sound and structure. This transformation could lead to conflicts within the community. As Nancy Dorian points out, however, a profound change in the language may go hand in hand with the survival of the language itself. In her study of the maintenance of Irish in Belfast she notes that "...it appears that movement away from conservative norms may represent a price to be exacted in return for the emergence of young native speakers." At the end of her study she states that this may indeed be an acceptable trade-off, that ultimately "...it may prove the wiser course to accept considerable compromise rather than make a determined stand for intactness where threatened languages are at issue. If a language survives, after all, it has a future. If it can never again be exactly what it was, it may yet be something." Of course, the transformation of Irish, a well-attested language (it has been written down longer than English has) is a relatively minor one compared to what would happen with revived Native American languages. In a language revival situation non-fluent speakers will teach the language by using certain words and forms that never existed in the language before.

In linguistic terms the new form of the language will be similar to a pidgin language for the adult L2 speakers who acquire it. The reconstructed/revived language will be a sort of simplified mix of the older form of the Indigenous language with the newer reconstructed forms. Once again, if the language is to survive there might have to be some compromise as to the form of the new language. After all, languages do change over time and as they come in contact with other languages and cultures. In an extreme revival situation, however, the change from dead language to living language will radically transform it. I will discuss these transformations in step three of the language revival model.

3.2 Creating L2 Speakers/Teachers

The second stage of our model involves creating a generation of new teachers. These new teachers will probably be the same individuals involved in language documentation and these first two stages may occur simultaneously.
3.2.1 Creating L2 Speakers of a Moribund Language

Master Apprentice Program

California has more seriously moribund languages than any other region of North America. Because there are so few speakers, the solution has been to team individual speakers with learners in what has become known as the Master-Apprentice Program. To date adult learners have had the opportunity to acquire twenty different languages. The basic model of this program is to match a fluent elder with a younger learner in situations which emphasize oral learning in real-life situations, often performing traditional tasks or skills. No English is allowed. The program directors encourage students to record sessions, both for their own use as well as a means to add to the linguistic archive of the language. An important idea behind the program is to bridge the generation gap that has resulted from rapid and traumatic cultural change.

These new speakers, however, will not become fluent speakers, even after years of involvement with the program. Berkeley linguist Leanne Hinton offers a realistic assessment of the expected results of such a program: “The desired results of the program is that by the end of three years, the apprentices will be at least conversationally proficient in their language and ready to be language teachers to other people. However, never could we expect an apprentice to be so fluent as to equal the ability of the master.” The Master-Apprentice program is making wonderful gains in keeping knowledge of the language alive; nevertheless, it is apparent that with only this knowledge the language will still die. The Master-Apprentice program, in and of itself, does not assure language survival in the true sense. A living language needs to have fluent speakers; in order for this to happen, children must learn the language as their primary language. Because those involved in the program are already adults, they could become highly proficient in the language, but not fluent. Perhaps we should view the Master-Apprentice program as preparation for a period of “language hibernation.” After the last native speaker dies, the language will technically be dead, although there will be individuals with knowledge and even proficiency in the language. Unfortunately, proficiency does not make a living language: a living language requires speakers to imagine and dream in it, to create with it and create new meanings for it. In other words, it requires fluent speakers.

Interactive Computer Programs

This resourceful solution to the scarcity of native speakers is but one reason for thinking that language revival may prove to be a workable model. Modern technology will also play a significant role in revival efforts for both extinct and nearly extinct languages. The Arikara language in North Dakota has fewer than ten elderly speakers, so the community has started a program of recording them on
CD-ROM and using these recordings to create multimedia interactive language lessons. The community realizes that Arikara will die out as a living language and are using computer technology to substitute for the elders; in essence, the computers are teaching the linguistic knowledge of the elders. The American Indian Studies Research Institute, based at the University of Indiana, oversees the Arikara language project. Technology has become a crucial part of the project’s goal of language perpetuation: “The number of elders who still speak Sáhniš, our Arikara language, has reached a critical stage. Soon, there will be none who can come into the classroom to teach. The problem for the Arikara community, as it is for most Native American communities that are losing their languages, is this: how can we preserve the voices of our elders and perpetuate our language?” Thus the computers are serving as “substitute elders” and compensating for the limited time, energy and ability of these last fluent speakers.

