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Language Revitalization on the Web: Technologies and Ideologies among the Northern Arapaho

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LANGUAGE REVITALIZATION ON THE WEB: TECHNOLOGIES AND IDEOLOGIES AMONG THE NORTHERN ARAPAHO

by

IRINA A. VAGNER

B.A., University of Colorado, 2014

A thesis submitted to the Faculty of the Graduate School of the University of Colorado in partial fulfillment of the requirement for the degree of Master of Arts Department of Linguistics 2014
This thesis entitled:
Language Revitalization on the Web: Technologies and Ideologies among the Northern Arapaho
written by Irina A. Vagner
has been approved for the Department of Linguistics

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The final copy of this thesis has been examined by the signatories, and we
Find that both the content and the form meet acceptable presentation standards
Of scholarly work in the above mentioned discipline.

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Abstract

Vagner, Irina A. (MA, Linguistics)

Language Revitalization on the Web: Technologies and Ideologies among the Northern Arapaho

Thesis directed by Professor Andrew J. Cowell

With the advances in web technologies, production and distribution of the language learning resources for language revitalization have become easy, inexpensive and widely accessible. However, not all of the web-based language learning resources stimulate language revitalization. This thesis explores the language ideologies used and produced by the Algonquian language learning resources to determine the most successful way to further develop online resources for the revitalization of the Arapaho language with the Arapaho Language Project. The data was collected on Algonquian language learning websites as well as during field research on the Wind River Indian Reservation; this field research included observing Arapaho language classrooms and conducting a usability survey of the Arapaho Language Project. The observations show that language ideologies of the Arapaho language are based on its indexicality. In particular, Arapaho indexes authority, identity, and social status through its reification and commodification in classrooms. Further, my examination of the Algonquian web resources shows similar indices, but it also gives examples of avoiding these ideologies using CALL procedures, whereas the survey regarding the Arapaho Language Project points to common difficulties in the website accessibility. The development of the Arapaho Language Project, I argue, must account for language ideologies and reproduce them in a way that assists the revitalization by bridging the gap between the language and the community but also by providing contemporary contexts for language use.
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**Introduction**

The importance of language maintenance and revitalization for the Arapaho community lays in the social meaning conveyed by the ability to speak Arapaho. This language is an inherent part of the Northern Arapaho identity and can be used as a tool for achieving political goals of the nation. In the process of language shift from Arapaho to English, the number of Arapaho native fluent speakers declined and the Arapaho community became involved in language revitalization efforts. Nonetheless, as previous studies indicate, there are still some problems associated with language learning and intergenerational language transmission. Some of these issues could be attributed to limited human and material resources as well as poor methodologies used in language instruction. A partial solution to these issues can be found in the involvement of web resources that offer easily accessible language learning materials. The *Arapaho Language Project* website developed in the University of Colorado at Boulder is the initiative intended to supplement the Arapaho language learning. However, its efficacy can be questioned due to the lack of a proper introduction of this website. In particular, this website may seem decontextualized from the classroom learning environment and impractical for the goals of learning to speak Arapaho as it merely supplements classroom instruction.

This thesis explores the effects of language ideologies on the prospects of language revitalization. The necessity for this study comes with the prospects of development of the *Arapaho Language Project* website. The main objective of this investigation is to research and revise language ideologies present in the Arapaho language instruction in order to improve presentation of materials on the website. To achieve this goal, the study will focus on three key research questions: what Arapaho language ideologies are present in classrooms; how some Algonquian re-
sources approach language learning on the web; and what can be done to develop the *Arapaho Language Project* so it becomes a helpful resource for language revitalization in the community.

Language ideologies are often investigated as a part of sociolinguistics in an attempt to define social meaning of a linguistic variation in a community of speakers (Silverstein 1992; Woolard 1992; Irvine and Gal 2000; Kroskrity 2009; Bender 2009). However, language ideologies are also very important in the context of language revitalization as they can have an inadvertent effect on the ability to restore the language. One of the main reasons of investigating language ideologies in this research is to understand their effect on the language revitalization of Arapaho. The analysis of language ideologies in the Arapaho community was based on previous studies summarized in the theoretical part of the thesis as well as on some of my own observations in field research that I conducted in the Wind River Indian Reservation.

In order to find some models for the development of the *Arapaho Language Project*, the study investigates some Algonquian web resources. By using the guidelines for evaluations developed in the Computer-Assisted Language Learning (CALL) and Second Language Acquisition (SLA) discourses, this study approaches the examination of the Algonquian language learning materials on the web. Evaluations of some of the Native American web-resources offer some critique but focus primarily on the technological innovations used for the creation of such resources (cf. Moore and Hennessy 2006; Lockee and Moore 1997; Eisenlohr 2004; Warschauer, Donaghy, and Kuamoŷo 1997; McHenry 2002). McHenry (2002) and Moore and Hennessy (2006) focus on the problems associated with the development of web-based resources for the particular language and community projects they have observed but do not offer a general approach to such initiatives. None of these previous studies elaborate on functionality and efficacy in language revitalization discourse. As a result, I based most of my analysis on the combination
of these studies. Additionally, I suggested some of my own judgments, especially with regards to approaching language presentation and functionality of the resources.

My research of the web resources already available to the learners of the Arapaho language focused on the Arapaho Language Project website. I based my analysis of the Arapaho Language Project on the guidelines by the Computer-Assisted Language Instruction Consortium (CALICO) as well as my personal observations regarding the portrayed ideologies. In my examination of the Arapaho Language Project I present difficulties associated with using the website and focus specifically on the language ideologies portrayed in the lessons and exercises of the project. I also provide suggestions for the further development of the website. These ideas emerge from a survey of the language learning preferences of the Arapaho language learners and teachers that I conducted during my field research. Although some of the suggestions are merely preferences of the learners, others are based on the effective techniques of web language instruction seen in some of the Algonquian resources.

This study shows that language ideologies specific to the Arapaho language, its speakers, and the behaviors associated with them led to commodification of the language and assignment of a privileged social status to the native speakers. This has a negative effect on language revitalization by limiting the access to the Arapaho language only to the elders of the community. To reverse this language attitude, additional contexts for language use can be established by the means of the web technologies. Following the success of other Algonquian web resources, the Arapaho Language Project may develop its language presentation with encouraging community involvement, using diverse language materials and connecting to social networks. Taking these steps would allow the reclamation of language fluency in the community and, consequently, would allow the Northern Arapaho to use their heritage language for various political actions.
Language endangerment and revitalization

The problem of language endangerment and revitalization has become one of the foci in linguistics and anthropology since it was addressed at the LSA symposium in 1992. Crystal (2002:14) in his book about language death provides shocking statistics from the Ethnologue: 94 per cent of world’s population speaks six per cent of world’s languages, whereas six per cent of world’s population speaks 94 per cent of world’s languages. These statistics illustrate the dynamics of language loss and use by different groups. They also suggest dichotomies associated with language use and distribution of power: according to Crystal the majority of the world speaks only a handful of languages such as English, Mandarin Chinese, Hindi or Spanish, whereas the less frequent languages spoken by a significantly lesser number of people are often referred to as minority languages. These minority languages are said to have very slim chances of survival under the dominance of the major six percent of world languages, and linguists agree that the number of world languages will be decreasing rapidly in the near future.

Krauss (1992) considers language diversity similar to biological diversity suggesting that languages bear important cultural information and should be regarded as treasures of humanity. He proposes language documentation as the first and most “urgent” step in the framework of language endangerment. Documenting typologically and genetically unique languages becomes the most required task as loss of information from such languages may turn into a profound loss of human knowledge. Additionally, he suggests that documentation and production of the linguistic material other than in oral form may acquire a symbolic value as well as lead to reclamation of a national identity and institutionalized restoration of the language in different social domains. As a result, language documentation would mean preservation and restoration of the valuable information that ensures cultural and linguistic diversity.
Language documentation often becomes a top priority even though it does not fully address the problems of socioeconomic inequalities associated with language use. The statistics above illustrate not only the scale of language endangerment but also hint at problems of language spread and socioeconomic inequalities. These data imply that speaking one of the major four-percent languages would mean being able to access products, services, and, more generally, power that is associated with a dominant language. In reality it means that language endangerment is fueled by the socioeconomic gap between speakers of majority and minority languages. A response to these issues includes language activism on a global level: it becomes possible to raise an awareness of language endangerment and provide some type of social prestige to the diminishing language with the help of global or international organizations (Nettle and Romaine 2000:24). Such a global-scale language activism also focuses on language tolerance and promotion of language diversity besides advocating for language documentation (Austin and Sallabank 2011:14).

Nonetheless, language documentation is often questioned with regards to direct benefits to communities experiencing advanced language loss. Collecting language data may assist the community of academic linguists before it is beneficial to that speech community. As a result, these data often become out of reach for the community that claims ownership of a language. In attempts at archiving, researchers may be able to make these linguistic data more accessible. However, these efforts come with the price of turning them into museum artifacts if the local speech community lacks an organized strategy in language revitalization (Austin and Sallabank 2011; Hill 2002). As a result, language documentation may be considered a tool for establishing grounds for a further development of materials to assist planned efforts supporting language maintenance and revitalization.
Documentation and revitalization of an endangered language are the most prominent forms of language activism. In addition to the problems of socioeconomic inequalities among speakers of minority languages, five common conceptualizations of a language introduce a support for language activism in endangered language communities and among linguists: a) language as an academic value; b) language as a cultural value; c) language as a repository of human knowledge; d) language as a part of identity; e) language as a viable aspect of human rights (Austin and Sallabank 2011:6–11). These conceptualizations may be considered beneficial especially to the academia by supporting language documentation. Nonetheless, the value of considering the language as a part of identity or as an aspect of human rights has powerful political effects encouraging language revitalization for the achievement of social and political goals. Consequently, language revitalization itself becomes an empowering action that allows the community to unite in resistance of language change.

Language revitalization can be defined as a structured effort of language planning, which employs several different techniques in sustaining the viability of an endangered language. Joshua Fishman (2006:91), one of the pioneers in the field of language revitalization who contributed greatly to the revitalization of Yiddish, sees the success of reversing language shift in transgenerational transmission of a language. Such a view emphasizes language learning directly from native speakers at home. By distinguishing individual stages of language shift, Fishman suggests that revitalization is a process heavily dependent on the community organization and its interests (2006:101–103). A success of this process relies on the methods employed to achieve the goal of language maintenance, while organized policy as well as political support and planning become crucial in cases of advanced linguistic shift. In attempts at reversal of language shift, the utiliza-
tion of planning mechanisms ensures that the interests and organization of the social group are reflected in the intergenerational language transmission within a community.

However, it is important to recognize that even the most highly organized attempts of language revitalization may fail to halt language shift or initiate language revival because sociocultural contexts of language use are not considered (Fishman 2006:91). Providing contexts for language use establishes the conceptualization of a language as a tool for social work, rather than a code of human communication, and leads to successful language revitalization. Additional avoidance and control of the issues that caused language shift initially contributes to the success of language revitalization. This suggests that the social organization itself needs to respond to the issues of language shift and needs to be not only aware of this process but also actively seeking to reverse it. Otherwise, none of the actions proposed by individual community members or language activists will become fruitful.

In the context of community efforts, two main approaches to organizing language revitalization are the most prevalent, according to Patrick Eisenlohr (2004:29–31): language revitalization efforts initiated from within the community (“grassroots” campaigns) and the external (“top-down”) attempts that include intervention of an outside force. On one hand, Eisenlohr (2004:30) contemplates, top-down approach seems beneficial because it often can provide material and ideological support to a community. Especially when the external force originates in a political organization, it may be seen as an explicit approval of the endeavor that the community is involved in. On the other hand, external intervention also can threaten or discourage individual agency of the community members in their attempts of language shift reversal. The top-down approaches are seen only as a last resort in the discourse of language revitalization, while the grassroots campaigns are claimed to be the only legitimate ways to succeed.
The grassroots campaigns are, perhaps, the most popular in the context of language revitalization in the communities with the advanced language shift. They most commonly involve immersion programs for children and adults, bilingual educations in schools, community adult second language training, home learning, and learning by the means of technology (Hermes 2012:134–136). All of these programs employ different techniques and have different agendas in language revival. Leanne Hinton (2011:310) argues that goals of such programs are different from the goals of more common foreign language classes, and focus more on the “creation of the speakers who will themselves carry the language on even if the last native speakers have passed away,” and with this emphasizes transgenerational language transmission. Language instruction of the endangered languages pursues different goals than foreign language instruction observed around the world and implies additional efforts from the community.

In spite of the community involvement and appropriate organization of the language revitalization efforts, there is often a problem of limited resources for language instruction. Most of the initiatives are community or school-based programs that rely heavily on social or educational organization and teaching materials created and distributed within the community (Cowell 2002; Hinton 2011; Hermes 2012). Due to the fact that endangered languages are taught mainly in their heritage communities, the language learning materials are extremely scarce and cannot not be compared to the resources available for foreign languages taught in schools worldwide. The language revitalization materials are often developed for varying students and, thus, promote varying degrees of language exposure triggering different expectations of material retention. These resources, nonetheless, are manifestations of community efforts that tend to demonstrate linguistic skills of native (or in some cases fluent) speakers, but rarely do they show specialized training in linguistics and education among the developers (Cowell 2002:27; Hinton 2011:312; Hermes
As a result, the grassroots campaigns are limited in the resources that could be employed in language instructions.

Overall, in the discourse of language endangerment, organized language activism that aims at reestablishment of a traditional language has become popular due to its relevant success. The goal of this process is understood as development (or in some cases, maintenance) of ecology for the language use. Offering actual sociocultural contexts in which the endangered language could be used, as well as promoting its socio-economic status, assists language revitalization. Additionally, grassroots campaigns that originate in the community and rely on communal human resources are the most successful. Nonetheless, such efforts may encounter problems of limited qualifications and training of the people involved in revitalization, which may result in limited resources for language learning. Most recently a response to these problems comes from the advances of digital technologies that allow utilization of web resources for the creation of new easily accessible and widely available language learning materials. In the following section, I will survey existing understanding of the use of digital technologies for the purposes of language revitalization.

**Role of technology in language revitalization**

Advances in information technology have undoubtedly assisted and influenced attempts at language documentation and revitalization in various communities. Ease in production and distribution, creation of new social space for learning the language, and the collaborative feature of using online technologies are all considered motives for turning to digital methods of language revitalization. However, as is the case with many of the innovations, there still are some issues concerning the production and distribution of the digital materials for learning endangered languages. For example, the problem of ownership of the language, involvement of only some of
the community members, and access to technologies are the reasons holding up the development of digital resources for language learning. This section will examine the role that technology plays in language revitalization as well as the benefits and issues associated with it. Considering the abundance of the literature on purely technological issues of language documentation and revitalization, assessment of common types of programs used in revitalization will be avoided (for more information on the types of products available see: Austin and Sallabank 2011; Holton 2011; Junker and Luchian 2006; Ogilvie 2011).

Use of information technology benefits a community in sharing already annotated and described data. While the community of endangered language speakers is not necessarily interested in the academic value of the language description, the data – which includes traditional narratives, music and other types of folklore – may be used in educational programs, social gatherings or other events. Such data can be one of the triggers of cultural and linguistic renaissance, a form of resistance to the dominant culture. A non-linguistic example of such a cultural renaissance comes from Hawai‘i, where a reconstruction of a traditional double-hulled canoe (Hoku-le‘a) in the 1970s became a symbol of cultural revival, helping reignite interest in the native Polynesian identity (Finney 1994:71). The possibility of creating online archives of linguistic data provides additional ways of sharing it with the indigenous community, allowing any member to have access to the archive and even using it for learning the language (Holton 2011:378).

Before the online technologies became popular, broadcasting was the more common way of sharing information that proved its efficacy. Radio and television broadcasting plays a significant role in providing new ventures and domains for language revitalization. Undeniably, use of broadcasting also contributed to some of the language shifts in the second half of the 20th century. Then most of the television and radio broadcasts featured the dominant language as a norm of
communication leading to language loss (Eisenlohr 2004:23). Since then, this mode of distribution of audio and video content has been used not only to assist the language revitalization attempts but also to allow communities to regain their voices in a form of resistance to the mainstream culture (Huaman and Stokes 2011:11). More recently the development of broadcasting materials also includes instances of production of new media and dubbing the existing ones in the native language. Among such initiatives are popular cartoons and films created by the language enthusiasts. Disney’s animated film Bambi dubbed in Arapaho (Greymorning 1999:10), children’s favorite Bernstein Bears dubbed in Lakhota, and Star Wars in Navajo (Cowell, personal communications) have become iconic of language revitalization in these communities.

Nonetheless, radio and television broadcasting are becoming less popular as methods of community expression in smaller language communities due to high costs of production, lack of competent human resources and competition with the mainstream companies. They still prevail, however, in bigger communities that face dangers of language loss, like those in Wales, Catalonia, Russia, the communities that still extensively use television, radio, newspapers and cinema.

The decreasing use of broadcasting in Native American communities prompts the use of computer technologies instead. Most recently the online-based technologies became more popular due to their ease and accessibility. Simultaneously a more widespread utilization of the online technologies raises the issue of literacy. It is often the case that the endangered languages do not have an established writing system, which makes creation and distribution of learning materials even more complicated. The task of the linguist documenting such language becomes the invention of an efficient way to represent the linguistic tradition of such culture reflecting the phonological system of the language but keeping it easy enough to be accepted by the community. The writing systems that use non-Latin conventions often present obstacles in language revitalization
complicating the development of any linguistic materials. Today digital technologies support about any kind of writing system with the installation of specific font packages or utilizing image formats of a text rather than the text itself (Holton 2011:379). Nonetheless, the benefits of using online technologies make them more popular ways of language activism in a community.

Accessibility of the web resources is its biggest benefit, allowing the community members away from home to participate in the language revitalization process. For example, Natalie Baloy (2011) shows with Squamish teenagers how web resources help to regain the aboriginal identity. In the development of web based language-learning resources the creators have to make choices of what to make widely available since the Internet does not discriminate between its users. As a result, both developers and users can increase sociolinguistics agency through use of learning materials shared online. On one hand, the developers decide what kinds of information to present using the web as well as what kind of audience to orient their final product to and what kind of rhetoric to use for such language distribution. On the other hand, there are always questions if the direct audience will use the published materials, and if they will use it properly.

These questions raise two important issues surrounding language revitalization in general. The first one refers to the idea of the language as intellectual property of a certain group that may not be used by any other groups. This idea, frequent in some of the Native North American indigenous communities, alludes to the ideology of the language being a gift from the creator to its people, and, thus, the language needs to be protected from any form of vandalism, including being available to the non-communal individuals (Cowell n.d.). The sacredness of the language may prohibit writing it down or sharing some of its speech genres. It is very important that the developers of the learning materials take this into account and do not go against the traditional views of the community, regardless of the associated benefit.
The second important issue that is raised by the sharing of the material on the web is the involvement of the community in general. It was mentioned in the previous section that the success of language revitalization or reversing the language shift is tightly connected with the engagement of the community members in the whole enterprise. The community itself needs to be integrated to develop the data or any of the materials for sharing (Noodin 2014, personal communications). Without response from the community, the result of the web project may simply be a decontextualized collection of linguistic repertoire, non-beneficial for any of its members. In addition, community members may begin developing language materials online and provide a proper contextualization for the language, establishing a new ideology for the created form of communication (Moore and Hennessy 2006:134). Such attempts are especially noticeable on the major social networking websites like Facebook, Twitter, YouTube and Pinterest, where individuals create an online group for the purpose of language learning. These groups serve as public space to discuss difficulties in learning the language by forming unofficial study groups or even share some of the language data. Successful web projects involve community members in creation of the language learning materials and recreation of the linguistic environment.

As mentioned above, the downside of having the text-based resources in the digital format is the fact that they require reading skills. Literacy can limit the audience after the major obstacles with the development of the writing system and fonts have been dealt with. Despite its availability on the web, such resources restrict the audience only to those who can read. This issue is exacerbated by the fact that most of the Native American languages have only had developed writing systems for the last few decades. In these communities, literacy prevails only in some social groups and is associated with the younger age of the community member. Additionally, a major gap in understanding of the digital materials has been reported in some communi-
ties and the involvement of elders is often limited to the development of the learning resources, whereas younger generations are also the ones who use it (Moore and Hennessy 2006:133).