Of course, the computer programs in no way compensate for interacting with a live speaker. They do, however, provide a way of keeping the language recorded and accessible in a way that cannot be found in mere written materials: “The computer lessons incorporate sound recordings of all language material. The format is significant because it incorporates native speech in sound-recorded form and insures that native speaker pronunciation of instructional materials will always be available to students, even after there are no remaining elder speakers of the languages. Thus, this format enables students to study their language in the absence of native speaker teachers, not only in their communities but also anywhere in the United States or abroad.” (“Arikara (Sáhniš) Language Program”) Especially significant is the emphasis on a holistic perspective of communication. The CD-ROMs need to duplicate as closely as possible an immersion-style setting with a focus on the place of the language in the everyday life of the culture. Furthermore, the programs allow for active learning to take place between the “virtual speaker” and the learner. In addition, the lessons can be found on the Internet, allowing people to fit learning into their own schedule.

3.2.2 Creating L2 Speakers of an Extinct Language: “Breath Of Life” Program

The hibernation model associated with the Master-Apprentice program remains, however, the language revival situation with the greatest chance of success. A second type of language revival situation exists where the language has already been dead for many years; if the community is lucky, there will be documents available for study and possible language revival. In the worst case scenario, the language has died out with no documentation and is entirely and irrevocably extinct. Unfortunately, such a situation is the case for the majority of extinct American Indian languages. For those communities with documentation available, there is the possibility to reconstruct the language from records, learn it and pass it on to children. In such a case the period of hibernation will be greater, the learners/speakers less proficient and the transformation of the language into a new form even more profound.
Once again, Californian linguists and language activists have led the way in this endeavor with the “Breath of Life” workshop. The guiding idea of these workshops is to bring together members of Indigenous communities whose languages belong to the extinct but documented category and train them how to access, understand and use the documentation. Participants learn basic linguistic skills such as phonetic notation, linguistic analysis as well as the basics of language teaching and methodology. Many of these records come from the famous California linguist John P. Harrington, who compiled a substantial body of notes on many of the California languages. Part of the challenge is decoding the eccentric style of his notes. Quirina Luna-Costillas and Lisa Carrier, both Mutsun Indians, have spent the last 10 years attempting a revival of their Mutsun language. Both have attended the “Breath of Life” Conference at Berkeley and, with the help of linguist Natasha Warner, have begun learning Mutsun as well as teaching it to their children. These revival efforts have produced an English-Mutsun dictionary, a phrase book, and a Mutsun translation of “Green Eggs and Ham.” Both women co-founded the Mutsun Language Foundation, a federal non-profit organization whose purpose is to “promote & provide leadership for the revitalization of Mutsun language and culture.” Natasha Warner is currently working on producing a basic Mutsun textbook.

3.2.3 Creating Virtual Language Communities for L2 Speakers Telephone

Technology is providing the means for these new L2 speakers to learn from the elders as well as keep in contact with each other. Certain language communities are making use of the telephone to communicate with elders over great distances. In Alaska a group of students have been learning by phone to speak Deg Xinag, the language of the Deg Hit’an (Ingalik Athabaskan). The Deg Hit’an are Athabaskan peoples of Western Central Alaska who live near the meeting of the Innoko and Yukon Rivers. There is only a handful of elderly Deg Xinag speakers and the learners are geographically too far spread apart to make it practical to get together face-to-face. The University of Alaska, Interior Campus McGrath Center, organized a one-credit distance delivery class to make it possible to speak with the elders telephonically. Although these learning conditions were far from ideal, the telephone did allow a learning situation to exist where it would not have otherwise been possible:

Compared to a language learning environment where we have speakers in a community able to interact with us face-to-face, learning over the telephone is a terrible situation. We cannot participate in physical activities. We cannot see the faces, gestures, and other body language of our speakers. We have no visual cues about the meaning of the speech we are hearing and have to depend on translations into English to establish meaning for Deg Xinag utterances. But compared to no language learning situation, the telephone class experience is wonderful. It allows
us the only opportunity most of us have to listen to and talk with a group of fluent speakers. We recommend this distance delivery method as part of a larger language learning program or as a way of getting such a program started.\textsuperscript{21}

These learners are using the telephone to create a virtual speech community. Not only can learners interact with elders located far away, but different learners in other areas as well can all participate in the same call-in lesson. Moreover, the creation of these communities creates a sense of solidarity among community members and gives the language a real presence in the modern world.