Lastly, the production of any kinds of language learning materials does not happen in a vacuum but inherently reflects existing language ideologies, suggesting the social work that can be accomplished by acquiring the language in question (Eisenlohr 2004:25). Using the newly developed information technologies to establish long lasting connection between the endangered language and its community may provoke new attitudes towards that language and even re-contextualize the language in terms of its usability for the current non-speaking community members. Such results can be argued to be the most desirable in the context of language revitalization since they reconstruct the ecology for the use of the language.

In sum, information technologies become a new venture in language revitalization due to the abundance of their advantages. In the process of development of digital language learning resources, speech communities of endangered languages still face some problems including limiting access to the resources, development of literary modes for interaction, and inclusion of the whole community in the revitalization with the information technologies. Nonetheless, expanding language revitalization to new media allows communities to respond to the diminishing language ecology and recontextualize language use.
**Theoretical framework**

The objective of the current research is to study the language ideologies employed in, involved in, and produced by the revitalization of the Arapaho language. Before I begin the discussion of the relevant attitudes about the language, I would like to argue that certain language ideologies have a blocking effect on language revitalization in the Arapaho community, and that development of any revitalization materials on the web needs to take these language ideologies into account. To analyze the production and effect of ideologies reported within the Northern Arapaho community, I will employ practice theory as the theoretical background. In the following section, I will first outline the key issues of practice theory pertinent to this study. Next, I will examine the implementation of language ideologies and indexicality since they are relevant features for studying contrastive social identities that have arisen in the context of revitalization efforts. Last, in line with practice theory, I will define the object of the study – the speech community that I will call “Arapaho advocates”.

**Practice theory and linguistic analysis**

Practice theory is the theoretical approach that developed to account for the individual’s actions in relation to the group, the influence of power, and the role of history. More generally, practice theory gives a fuller account of the notions of “agency” and “resistance”. So, according to this approach, culture emerges from people’s actions, and, as a result, is inherently heterogeneous. This view explains how culture can be a way of formation and transformation of the society that can be achieved through the exploitation of personal agency (Ortner 2006:18; Foley 1997:26).
Agency is crucial to understanding an individual’s involvement in the production of social transformation and can be defined as the sociocultural capacity to act (Ahearn 2001:112). A key aspect of agency is its emergence in the social and cultural norms that allow the consideration of socially constructed identities. Besides producing a uniform set of actions available to all of the individuals, agency accounts for the heterogeneity and variation of choices, some of which help to form and transform society and build practice (Foley 1997:23; Duranti 1997:30). This practice contributes to the social organization in the production of social work and nourishes social meaning; thus, it becomes a manifestation of culture. Social transformation as well as social maintenance are possible through the practices of a social group and can be considered society’s potential goals mediated by power and mobility of an individual (Ortner 2006:18). In other words, practice theory explains how the individual’s and group’s actions are constructed and supported to achieve social and political goals and produce social meaning.

In the production of social meaning, the group and the individuals may use a plethora of semiotic devices, and language in particular. Previous understanding of the language as a conduit with a preexisting meaning are contested, which suggests that the language and linguistic varieties are performative actions with meanings enabled by and emerging from context but also constrained by cultural sets of practices (Duranti 1997:9–10). This view of language variation empowers social agents in their choices: they exercise of the agency given to them in the community (Ortner 2006:15). Individual agents produce and mirror the power dichotomies present in society and negotiate them through the interactions with other social agents. Triggering the sociocultural knowledge shared between the actors allows one to claim a certain identity, which is possible only by means of the culturally-informed evaluations of differences and choices.
(Duranti 1997:28). Thus, linguistic variation, and language most generally, can be considered sources for exercising one’s agency and the production of social meaning.

While practice theory is concerned with studying communities of practice as social organizations united by a common political goal of social and cultural transformation, this analysis focuses on a subset of a community of practice united by a set of linguistic features —speech community. Both concepts community of practice and speech community allow us to understand the dynamics within the community that help individuals to construct their relation to the world as well as form a specific identity. Most importantly, speech community explains the internal heterogeneity in a community of practice that is expressed in the variety of linguistic forms: an identity of a speech community member is constructed in its relation to interests of other members of a community of practice along with a shared social meaning produced in the process of exploitation of linguistic variation (Eckert 2006; Bucholtz and Hall 2005). Thus, the community of practice unites individuals with similar social and political interests, but variable linguistic practices in the group may produce internal heterogeneity splitting the members into speech communities with divergent social goals.

For the purposes of this research, I would like to propose a working definition of a speech community: it is a fluid association of individuals who are involved in the production of social meaning and achievement of a common social goal through the network of shared linguistic repertoires. This definition suggests that the membership in the speech community is emic and assigned with the use of the linguistic repertoires contrastively available to the members of the group. The social goals often serve a political purpose such as rights movements, establishment of an identity in order to ascertain independence. Linguistic repertoires license and constrain the activity of the community members by providing a linguistic framework contrastive to other so-
cial groups and communities of practice. This definition also explains that speech communities themselves are not inherently homogenous and that simultaneous affiliation of the same individuals, or speakers, to multiple speech communities is possible. Uniting factors in this affiliation are not merely an ability to speak a language, or to understand the context of interaction, or an awareness of cultural diversity, but rather the factors are an understanding and an ability to use a set of shared indices for the purposes of the community of practice.

In sum, practice theory gives a theoretical foundation to the understanding of the connection between culture and social goals in the society. While it is assumed that the individuals in a community of practice are united in their agency, the homogeneity of a community of practice is rather imaginary. What is more, since the individual members may have divergent goals expressed by their use of linguistic variables, speech community accounts for this diversity and suggests the affiliation based on the common understanding of the linguistic variable and its social meaning.

**Language ideologies**

An example of a shared feature in the community of practice and in the speech community can be a set of attitudes and beliefs concerning the language, its speakers, and their linguistic behaviors. These beliefs are referred to as language ideologies. One of the key features of language ideologies is their effect on the sociocultural practices of the group. So, according to Irvine (1989:255) language “ideology [is] the cultural (or subcultural) system of ideas about social and linguistic relationships, together with their loading of moral and political interests”. This definition emphasizes the connection of the language ideologies with the political agenda and goals of a community. Considering that language ideologies influence social systems and justify their practices, studying them may allow an understanding of the connection between ideology and
practice in social life, as well as social institutions and the development of a linguistic structure (Woolard 1992:243–244). In light of language revitalization and documentation, using language ideologies can be a way to determine a potential response from a community that has undergone language loss.

The concept of language ideology has become one of the key issues in linguistic anthropology and it explains how the attitudes and beliefs about a language, its speakers and linguistic behavior contribute to an achievement of a political goal (Irvine 1989:255). Additionally, as the ideologies index certain social features and help to construct the identity of a speaker, it has been suggested that language ideologies drive selection of linguistic resources (Silverstein 1992:319; Bucholtz and Hall 2005:594). Distinct identities do not have set semiotic resources referring to them; instead, the indexical value of a sign is determined by the context in which the sign may be used. Thus, the whole concept of language ideologies is crucial to the concept and operation of indexicality, which can be described as a link between a language or linguistic feature and the social meaning it helps to accomplish (Silverstein 1976:25).

Language ideologies emerge in a variety of contexts and may concern nearly any aspect of a language. But many harmful language ideologies are often discussed in the context of socioeconomic inequalities, when they often emerge, persist, and have a negative effect on the speakers of a minority language. While it would be wrong to claim that only socioeconomic inequalities cause negative language ideologies, it is often the case that some specific ones may flourish in systems of colonial oppression. Language ideologies constructed from specific political and economic perspectives shape cultural ideas of language, and consequently lead to performing these ideas in practice – whether through a choice of linguistic features or a choice of a language as a whole. In the context of Native American languages, many harmful ideologies arise in rela-
tion to the domain of inequality and dominance of English language. Claims of the superiority of the dominant language of a nation-state over the traditional indigenous languages often become forces driving language shift (Field and Kroskrity 2009:11, 13).

In the discourse of language revitalization, such language ideologies may have a negative effect on language transmission by forming conflicting language ideologies. Loether (2009:251) addresses such ideologies as “stumbling blocks,” suggesting that they impede language revitalization rather than assist it. The conflict in language ideologies can be attributed to the fact that groups in which these language ideologies are seen are rarely homogenous. In fact, as it has been discussed above, social structure is almost never homogenous; heterogeneity is innate to social organization and culture. As a result, the heterogeneity of social organization contributes to the heterogeneity of ideologies (Field and Kroskrity 2009:9). The plurality of language ideologies is a result of the plurality of the social system.

In her study of language revitalization in the Kaska community in Yukon, Barbra Meek (2010) shows such an example of discontinuity in language ideologies. On one hand, the Kaska community is involved in language revitalization; on the other hand, the belief that the elders are the owners of knowledge and traditional language prevents Kaska from being revitalized. Traditionally, Kaska matriarchs are believed to be the only legitimate owners of the language, so any attempts of the younger members of the community to claim Kaska competence are discouraged. In particular, speaking Kaska by a younger community member may be treated as a claim of this specialized knowledge, and, therefore, will violate the respect towards the elder matriarchs. As a result, students prefer not to speak the language, even despite community’s efforts to restore Kaska, because they do not want to impose on an elder matriarch’s status according to the respect traditions. The community may be actively involved in the process of language revitaliza-
tion and documentation, but the results may be minimal due to the discouraging ideologies (Kroskrity 2009:74).

Previous studies in the Northern Arapaho community also show the existence of conflicting language ideologies. Jeffrey Anderson (2009) traces the emergence of current language beliefs in the Northern Arapaho community of practice and concludes that the adoption of Euro-American educational traditions led to the establishment of the Arapaho writing system and resulted in the understanding that the written form of the language is a synchronous code. It also means that any language learning would involve reading and writing, which is a considerably new approach in the context of Arapaho. This language ideology impedes the process of language revitalization as it focuses on learning the language in the Euro-American educational tradition. Anderson notes that some of the suggested methodologies in language revitalization contradict the belief about the sacredness of the language that some speakers may have. For this reason, he claims, the presence of contrastive language ideologies is dominant in that community and leads to certain linguistic practices. Some Arapaho believe that the language must not be written and distributed even in the attempts of language revitalization, while others suggest that language revitalization must employ all possible methodologies and should among all include literacy and technical innovations.

In response to Anderson’s claims of adoption of Euro-American educational practices by Arapaho, Andrew Cowell (2002) examines how the bilingual materials are used in the curricula of the language classes in the reservation. His findings indicate an implementation of certain language ideologies in the development of learning materials. He argues that while the Euro-American educational style has been widely adopted in teaching the language and culture, Arapaho curricular materials often implement some of the traditional educational forms as well. The
materials that Cowell examines show how the traditional performative genre responds to the modernity and changing domains of the social use of Arapaho. He argues that most schools use the bilingual curricular resources despite some individual beliefs about literacy and writing. The contents of these materials reflect the social context of the language loss at the reservation; in particular, bilingual curriculum serves as a contemporary commentary to the social issues. Considering the lack of other forms of backchannel with the members of the Northern Arapaho community, bilingual curricula become an arena for the development of contemporary linguistic contexts. In other words, Cowell contests the idea of the Euro-American influences and attributes some of the changes in the educational approaches to the internal practices of the Northern Arapaho.

In her honor’s thesis conducted at the University of Colorado at Boulder, Jenette Preciado (2010) focuses specifically on language ideologies present in the language classrooms on the Wind River Indian Reservation. In thorough research, Preciado concluded that, besides the ideologies that equate Arapaho identity with native language fluency and constitute Arapaho as a language of traditional ceremonies, there is a set of ideologies that stems from the mainstream educational approach to language learning. Specifically, Preciado claims that the adoption of a Euro-American teaching style has triggered an idea of the language as an abstract and finite set of memorizable phrases and vocabulary. Limited curricular materials, Preciado argues, also limit the contexts for language use. Additionally, Arapaho is associated with age and the past because the elders are the only fluent speakers of Arapaho in classrooms. Preciado’s findings attest to the presence of conflicting language ideologies within the Northern Arapaho nation and proves them to be corrupting the attempts of the Arapaho revitalization.
Similarly, Katharine Brown’s (2011) undergraduate research at the University of Colorado at Boulder studied the opinions of parents on language and culture maintenance in the context of immersion schools. Brown shows that the less supportive of the immersion schools parents also claim to have weaker Arapaho identities; as a result, Brown considers the Arapaho language a constitutive feature of the Arapaho identity. The conflict of language ideologies arises from the simultaneity of beliefs that elders are the keepers of the traditional knowledge and elders’ criticism of assimilation of the younger generations to the English-speaking ways. Despite elders’ “approval” of the youths’ attempts to learn Arapaho, the language is displayed as a limited kind of knowledge that needs to be sought. Overall, Brown’s research has shown that language revitalization has been considered one of the main goals in the Northern Arapaho community and resulted in the claim to continue development of the immersion programs.

Previous studies in the Northern Arapaho community allow considering the link between language ideologies and a linguistic feature, an action and a social organization to account for the issues of language revitalization. The internal heterogeneity of a social system, like the one in the Northern Arapaho, causes conflicting language ideologies. In fact, studies indicate that language ideology is not uniform in the reservation. A sketch of the linguistic practices and their meanings to the social system of the Northern Arapaho nation based on the assumptions of practice theory can assist understanding the object of this study as a social unit, and more specifically a speech community: the connection between the social organization on the one hand and the linguistic practice on the other explains the nature of language ideologies found in the speech community. It seems natural to employ the language ideologies and linguistic varieties common to the groups most involved in language revitalization because of their effect on language revitalization. The following section justifies the category of a speech community and argues that, based on certain
linguistic variables among elders, teachers, and learners of Arapaho involved in the revitalization of the language, it is possible to talk about a speech community of Arapaho language advocates within the Northern Arapaho tribe.

**Arapaho language advocates: identities and linguistic repertoires**

The Arapaho community on the Wind River Indian Reservation in Wyoming is highly heterogeneous when it comes to speaking abilities and use of the traditional language. In fact, three main tendencies of the Arapaho language and involvement in revitalization practices can be traced within this reservation. First, native fluency in Arapaho is rare. Only the elders of this community are natively fluent in this language. Most of the other speakers can be labeled semi-speakers, as they tend to practice Arapaho only in certain contexts. Second, the tendency of speaking Arapaho only in some contexts constructs contextual competence associated with the semi-speakers, the elders and the learners of Arapaho. Those who speak Arapaho do it only in certain contexts such as with the elders, in the language classroom, or when addressed in Arapaho. Third, literacy in Arapaho can only be attributed to those who are involved in language revitalization. The features of speaking Arapaho are distributed among certain identities, which, I claim, form a speech community. Here I will give an account of each of these identities and their linguistic repertoires. I would like to argue that shared linguistic features of literacy, contextual competence and language proficiency grants individuals affiliation to a speech community that can be referred to as “Arapaho advocates”. Additionally, other linguistic repertoires specific to these three subgroups may be defining of smaller nests of speech communities within this one.

Native fluency in Arapaho has become rather rare on the reservation and can be primarily attributed to the individuals over the age of sixty. These folks often refer to their language learning experience as learning it in conversations through listening and obeying their parents and
grandparents. The emphasis on the orality of the Arapaho language also comes from the fact that it was not written until the late seventies. The writing system became popular only in certain circles of the Arapaho community, mainly among people directly connected to language teaching and learning. Literacy in Arapaho, in other words, is very selective and is mainly associated with Arapaho learners and teachers, in other words a younger generation of non-speakers or semi-speakers.

It would be fair to say that native fluency in traditional language accompanied by literacy is a very prestigious combination. So the elders, fluent in Arapaho natively and able to read and write, may hold important community positions such as a commissioner in the Northern Arapaho Language and Culture Commission (NALCC). Importantly, being an elder fluent native speaker does not necessarily assume involvement with the language revitalization practices in the community. Although the whole community recognizes language loss as a process that needs to be avoided, speaking Arapaho is still a choice made only by some of the fluent speakers. It is often the case that this choice also triggers community activism, and eventually social capital: fluency and literacy both give advantage in becoming an Arapaho teacher. The realization of a social capital associated with these skills causes the emergence of a group of elders who became involved in language activism.

Literacy, thus, is a common skill, or a feature, of any current language teacher on the reservation. Language teaching techniques in most of the classes necessarily involve reading and writing; in fact, it may be one of the first things taught in a language class. Students are expected to know how to read and write, know how many letters there are in the Arapaho alphabet, and know which ones are the vowels and which ones are the consonants. Although some teachers may not be fully competent speakers of this language, they are all qualified and approved by the
NALCC to their teaching positions and sometimes may be accompanied by an elder native fluent speaker (O’Brien 2010:9–10). Teachers, thus, can be described as a younger generation of literate semi-speakers.

In the context of a classroom, teachers’ preference for speaking Arapaho rather than English varies greatly. Although they attempt to practice “Arapaho-only,” they still may slip into using English while speaking to students on the topics outside of the classroom material. Besides using Arapaho for examples of the utterances, teachers tend to prefer using this language for interactions that either require minimal formulaic verbal response (e.g., greetings, checking attendance) or do not require it at all, like in commands (e.g., “Write your name”, “Close the door”). In such cases, it is a specific speech genre that is associated with the use of Arapaho by classroom teachers. In particular, Arapaho is compartmentalized for using as directives or as an individual artifact of knowledge in an institutionalized setting. This also holds true in some of the immersion schools, where some teachers may translate Arapaho into English or interact between themselves in English even though they would discourage similar behavior of their students (O’Brien 2010:40). Arapaho in language classrooms can be described as framed in English instruction and reserved for minimal interactions between students and teachers (Meek and Messing 2007:106; O’Brien 2010:22).

Most of the Arapaho students have acquired this language in a classroom setting in immersion or bilingual schools. Very few students can claim to speak the language outside of class. Learners of Arapaho in high schools and colleges are proficient in reading and writing and exercise in these activities every day. Their speaking abilities are very limited, and although many students claim to know the phrases taught by their teachers, they refrain from speaking Arapaho. Interactions initiated in the classes are mostly in English, except for explicit exercises that are
targeted at practicing spoken Arapaho, such as question – answer exchanges, TPR commands, formulaic answers to teachers’ questions, or some games (O’Bien 2010:12). Because learners know the environments in which to use the traditional language rather than the dominant one, such limited fluency can be described as contextual competence.

Altogether, these variations are meaningful choices that may be seen as indexical representations of the set of identities described above. Although I have managed to propose them as distinct groups, existence of the common shared linguistic features of the members of the three identity categories suggests their membership to a speech community that can be defined as the Arapaho language advocates due to their involvement in the Arapaho revitalization. The reason why I insist on distinct identities in this speech community was to show the internal heterogeneity of the structure of this social organization and the degrees of employment of the outlined features. The latter especially indicates the degrees of involvement of an individual in the speech community and members’ pursuance of the language revitalization goals. However, the heterogeneity additionally implies divergent social goals of the actors involved. All three groups retain their identities in the speech community and students, teachers and elders have their own objectives besides the common goal of the language revitalization and speaking Arapaho. Students in the process of learning the Arapaho language also achieve a goal of being a competent learner. This goal serves as a reason for their cooperation in language revitalization and explains why students only speak Arapaho when teachers address them. Similarly, teachers make sure that students understand what is being taught by framing the instruction of Arapaho in English and limiting Arapaho to the school subject. Both learners and teachers, however, also politically align themselves with the third subset – the elder fluent speakers, who, besides their engagement in language revitalization, also happen to hold official positions within their community.
It is important here to hold off on the idea of distinct identities but instead focus on their collaboration in attempts of achieving a common social goal. A speech community, not unlike any other communities of practice, postulates that its members are co-participants in discourse of power with different positions, constraints, and possibilities (Rampton 2000). The Arapaho advocates’ speech community, which has a common goal of reversing language shift, consists of three subsets of identities and is defined by its linguistic repertoire. In this speech community, achievement of the common goal would be impossible if it was homogenous and consisted only of “elders” or only of “learners”. In contrast, the heterogeneity explains how the power of the elders is constructed and renegotiated through the rigid structure of this community and their specific linguistic repertoire.