Internet

The Internet is becoming a powerful resource for those interested in the general problems and methodologies surrounding language revival. Indigenous groups can now have a presence on the web that is easy to locate where they can post information about the language as well as lesson plans. For example, the Miami nation has decided to revive their language, extinct since the mid-twentieth century, and has created a web site (http://www.myaamiaproject.com/) that contains basic greetings and phrases as well as information about revival projects. Part of my reasoning for grouping Category D languages with extinct languages is that the few elderly speakers of the category language have no framework in which to use the language. Laura Buszard-Welcher suggests that the Web can be used to create a virtual speech community, “a constructed immersion where members of the speech community meet, interact, and communicate in the native language.” She points out that the Internet can help to reverse the negative effects of television, a medium that “invades” the home and imposes outside linguistic dominance: “However, the Internet is different from television. Television is a one-way information flow from the network to a passive home audience. The Internet is not one-way, nor is it passive. People receive information, but they create and send it too. The Web is a very social place that encourages participation and community building.”\textsuperscript{22} The Internet is thus becoming essential in creating a virtual domain from the language where one had not existed before. David Crystal believes there are currently at least 500 languages with an Internet presence.\textsuperscript{23} He points out that the Web circumvents the normally prohibitive costs associated with traditional communication media like radio and television:

Only the ‘better-off’ languages could afford to make routine use of these media. But with the Internet, everyone is equal. The cost of a Web page is the same, whether the contributor is writing in English, Spanish, Welsh, or Navajo. It is perfectly possible for a minority language to make its presence felt on the Internet. … What is significant, of course, is that the Net provides an identity which is no longer linked to a geographical location. People can maintain a linguistic diversity with their relatives, friends, and colleagues, wherever they may be in the world.\textsuperscript{24}
The idea that modern means of communication may reverse language shift is a refreshing change from the role technology has played in language shift. It used to be the case that the less isolated a community was the more vulnerable it was to takeover by the dominant language. Television in particular has played a harmful role in establishing English as the favored *lingua franca* of telecommunication. The Internet, however, with the possibility of two-way communication, can help to re-establish a dominion where languages can interact on a much more level playing field.

The Internet, in addition, has allowed numerous groups interested in language revival and revitalization to make available resources and information that would have been otherwise difficult and time-consuming to locate. Just a few examples would include the Indigenous Language Institute for the Preservation of the Languages of the Americas (http://www.indigenous-language.org), the Foundation for Endangered Languages (http://www.ogmios.org/1810.htm) or the Linguistic Society of America (http://www.lsadc.org/). Here is a personal example of the power of the Internet in language revival: I learned about the California language Mutsun through surfing the web, contacted the linguists working on it via email and received emails from them containing, as attachments, the Mutsun dictionary and workbook that they have been developing. Furthermore, the library at my University has on microfilm the Harrington notes on Mutsun that have been transferred from aluminum disc. Thus I have all the linguistic documentation available on Mutsun at my disposal and can work on materials for a California language without ever visiting that state.

3.3 Creating Native Speakers

If language revivalists complete the first two steps, and if the community supports the necessary commitment, an immersion style environment can be created to teach the language to the next generation. Given our definitions of a living language and our stated goals for language revival, this is the only manner in which to revive a language.

3.3.1 The Immersion Environment

A true language revival means that committed adult learners will take their knowledge and create a learning environment for children. Once there are enough adults who know the language there will be the possibility of creating school and/or home environments to pass on the language to children. Children can learn a language fluently from non-fluent speakers, but there needs to be other children to interact with as well as adults with a high level of commitment. To understand this dedication, try to imagine bringing up your children in a language you are not fluent in yourself. Such a learning environment did take place in the 60's when a group of eleven families in Belfast, Northern Ireland, decided to raise their children.
as Irish speakers. These parents were themselves not fluent in Irish and were living in a city of monolingual English speakers. The level of dedication was such that not only did the children acquire the language, but the group as a whole precipitated a shift in the local area towards Irish. Gabrielle Maguire points out the high degree of motivation necessary for the success of this program:

Community members were motivated by the recognition that the creation of a socially cohesive speech community was necessary if they were to have any chance of bringing up Irish-speaking families in Belfast. The project proved successful. Not only did the community of eleven families survive the pressures of being rooted in an English speaking community. In addition, it exerted a significant impact upon the surrounding neighborhoods, contributing to a wider shift towards bilingualism. Furthermore, the Shaw’s road community inspired other community enterprises throughout the North, particularly in the area of Irish medium education.