While the described features of this speech community may not construct distinct styles of Arapaho, they offer variability in using a linguistic variety. Literacy, for example, can be considered a place of origin for some of the speech genres associated only within the speech communities of the language learners, teachers and language activists rather than Arapaho speakers in general. Overall, the linguistic variety used by the speech community of Arapaho advocates can be described as partial and highly contextualized. There are also some variations within the community that can be attributed to different social roles and goals of interlocutors. Due to this variation, the heterogeneity of this speech community is the innate attribute necessary for healthy functioning of this system: it allows achieving their social goal and produces the meaning through the establishment of power. The division of the members of this speech community into smaller sub-communities of “elders”, “teachers” and “learners” will help to comprehend power dichotomies, understand the origins of the ideologies of the Arapaho language, and allow considering the audience of the revitalization materials as a heterogeneous group.
The Arapaho language and its status

The Arapaho language is one of the Algonquian languages of the Plains Indians along with Cheyenne, Blackfoot and Gros Ventre. Today it is mostly spoken by the residents of the Wind River Indian Reservation, who share their land with the Eastern Shoshone in Wyoming (Northern Arapaho). There is also a Southern Arapaho branch located on the Cheyenne and Arapaho Indian Reservation in Oklahoma; however, there are no remaining fluent speakers of Southern Arapaho. When the federal government established the Wind River Reservation in 1878, every member of the Arapaho tribe was fluent in Arapaho. According to the latest census data, about 22 % of all the Natives living on the reservation are now able to speak a language other than English. In his overview of the language situation, Jeffrey Anderson (2009:48) provides the data that states that by 2005 only 7% of Arapaho were proficient in their traditional language. As for the Southern Arapaho, due to the practice of intermarriage, there has been an overwhelming language shift until most members of the tribe stopped identifying as Arapaho anymore (Cowell and Moss 2008). Some of the language activists in the community today suggest that out of approximately ten thousand Arapaho on the Wind River Indian Reservation only about 150 or 170 people are able to carry on a fluent conversation (Antell and Lopez 2013).

According to Anderson (2009; 2011), language shift from Arapaho to English took place in the middle of the 20th century. The subliminal repression of the Native language was happening through the adoption of the socio-economical practices of the European-American culture, in particular, due to the switch to an agrarian economy dependent on state control. The sedentary life-style of the new Arapaho culture resulted in a change of the temporal progression of the tribe and slowed adaptation to the Euro-American calendar. Instead of previous reliance on natural seasonal cycles for hunting, Anderson argues (2011), Northern Arapaho started to live by the Eu-
American calendar, which sequestered time into “payable” chunks and offered alternative celebrations of the Christian holidays. While the traditional ceremonies remained intact, the adoption of the Euro-American holidays included additions to the traditional cultural practices. The linguistic dominance of English became especially visible with this appropriation: while traditional ceremonies continued to employ Arapaho narrative, newly introduced celebrations were often carried out in English. Today due to extensive socioeconomic contact with the Euro-American society, the Arapaho do not have unique contexts for use of their heritage language. From Anderson’s (2011) point of view a single most important reason for the language shift in the Northern Arapaho is an attempted assimilation to Euro-American cultural practices.

Another reason commonly cited in the discourse of language loss in Native American communities is the existence of boarding schools in the late 19th – early 20th century. With regards to the Northern Arapaho experience, it seems that boarding schools are often cited among folk beliefs regarding language loss, and thus, are often raised in conversations between elders. In the literature, the issue of the boarding schools does not come up very often and only Steven Greymorning (1997), sees the displacement of indigenous languages in boarding schools as the first reason for language loss.

An alternative point of view of the language shift is expressed in the works of Andrew Cowell (2002; 2008), who argues that the shift was an informed choice. According to Cowell, the language shift in the Northern Arapaho community happened after World War II, when those who were able to travel outside of the reservation noticed social and economic advantages to speaking English. Some families began raising their children speaking English, however, in most circumstances continued speaking Arapaho between themselves. Today most of the fluent Arap-
Arapaho speakers are elderly, and only some of them continue to use this language on an every-day basis.

In the second half of the 20th century, some community members came to believe that the switch to English as a primary language was unfortunate and made attempts to restore the heritage language. This has led to a series of events, one of which was arrival of a Czech linguist to the tribe. Zdeněk Salzmann was invited by the community to produce a dictionary and an alphabet for Arapaho. During his visit, Salzmann was also able to gather some ethnographical material to supplement work he had done. The existence of the alphabet brought a new level of communal involvement in the revitalization of the language by establishing possibilities for literacy among the tribal members and formal education in the Arapaho language. This alphabet is mostly used in educational settings in the language classrooms, and mostly the members of the community who have attempted learning the language in traditional language classes are able to read and write using this system. Many other members of the community who did not learn the language in schools prefer using the English alphabet, and openly reject Salzmann’s system.

The introduction of the writing system allowed the community to create and reproduce teaching materials for learning Arapaho, and implement language classes in tribal schools (Anderson 2009; Cowell 2002). The three language programs that are available in the schools now are the same language programs that are offered in many other revitalization and language teaching contexts. Even though some Arapaho speakers do not like this writing system, the mainstream Arapaho community seems to be fairly satisfied with it, making small changes to some spellings of common words and their morphological derivatives.
**Arapaho revitalization methods**

To assist many of the tribal needs with regards to these initiatives, a Northern Arapaho Language and Culture Commission (NALCC) was established in 1978. It is involved in the creation and distribution of curricular materials as well as some audio and video documentations of the language (Cowell and Moss 2008). Commissioners hold lifetime positions with this organization and must be approved members of the tribe able to demonstrate their native fluency in Arapaho. Besides the development of linguistic resources to assist language revitalization NALCC also appoints teachers to local language classes and develops curriculum used in the classes. However, it should be noted here, there is no unified Arapaho curriculum for use in schools.

**Foreign language classes**

Foreign language classes are the most popular form of Arapaho learning. Students are taught the language with the help of teaching materials by a language speaker (or semi-speaker, as is often the case) in a classroom several hours a week. Results of such classes are often very minimal, and there is no documentation of producing a fluent speaker of Arapaho (Cowell n.d.; Preciado 2010). The language of instruction is often the dominant language of the community, English in the Arapaho case. Despite the fact that students may be extremely driven in learning the heritage language, many of their efforts are unrewarded.

**Bilingual education**

Bilingual language programs are the ones that provide instructional material both in a culturally dominant language and a target language. Cowell (n.d.) reports that students in such programs are not only exposed to the target language more than in the foreign language classes but they also acquire culturally significant knowledge through the realm of the target language. This eventually results in higher comprehension of the linguistic material and higher confidence
in language proficiency. However, it is commonly believed that the effects of bilingual education are noticeable only in the schools that employ at least 80% of the instruction in the target language (Cowell n.d.:2). Such mode of instruction is not only desirable by the community because it is economically effective in bringing steady income to the qualified language speakers employed by such schools, but also because it creates speakers of the language, and, consequently, new social domains for language use. In other words, the students of such schools may become able to mold their linguistic skills to adapt to social contexts where the dominant language has been prevailing.

**Language immersion program**

A modification of such teaching style is an immersion school program. The immersion model was first used for teaching French in Canada and soon was adopted by many other languages and communities. The most popular example of successful language revitalization by the means of such school is the Hawaiian model, where students are introduced to their second language by the age of five or six. School instruction in such programs is done exclusively in the target language, which means that the culturally dominant language is not used during the period of class instruction.

The immersion school program was implemented in the Arapaho community after testing daily language classes in an elementary school. Greymorning (1997) writes that the language proficiency among students who had an hour long Arapaho class every day showed 80% increase than their peers who had only 15 minutes of daily language exposure. As a result, the pilot immersion school in the town of Ethete was opened to preschool-aged children for the four-month period from January to May 1994. The school was available for children of Ethete for two hours a day, four days a week. The results of the pilot program were astounding and raised the aware-
ness among parents that such a schooling method is quite effective. With help from multiple organizations, the Arapaho were able to establish a full immersion program for pre-school children. Overcoming many problems en route to learning what kind of methodology may be most successful for this language specifically, the organizers have concluded that instructing solely in the target language allows students not only to learn the language in the same way as native speakers do but also allows them to learn multiple possible forms which enable conversational skills.

Today the Wind River Reservation is proud to have two immersion schools on their land. Students who attend these schools have shown fluency in all registers of communication in the target language. The main problems of this program are connected with limited funding, limited human resources, and an inability to support fluency levels once the students go to mainstream kindergartens. A common fear that students of such schools will be behind others in standardized tests becomes a major obstacle in promotion of Arapaho language education.

To sum up, in the process of language revitalization there are several educational resources available to language learners. After establishing the writing system of the Arapaho language, the tribe was able to implement Euro-American styles of language education. The revitalization programs have proven the importance of creating additional domains for language use. The foreign language program was not able to achieve this goal because of the limitations in language instruction. Bilingual education creates additional opportunities for language use; however, it is often limited to the material taught in class. The most successful program is immersion. Not only does it create additional language domains opportunities, but also it allows students to learn how to manipulate the language for other daily situations.
Arapaho language instructions and language ideology

To investigate language ideologies and some of the issues that may be present in the language instruction, I have conducted a series of observations in language classes. In analyzing the learning environment in the Arapaho language classes of the Wind River Indian reservation, I have observed that the Arapaho language can be used as an index of a certain social status. The meanings for these indices originate from classroom instruction, and some of them are emphasized in the use of some instructional practices. In this section, I will analyze how the resources used in classrooms, teachers, and elders all contribute to conceptualization of Arapaho as an index of identity and, more specifically, how they narrow the social meaning of Arapaho proficiency to advanced age. The investigation of the language ideologies present in classrooms and the speech community is done with the analysis of the approach to language instruction. The goal of this section is to present these ideologies and analyze them as significant details necessary for the development of linguistic materials aiding language revitalization.

Before I offer my analysis, I would like to make a few comments about my classroom observations. During my fieldwork, I was able to conduct six observations in the Arapaho language classrooms, five of which were in the territory of the Wind River Indian Reservation in Wyoming. Three of the classes were offered at local high schools (Wyoming Indian High School, Arapaho Charter High School and St. Stephen’s High School), one in the Wind River Tribal college, one in Central Wyoming College, and the last one was stationed at the University of Wyoming. To preserve anonymity of the participants in my observations, I will not specify the schools in my examples, and I will use pseudonyms for the teachers’ names.

Since all of the classes employed foreign language teaching method, they all were very similar in their approach to language learning, often reflecting the Euro-American tradition in
education that Anderson (2009) reports. All of the schools kept their classes very small, with the biggest class counting about fifteen students at a time, and the smallest being made of only two students. Because there is no unified curriculum for the Arapaho instruction, each teacher chooses their own form of instruction as well as topics and materials for teaching. Only one teacher in the observed classrooms included computer technologies in his syllabus using various online resources for creating word games, index cards, crosswords, etc., which he would share with the class for completion either at home or during class. Other teachers relied on handouts and worksheets developed in the community. Lack of instructional resources prompted some teachers to create new activities, and I observed two classes in different schools play popular American games such as Uno, Spot it!, Go Fish and Candy Land in Arapaho. Finally, some schools also employed cultural components in their instruction, which was done by dividing a class period into two components – one for language instruction and one for culture practice (e.g., beading, drumming) or history of the Arapaho nation told in English.

**Arapaho as an index of authority**

As is expected in any classroom, power dynamics in Arapaho classrooms is very noticeable. Teachers expect students to listen quietly and demonstrate their knowledge, leading all interactions. The authority of the teacher is sanctioned by the school and the Northern Arapaho Language and Culture Commission. Although most of the teacher-student interactions are framed and executed in English, students are aware of their teachers’ speaking abilities as they observe the teachers talk with each other in Arapaho and initiate small talk with the students. Nevertheless, most of the teacher-initiated interactions with the students are framed in English, while Arapaho is reserved only for imperatives and commands targeted at students. Students themselves do not engage in classroom activities without coercion, and rarely answer questions before
they are invited to do so individually by the teacher. Students’ comprehension of Arapaho is not questioned here because all of the students have taken Arapaho classes before. Following is an example of teacher-initiated interaction in the Arapaho language class that happened right before a quiz, where the teacher (“Mr. Blok”) gives specific directions to the class in Arapaho, and a student (S1) asks a question pertaining to the instructions in English:

(1) Instructions for a quiz in school B with teacher MB:

1. MB: wo3onohoe niisih’iit
   “Write your name”
2. MB: woow, woow wo3onohoe niisih’iit
   “Write your name now”
3. MB: awu beehotihit ((inaudible))
   ((not sure about translation))
4. MB: woow wo3onohoe
   “Write it now”
5. MB: ok, what I’m telling you is write your names right now,
6. MB: not later, but right now
7. S1: what's the date?
8. MB: the date is the (0.3) what is today?
9. (.)
10. MB: today is twenty second

Although in the middle of a class period, this was a first attempted exchange in Arapaho between the teacher and a student. Despite using Arapaho to give a command, the teacher translates it into English to either ease the students into Arapaho-only discourse or because of an incorrect assessment of their linguistic competence. The teacher’s use of English prompts one of his students to ask a question in English as well. The student, although not invited to speak, was most definitely not invited to talk in Arapaho, which is a reserved mode for the teacher only. This teacher, as well as many others, prefers to use English as a method of instruction, reserving Arapaho only for some commands and interactions.

Such an approach to classroom interaction suggests that Arapaho is an index of authority, and interactions are aimed at achieving specific goals of participants rather than exchange of information. The teachers are the carriers of traditional knowledge through their justification of
their authority to speaking and teaching Arapaho. They construct a social identity responsible for language preservation in the sense of both transmission and protection. By contextualizing the interaction in Arapaho exclusively within the domain of imperative actions, the teachers present the language as a mode of commands, available only to the authoritative social class.

Arapaho in imperatives and other commands is also widely used in the method of language instruction called Total Physical Response, which is an exercise for practicing the knowledge of commands that require physical action using the target language. The partner’s objective is to understand the command and perform the action. This exercise is usually performed in the target language, and it requires a physical rather than a verbal response. More elaborate versions of this exercise include more than imperatives and also can stimulate learning of vocabulary, proper verb conjugations and other aspects of grammar.

Total Physical Response is often the only classroom exercise in which the students speak Arapaho. In my observations of this activity at School A, both students and teachers were involved. That class had two instructors – a teacher (a native speaker of Arapaho) and a teacher’s assistant (who was previously a participant of the Master-Apprentice program). In this activity students were instructed to create a list of ten to fifteen commands set by a template and, while in pairs, execute them. The teacher’s role is to check the list of imperatives before the execution of commands and then to correct mispronunciation. The TA coordinated the whole exercise while the teacher was interacting (in English) with the students. Besides giving helpful feedback, the TA also translates some of the harder commands, especially when the student does not give an immediate response. In other words, it is often the case that the TA would intervene in the interaction to correct and even to interpret the command before the student had a chance to execute it. Nevertheless, it is one of the most active teaching methods observed in the Arapaho classrooms,
and it tends to involve students much more than the recitation of the material or question-answer learning style.

That I was able to observe the Total Physical Response Method only in one classroom is because there is no unified curriculum of the Arapaho language classes. Without standardized curriculum, each teacher decides upon the language proficiency of the students as well as teaching techniques. Students often engage in learning the same language material multiple times at different educational levels. So, while it may be the first time in junior high school that the kinship vocative terms are being taught, the assumption that teachers make is that the students do not know how to say “mom” or “dad” with or without the vocative inflection. As a result, the language is presented to the students as a set of words detached from a context or as an artifact of knowledge making it unusable in actual interaction.

All of these observations suggest that some of the teaching approaches present the Arapaho language as an index of authority. Speaking mostly English in classrooms, teachers speak Arapaho to each other but direct it to their students in the framework of commands and imperatives. The Total Physical Response method, which is used especially to practice imperatives, allows students to try speaking Arapaho for the same purposes as the teachers often use it. As a result, functions of the Arapaho language become limited to indexing the authority of the speaker. The renegotiation of such social meaning happens not only in the choice of the linguistic variety but also in the choice of speaking altogether. As noted below, this functionality and social meaning both can be attributed to the social practice of respect and avoidance relationships.

Decontextualization and reification

The beliefs that learning words in isolation is enough and that one word equals one function seems to be rather pervasive in the language classes. Representation of the heritage language
as a list of decontextualized words and expressions is a systematic approach to Arapaho instruction that facilitates reification of the language or constructs a new realm of the language as an object of knowledge. Many teachers see this method as accommodating language acquisition and the bigger goal of the language revitalization, while manipulation of words and morphological units is not considered a part of the language learning enterprise. Similar to Barbra Meek’s (2010) findings in Kaska, many teachers of Arapaho give a strong preference to teaching students nouns of the language as “carriers” of culture.

A good example that demonstrates such decontextualization is found in the Arapaho culture class taught in School D by tribal elders. At the beginning of the class, they distribute a handout (Error! Reference source not found.) with the vocabulary for the days of a week and tableware. The handout has English and Arapaho names for the words, and their etymology. At the top of the worksheet there is a conversation prompt in English: “Q. What is it today? R. Today is_____. “ During this exercise, the teachers first read out loud the contents of the handout and then explain meanings of the Arapaho words and proper use of the grammatical number. After the explanations, they ask each student individually to read everything on the worksheet, including all of the English translations. If a student misreads the Arapaho, the elders correct him or her. During the class, each student got their turn to practice pronouncing the words, but there was no contextual use of days of the week and tableware vocabulary involved in the exercise; even the conversational prompt was not used.
Besides the lack of the context for the use of the new vocabulary, this exercise demonstrates little consideration for choosing the vocabulary themes. Tableware and days of the week is a rather uncommon combination for learning and the examples of the use of the two in one sentence can be rather comical. I do not intend to speculate on the reasons for such choices, but the implications of this exercise could have negative effects on language revitalization. In particular, this exercise emphasizes few possibilities of language use in interactions or texts, so that students learn that the language is an artifact of knowledge that must not be manipulated and has to stay put in the memory of an Arapaho person. As a result, the execution of exercises like these
promotes the ideology among students and non-speakers that one must begin memorizing words from a dictionary in order to learn the Arapaho language.

Other similar activities in the language classrooms may also include memorization of full phrases, which in Arapaho are often individual words. Consider the following example from the Arapaho language class in School D with teacher “Mr. Gumilyov”, where the teacher reviews previously taught material before a midterm next week.

(2) Review for a midterm in school D with teacher “Mr. Gumilyov” (MG) and student (S1):

1. MG: kooheetnec'koo, kooheetnec'koo
2. (.)
3. MG: at the end of the day I ask you this question. kooheetneeckoo.
4. S1: what time is it!??
5. MG: are you going where?
6. S1: home
7. MG: are you going home, good! (.) heetousihi
8. S1: what's your name
9. MG: good. and an easy one of all too.
10. ((inaudible))
11. MG: where, good
12. MG: hihtousta
13. (.)
14. MG: eich ai eich: hihtousta (.) I was asking about your friend: hihtousta
15. S1: how are you doing?
16. MG: what is he or she doing. heet- tous-tan future tense
17. ((inaudible))
18. MG: heettoustan
19. S1: what are you doing?
20. MG: that's right, what are you going to do. Heeneehekiinee (.) or some would say heeneekhiinee
21. ((inaudible))
22. S1: who is that?
23. MG: hohou
   thank you
24. MG: koowonoohoo, koowonoohoo
25. S1: what time is it?
26. MG: pretty close. look at your watch you say: koowonoohoo
27. S1: is it time to go?

Even though it is an example of review material before an exam, the language is presented and used as a set of individual words. Moreover, Mr. Gumilyov does not use these phrases in
a larger context: each of these phrases is read alone without any sort of connection between them. Students in this class do not even have a chance of practicing these phrases in small conversations, and all they are required to do is to memorize the phrases and to be able to pass the exam. This example, as well as the previous one, displays the objectification of the Arapaho language and its separation from a sociocultural context, all which deprives the language of its functional domains.

Using memorization of individual words in language instruction contributes to an understanding of the language as a form of detached knowledge. The Arapaho language has become an artifact of knowledge and an object of instruction; in other words, it has become reified. The term “reification” is tightly connected with the Marxist theory of consumption and social change. Specifically, it explains the change into objective measurable things that the intangible social events, relationships, talents and ideas can undergo. The term is derived from Marx’s (2010) conceptualization of the power of labor and commodity as a final product of labor, which was further reinterpreted by Georg Lukacs as a form of coercion for the sake of profitability (Honneth 2006; Lukacs 1923). This analysis of the reification suggests that ideas, talents and values can be reconsidered as objects of possession if they can contribute an economic usefulness to its owner. On one hand, reification is the reflection of social relationships within the society, and, on the other hand, it can be analyzed as a conscious response to class inequality and limited access to tangible commodities. Reified ideas are introduced as commodities and eventually create a marketplace, at which they can be exchanged for a profit also creating a new relationship between an idea and capital. What has been symbolic capital in the eyes of the owners of this initially non-commodified expression of knowledge becomes social capital on the market of intangible objects.
There is no doubt of commodification of the Arapaho language, at least based on the presentation of the language in schools, the conversations with the tribal members and the political practices of the tribe. By teaching isolated words and phrases, teachers begin to construct the belief that learning a language means memorization of individual words, while speaking these individual words means speaking the language. Such perception of language learning becomes more attractive to students who begin to disregard learning the grammar of the language and practicing speaking Arapaho in conversations. However, the bigger implication of objectifying the language is that it becomes a tangible possession that may imply social value to its “owner”.