Of course, Irish in this situation was not a dead language; it had only lost fluent speakers on a local level. Unfortunately for the Indigenous communities we are examining, there is no “homeland” where there is still a pool of native speakers. The responsibility for the future vitality of the language rests entirely on their shoulders.

3.3.2 The Creolization Process

Because the children will be learning from non-fluent speakers, the children will have to take the simpler proficiency-level language they are learning and transform it into a more complex fluency-level language, a process that could involve a profound transformation of the language itself. This process is similar to the transformation of a pidgin into a creole. A pidgin is a language that two or more distinct language communities create when trying to interact with one another. Because the goals are limited and practical (trade, for example) and the speakers of the pidgin already have an L1, the pidgin will necessarily have a simplified rule structure and limited power of expression. If children acquire this language as their first language, however, they will expand it and make it more complex because it will be their primary means of comprehending reality and expressing themselves. Stephen Pinker discusses this process:

...the linguist Derek Bickerton has presented evidence that in many cases a pidgin can be transmuted into a full complex language in one fell swoop: all it takes is for a group of children to be exposed to the pidgin at the age when they acquire their mother tongue. ... Not content to reproduce the fragmentary word strings, the children injected grammatical complexity
where none existed before, resulting in a brand-new, richly expressive languages. The language that results when children make a pidgin their native tongue is called a Creole.26

The distinguishing feature of a pidgin is that is has no native speakers; creoles, on the other hand, are pidgins that children learn as their first language and turn into “real” languages. The language turns into something new through the creolization process.

At this point we can perceive a possible positive outcome for the survival, revival and perpetuation of Native American languages. Children, of course, are the ultimate target learners in order for the native language to revive. The adults are learning the language in order to pass it on to the children; in a certain sense it is “too late” for the adult learners. Children, on the other hand, will acquire as their native language the language around them. In language revival the language that the adult learners are re-learning will be a pidgin language in the sense that it will be, linguistically speaking, a simpler language. As non-fluent speakers they will know all of the language that there is to know, so the language will be necessarily less complex than a “natural’ language with fluent native speakers. If the adults teach the simplified “pidginized” form of the language to their children and allow the children to interact with each other in the language, the children will naturally turn the language into a complex, full-blooded natural human language. This process of pidginization and creolization is a process that many Native American languages have undergone under intense pressure from European languages. Anne Goodfellow and Pauline Alfred point out that this same regenerative power of language can offer new life to language communities who are willing to accept such a transformation:

What often happens is that they learn Native vocabulary but maintain English grammatical structures and phonological distinctions. Are they speaking the Native language? Are they speaking English? Or are they speaking a “mixed” language? Pidgins, creoles, and mixed languages are examples of how new languages develop over time through language contact. Perhaps the Native languages as spoken by young people can be regarded as types of pidgin languages. If we look at language learning in this way and realize that all languages change over time due to various influences, perhaps we can be more accepting of the way that Native languages are spoken today and encourage young people to continue speaking the language, in whatever form.27

It would be a cliché to say that children are necessary to revive a language and to keep it alive for the future. As it turns out, children (not the adult learners and the linguists) are also the essential component for reconstructing the language.
In certain instances this transformation will take a radical and unexpected form. As an extreme case we have the example of Copper Island Aleut, a language spoken off the coast of Russian Kamchatka. This language is very unusual because it uses as word stems Aleut words with an attached Russian inflection. This is unusual because in creoles and pidgins it is usually the borrowed word that acts as the stem while the native language supplies the grammar. This process is expected in that words are easier to borrow than grammatical structures. However, the Indigenous people who created this mixed language started off with Russian as their native language and Aleut-ized it in order to communicate with previous generations who did not speak Russian. Typically the formative process of mixed languages is based on tension between social or ethnic groups; Nikolai Vakhtin believes that Copper Island Aleut is an alternative model of mixed-language that is based on sociolinguistic tension between generations. According to his description of the emergence of Copper Island Aleut, there was a period in the island’s development when the children found the need for a different language as a means of ensuring their identity. Although Russian was their native language it could not serve this purpose. Their parents and grandparents spoke Aleut, but they could not. In such a situation the children created a jargon using Russian as a grammatical basis and rounding it out with Aleut stems. The older generations (as well as newcomers who were monolingual Aleuts) would have encouraged the process, thus causing an increase in the use of Aleut stems. After several generations, a unique language was born. In a sense the children developed a creole based on the dominant Russian language in order to go back a generation and speak with their parents and grandparents.