**Arapaho as an index of identity**

The increasing social value of the Arapaho language is well observed in a common language ideology that connects an ability to speak this language with Arapaho ethnic identity. Before the language shift, Arapaho used to be an unmarked linguistic variety used in every day interactions between the tribal members; it became a symbol of tradition and ethnic identity after English had become a more common language. This led to a change in the indexical value of the Arapaho language: some tribal members use Arapaho instead of English to reference their Arapaho identity. The social value of the Arapaho language is in its referentiality to the ethnicity and cultural heritage of the Arapaho tradition.

However, because only the elders are proficient in Arapaho today, the language now has become an index of the advanced age and life experience of the speaker. This social status is exclusive to them due to their linguistic competence, making the Arapaho language a form of symbolic capital (Bourdieu and Wacquant 2013). The elders manipulate it with the language ideology of pure Arapaho language that limits an ability of many semi-speakers to use Arapaho because they are more prone to making mistakes when speaking or writing. Even when Arapaho
high school students express their desire to use the language in contexts other than the language classes in school, they are constrained from doing so by this language ideology. In fact, students in one of the schools told me that they like writing hip-hop lyrics in Arapaho but they cannot make their music and lyrics public unless the elders approve it. Luckily, there are elders teaching the language classes in that school, so the students have the opportunity to get their lyrics checked. The social position associated with the ability to speak Arapaho is convenient for the fluent speakers and rather advantageous. However, implicitly it hinders the efforts of restoring the language in the community.

Arapaho as the index of advanced age is also seen in the belief that people of certain age *should* be able to speak Arapaho. The next example follows the rationale of such understanding and demonstrates how it is a popular belief. This conversation was recorded during an Arapaho language class, where the student (S2; a non-Indian teacher of Business and Economics in the same school) asks the Arapaho language teacher (“Mrs. Akhmatova”) about the instructor of their Arapaho culture class (“Osip Mandeshtam”):

(3) Excerpt from Arapaho Language class in school D, with teacher MA:

1. S: he’s a cool guy.
2. (.)
3. MA: Wayne?=
4. S2: =uhm
5. S: yeah
6. S2: what about uhm=
7. MA: =yep, he tea- he teaches at the college
8. S2: does Osip, does Osip speak a lot?
9. MA: Osip who?
10. S2: Mandelshtam?
11. (.)
12. → MA: he ↑should~=
13. S: ((laughter))
14. S2: =when he’s, you know when he’s around=
15. MA: =I never really heard him speak it
16. S2: =out of the school, you know (.). when he’s talking to his family or=
17. MA: =I don’t know
Everybody in the class knows the referents of this discussion, but only the teacher and the two non-Indian students are involved in the conversation. Other students present in the class, who identify themselves as “Arapaho”, prefer not to talk about the linguistic abilities of elders. It is a provocative question that implies that the very teacher of the school’s Arapaho culture class may not be a proficient language speaker. However, the response that this question gets is merely a recommendation and a guess (“He should” and “I think he does”) rather than an answer. Nevertheless, it reflects the common belief that people of certain age “should” be able to speak Arapaho.

This language ideology additionally implies the understanding of access and appropriation of the language. If the heritage language has become indexical of a certain social group, it is likely that there might appear limitations as to who can [read: be allowed to] speak this language. Seeing and hearing exclusively elders use this language daily, students of Arapaho classes may take this limitation as a cue to avoid this language for they are not officially authorized to use it.
It is precisely what Meek (2007:36) reports from the Kaska community, where Kaska language spoken by the elder matriarchs is avoided by young generations as a part of respect relationships.

The avoidance of speaking Arapaho by students was noticed in almost all of the classes, and can be attributed to the tradition of respect (or avoidance) relationships. These relationships, which are based on the cross-generational, cross-gender, cross-family avoidance, define interpersonal communications in the Northern Arapaho as well as in many other Native American communities and result in the avoidance to communicate or silence (Cowell 2011). Because of certain expectations of actions and the commonality of avoidance between the elder and younger kinsmen of opposite gender, these dynamics may often be addressed as respect relationships (Three Affiliated Tribes: Mandan, Hidatsa 2011; Brant 1948). Moreover, according to Cowell (2011) these relationships build a context to the social practice of storytelling and establish the social structure within the performance and the narrative. In that case, the dichotomy of joking and respect is learnt by the youth through in the narrative tradition and is carried out in their interactions with the Arapaho speakers as well as in language ownership and intergenerational language transmission.

In language learning discourse, however, avoidance of speaking is not a desirable practice. To make sure that students practice speaking Arapaho, an exercise of “performative speaking” has been used in many classes and has spread to other social contexts. This practice is a learning technique that requires students to produce a short self-introduction all in Arapaho, the goal of which is a display of Arapaho identity through their speaking ability. It is primarily used with students of low proficiency levels, and it involves writing a paragraph about oneself in English, translating it into Arapaho with the help of the teacher, memorizing it, and reproducing it in class along with other students. It is important to note here that this is a reproduction of memo-
rized text rather than a planned speech because students at this learning level often do not have the ability to produce coherent and connected phrases by themselves.

The utilitarian value of this exercise is highly questionable: because students in the class often know each other, use of this self-introduction in a class seems to be done purely for the purpose of practicing speaking. Outside of class, introductions are typically done by another person who can claim the acquaintance with the speaker. The reason for the use of this new performance genre, then, is its indexical value of claiming ethnic identity and access to the language. Limited interactional settings for the use of such a form of the language have prompted many Arapaho tribal members, who do not speak Arapaho fluently, to use this practice to give speeches at tribal meetings. A semi-speaker or a non-speaker may write and translate a speech in Arapaho and either memorize it or read it during an address to their community. In this performance, the speakers display their affiliation with the tribe using the indexicality of the chosen language, and may even claim authority just by using this language.

This practice is very common and did not stay unnoticed in the circles of fluent speakers. Since most of the fluent speakers are elderly, who did not acquire reading and writing until later, one can often hear dissatisfaction and criticism of this practice. Although the fluent speakers agree with the content of these speeches and claim that the language itself is grammatical and ‘good’, they criticize the inauthenticity. The following example is taken from a conversation between elders about the ability to speak the Arapaho language. This excerpt is only a monologue part of the larger multi-speaker conversation. All of the participants, including the speaker in this part, are elderly Arapaho tribal members fluent in Arapaho who hold official tribal positions:

(4) Excerpt from 49b of CSILW Arapaho Documentation Project:

<table>
<thead>
<tr>
<th>Original in Arapaho</th>
<th>English translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>'oh beebeet heetbi'-heetneihoo-</td>
<td>&quot;But they won't be</td>
</tr>
</tbody>
</table>
wuuni hi'eeneniiitoon, heetnehoowuwheetini3etiitoon.

2. 'Oh beebeet huut nee'eenee3oo'.

3. Noh, noh nehe' toonheetniini neyeitiit, 'oh huu3e' he'iitne'i, huu3e' heetne'niitonei'eehek

4. toonhei'iini heetneesiiini, het-neihoowewntoono' toon- too- toonheenesiini, toonheenesiin-eyeitiit.

5. Howoo huutiino hini'iitiino hiseihiitei'yoo, huutiino heetini neeceheenetiitooni',

6. neeni'- neeni'- neeni'[in]ihiit.

7. Hee3neeneeni'iniihit.

8. Nih'eenei3oobeit.

9. Oh nihbi'neeyeitiit.

This speaker’s irritation is caused by the fact that many of the public speeches are translated into Arapaho with the help of elders, memorized by the speakers and may not mean exactly what was supposed to be said. This practice has an inadvertent effect on the language ideology and the Arapaho language itself by delimiting the functions of the language: it limits language proficiency to a performative gesture of the language as an identity. Such speeches only manifest the young community members’ reading abilities that are often lacking among the elder fluent speakers. Performative speaking requires students to practice pronouncing Arapaho rather than creating spontaneous utterances. In other contexts, it allows semi-speakers to achieve some degree of prestige and admiration, but since the Arapaho elders are interested in preserving their special rights to linguistic authority, the performative speaking is highly criticized and discouraged.
In addition, this practice raises an important question of literacy. Because Arapaho did not have a writing system until the second half of the 20th century, most of the current elders learnt Arapaho in the oral tradition. Literacy has now become an ability associated with the identity of the Arapaho learners who may be proficient in reading and writing but lacking necessary communicative knowledge. This ability discriminates between all of the Arapaho speakers, so a fluent speaker cannot become a teacher in schools unless he or she is literate. Literacy has also become indexical of the younger age of the speaker – mostly those who are younger than 60 or 50 years old can claim this ability. So another attitude about the language that is often voiced by the community members is its “oral nature” and the idea that “the Arapaho language cannot be written”.