This new model of mixed language creation may be applicable for the transformational process involved in language revival. As I stated at the beginning of the paper, the line between a living and a dead language is somewhat blurry – in many ways a living language is dead when it has become fossilized and restricted to the older generation. On the other hand, there are possibilities of transforming the language and—if we are willing to accept the change—bringing a new and unique language into the world that can serve as a badge of identity to the Indigenous group. Vakhtin’s conclusion of his description of Copper Island Aleut seems to support this optimistic alternative:

...the situation here is more than one of just “the language is alive vs. the language is dead.” Language is a highly viable and an extremely flexible system; it is often not at all easy to eradicate a language. . . . This does not mean I am overly optimistic about the fate of endangered languages; I simply wish to state there are other possibilities besides linguistic “life” and “death,” especially at times of sharp turn of history. . . . To an external observer, a caterpillar in a cocoon does not show any sign of life. It looks dead, but it is not dead: it has ceased to be a caterpillar, but in due time it will become a butterfly, and the life of the organism will continue, though
the form of life will become different. Some languages find such a new form of life in creolization.\textsuperscript{28}

In other words, if we expect an endangered language to survive in its “pristine” form, then we will probably have a pessimistic outlook for endangered languages. If, however, we accept language revival as involving a natural transformation of the language, then it is possible to be more optimistic.

4. Conclusion

Language revival offers the chance to turn language death into a process of skipping a generation (or two or three) and not permanent extinction. Many of these communities do not really think that their language will die out; hopefully, many will take the opportunity to bring back the old (new?) language once they realize the immensity of language loss. Joshua Fishman eloquently describes the essential role that language plays in Indigenous culture:

The most important relationship between language and culture that gets to the heart of what is lost when you lose a language is that most of the culture is in the language and is expressed in the language. Take it away from the culture, and you take away its greetings, its curses, its praises, its laws, its literature, its songs, its riddles, its proverbs, its cures, its wisdom, its prayers. The culture could not be expressed and handed on in any other way. What would be left? When you are talking about the language, most of what you are talking about is the culture. That is, you are losing all those things that essentially are the way of life, the way of thought, the way of valuing, and the human reality that you are talking about.\textsuperscript{29}

Regardless of the difficulties, the rebirth of a language not only is a workable alternative to permanent extinction but also could be the way in which many Indigenous languages will be able to survive in the future. The language revival model could become a progressively more relevant approach for increasingly endangered language communities. It appears probable that many Indigenous languages in danger of extinction will in fact die out. A language revival program, however, offers these languages the chance to transform themselves and live again.

Notes

1. These definitions of L1 and L2 are well-established in the Linguistics literature. Of course, the situation can be more complicated if the speaker has more than one native language, if the second language supersedes the first, etc. but I will not cover these issues.
3. There are exceptions to this generalization, but such a discussion is beyond the scope of this paper. One famous example would be the English novelist Joseph Conrad. Conrad learned Polish as his native language and did not acquire English until he was 18. Nevertheless, he went on to become one of the most famous masters of English prose.


7. Akira Yamamoto presented this data in a Linguistics Colloquy at the University of Kansas on December 2, 2002.


9. I borrow this distinction and specific terms from Nancy Dorian. Some publications will use language revival for what I term language revitalization and vice-versa.


18. "Arikara (Sáhniš) Language Program."

19. "The Use of Linguistic Archives."

20. "Mutsun language Foundation."


24. Id.

25. Ash, p. 34.


27. Goodfellow, p. 213.


29. Fishman, p. 81.

Bibliography


Errata – The editors regretfully omitted the remainder of the bibliography from Brad Montgomery Anderson's article, on page 43. The following is the omitted text.