My observations show discontinuity in the potential goals of language revitalization that emerges in the mode of instruction and very little encouragement from the teachers. On one hand, the teachers present the language as a mode of commands, available only to a certain social class that has the authority. This allows students to associate Arapaho with achieving goals or “getting things done”. On the other hand, framing the whole language instruction around the dominant language allows students to grow into the idea that while Arapaho can be used for egocentric actions, to really get a point across, English must be used. Additional discontinuity arises between the goals of the students and the teachers due to the presence of official testing and grading: the teachers see their role as being responsible for teaching the students how to *speak* Arapaho, whereas the students see their goal as being competent learners.
**Algonquian language websites**

Several Algonquian websites stand out as the most effective and longstanding in the context of language revitalization. For this analysis, I chose fourteen websites (see Appendix 1 for web links), following the work of Marie Odile-Junker, who, besides her input in Algonquian linguistics, developed a plethora of digital electronic resources for language revitalization in Canadian communities. I critique and analyze these online resources using some Computer-Assisted Language Instruction Consortium (or CALICO) methods in order to suggest an appropriate model for further development of the *Arapaho Language Project.*

CALICO evaluation methods are based on the research of Philip Hubbard (1996; 2006) and focus on three main components of Computer-Assisted Language Learning (CALL) programs: approach, design, and procedures. *Approach* is a pedagogical category, and it most generally concerns the language ideologies and SLA beliefs teachers use to teach a language. *Design* refers to the functions of the language resources; it defines teachers’ and learners’ roles and provides guidelines for learning a language. The components of design include a learner’s profile (intended audience of the CALL materials), syllabus (goals of the CALL program), program focus (the linguistic objective), learner focus (skills emphasized by the program) and technical tools (hardware and software used for language learning). *Procedures* take into account design and approach and decide on the types of activities being included in the CALL. Depending on the components of a CALL resource, it can be evaluated to its best potentials in implementation. The main purpose of evaluating a CALL program, according to Hubbard (2006:1), is to judge its appropriateness with regards to the target language, find ways of its effective implementation, and to assess its degrees of potential success.
CALICO (2006) additionally classifies the activity types as follows: instructional (e.g., tutorials, drills, text reconstruction); collaborative (e.g., games, simulations, discussion forums, peer group writing); and facilitative (e.g., dictionary, database, verb conjugator, spell or grammar checker, authoring system). The features emphasized in the activities are linguistic focus (e.g., discourse, syntax, lexis, morphology, spelling, pronunciation); language skills (e.g., reading, listening, writing, speaking); sociolinguistic focus (e.g., information gathering/authentic tasks); relationship to the curriculum (i.e., supplementary, complementary or central). I will use this CALICO classification to assess the appropriateness of each website to language revitalization and examine the language ideologies reflected in each of the resources.

Before I begin a discussion of these digital resources, I would like to note some technical issues persistent on all of the websites. It is important to understand that studying any Internet technologies presumes working with constantly changing contents. During my research, I have been noticing modifications on some websites that added lessons, games, etc., whereas other web pages were abandoned or moved to new domains. My analysis became a work in progress, and it is possible that today the contents of these websites do not match the descriptions offered here. In addition, there are a number of websites that restrict public access and require users to officially enroll in classes and pay the tuition. As a result, I was able to access only the “Home” pages of these resources. Finally, all of the websites exhibit some technological issues. Often the contents do not display properly, have “broken” links, redirect to non-existent pages or simply do not work; these technical issues are unavoidable because most of these websites rely on minimal and short-term grant funds as well as volunteer help. Thus, instead of analyzing functionality issues, I will avoid any of the descriptions of inaccessible resources and emphasize on the materials I could access.
**Facilitative websites**

Facilitative CALL initiatives are the ones that only facilitate language learning by providing additional language materials such as online dictionaries, databases, and audio or video collections. The Algonquian websites that fit this category are *Online Cheyenne Dictionary* and *Doug Ellis Audio Collection*. These websites are primarily designed to share learning resources rather than to create them. They do not provide grammar explanations, and explicit language instruction is limited. Instead, these web pages offer materials previously developed for language revitalization. Although the *Doug Ellis Audio Collection* stores audio resources that provide language instruction, I have categorized it as facilitative because users may not manipulate any of the materials and can only access these resources through downloads.

The *Cheyenne Dictionary* is a kind of web resource that is intended to supplement individual or classroom learning, given the users know how to read and write. It is a dictionary developed with LexiquePro software that offers a search function, a choice to switch between languages, illustrations and audio-recordings associated with every word in the system. Verbs supply examples and show possibilities of conjugations and their use in a sentence. Language instructions are not provided on the *Cheyenne Dictionary*, so I will not discuss possible ideologies a dictionary may portray. However, I will note that providing a dictionary to facilitate language learning, the developers of this website, and possibly the developers of Cheyenne language curriculum, emphasize literacy as a key aspect of language learning.

The other facilitative web resource, the *Doug Ellis Audio Collection*, provides a large collection of audio files intended to develop pronunciation and introduce learners to the narrative traditions of Cree. The audio drills are accompanied with supplementary instructions in a PDF format and feature conversational phrases that need to be repeated after the record. In one of his
first audio recordings, the instructor explicitly states that writing is secondary in learning a language, so he advises students to refrain from acquiring Cree syllabary but suggests to follow English transcriptions at first. This use of pronunciation “drills” places a focus on correct speaking rather than speaking as a way of producing social meaning. Additionally, lack of contextual information prevents from learning Cree as a language for real conversations and suggests that phrases can be used regardless of the context. This website, thus, shows that literacy, even if significant to some types of language acquisition, is not central and can be avoided on the web.

The narratives stored on the Doug Ellis Audio Collection comprise a library of five hundred stories told by native speakers in Cree. These stories are categorized based on their topic and information in English regarding the contents, possible contexts and the teller. Although the stories are not transcribed in the syllabary nor are they fully translated in English, they may still be fully utilized in classrooms: given the status of Cree, teachers using these files are usually competent enough to either already know these stories or to provide supplemental materials. In other words, only the competent speakers of this language are able to use these files. The supplementary nature of this resource, little language instruction and emphasis on only listening and speaking limit a potential use of this web resource in a class.

Limited technologies used on these websites restrict the kinds of procedures available for the language learning: learners’ linguistic skills are not accounted prior to entering the website and, thus, the websites do not show how to improve them. Facilitative nature of this websites requires presence of an actual instructor to help the learner in acquiring the language. Thus, facilitative procedures should be considered additional to other instructions provided by the language learning materials on the web.
**Collaborative websites**

Collaborative resources use high-tech initiatives for the inclusion of more than one student into the language instruction. Central to this kind of a procedure is the implementation of interactive technologies that use a multimodal input (e.g., keyboard, mouse, audio, video) allowing active language learning by the means of games and feedback with the website developers. The collaborative Algonquian websites are the ones that can be regularly accessed to attend language instruction (*Learn Ojibwe Online* and *Learn Cree Online*) and websites that offer interactive learning (*Algonquian Linguistic Atlas, Introduction to Blackfoot E-learning course* and *Anishinaabemowin Today*). Additionally, *On the Path of Elders*, even if not a language learning resource, can also be assigned to this category for its inclusion of traditional oral narratives in Ojibwe. Because these websites offer more than a simple collection of resources, they demonstrate language ideologies in their approach to language instruction.

The inclusion of more than one student at once can be achieved by restricting the access to the online instructions. So, *Learn Ojibwe Online* and *Learn Cree Online* do not share any linguistic resources with the public; instead, they allow each user to enroll in their virtual classroom for online video classes taught once a week at a specific time for free. On one hand, this restriction to the language instruction helps to control the accessibility of the language and protect the knowledge. On the other hand, it also implies that learning Ojibwe or Cree needs to be approved and mandated. The effects of such an ideology may contribute to language shift while attempting to aid the language revitalization.

The language instruction on these two websites is offered as a response to the language loss in Ojibwe and Cree communities. While the elders are reported to be the “keepers of the language” (Toulouse n.d.), the younger generation is understood to be responsible for the rever-
sal of language shift, and the first step towards this goal is language learning. Providing the online language instructions, the authors of these websites assume that Cree and Ojibwe can be learnt without full immersion of a student in the target language: these classes use English as a matrix language for instruction, leaving Cree and Ojibwe as a topic or a subject of learning. Without presenting the heritage languages as linguistic varieties that can be used by different people in different contexts, these websites risk displaying Cree and Ojibwe as dead languages of tradition.

*Algonquian Linguistic Atlas* is an example of a website that portrays the contemporaneity of the languages it intends to teach – dialects of Cree, Michif, Innu, Naskapi and Atikamekw. Although this website does not teach how to interact in these languages, it displays variation in its dialects. The atlas is interactive and allows its user to choose a topic, a phrase and a location to hear how the phrase is spoken in a particular dialect. A pop-up legend specifies the speaker, the dialect and grammar difference of the dialect, while a teacher’s guide supplements audio, adding some of the topics and vocabulary of the dialect and commenting on grammar and pronunciation of the language. Some resources on this website are trilingual (English, French and one of the dialects of Cree) manuals of conversational styles of the languages, which provide basic phrases that may be used daily both in traditional (“I am leaving by a canoe” or “I am going moose-hunting”) and contemporary (“Can you take me to an airport?”) contexts. However, some of the language materials are decontextualized and compartmentalized sets of words. For instance, in a manual for conversational Woodland Cree such units as “Seasons”, “Location and Travel”, “Clothing” and “At school” only provide word-lists without showing their use in sentences. Such a limitation of the environments, at which the language is offered to be spoken,
takes away from the provisions of the contemporary discourse and suggests that some contexts may be better to be talked about in English.

Because this web site is not instructional, a fluent speaker of one of these languages is the imagined user. Sharing the materials developed by different communities allows promoting language revitalization and collaboration between these communities. The website adheres to the awareness of linguistic diversity in Canada and celebrates it by sampling each of the Cree dialects. Nonetheless, there may be an overt attempt to erase differences and create homogeneity of the Algonquian communities. Since this website features only Algonquian languages, it covertly suggests a possible community of Algonquian speakers rather than indigenous Canadian populations. Perhaps, this is a trend toward linguistic homogenization among Cree speakers that can be achieved using the data and lessons from this web page. In sum, this web page offers a sociolinguistic set of skills for its users by focusing on contexts of language use and linguistic variation rather than on language instruction, which is quite unusual for revitalization materials.

One of the approaches to presenting conversational materials is through an introduction of culture and history associated with the language and instruction on how and when certain expressions may be used. *Introduction to the Blackfoot E-learning course* attempts to motivate the language learning with a broader context by incorporating Blackfoot culture and historical lessons into video recordings of pronunciation and vocabulary. Resources on this web site are separated into modules covering a particular topic. Topics emphasize some basic grammatical notions such as animacy and number and some of the basic vocabulary such as plants, food, clothing, seasons and greetings. Each of the lessons is a video recording of an instructor explaining the nature of grammar rules or introducing new vocabulary. This instruction especially focuses on pronunciation of the words; in fact, some of the parts of an instruction are played in a loop so
a student can hear and practice what is being said. The instruction on this website is based on visual and aural information and does not promote language skills of reading and writing. New words in these lessons are not written but are accompanied by a picture of an object. A voice recognition system helps students to practice pronunciation and repeat after the instructor: when a word is mispronounced, the website’s software recognizes it and restricts further progress in the module, so students practice until their pronunciation matches the teacher’s example. Each module ends with an interactive game and interactive quiz where students need to match audio with a picture of an appropriate object.

This web site has a number of limitations that prevent it from being a cohesive source for language learning. One of the biggest problems is the lack of a sociolinguistic context for language learning; instead, language is presented as consisting of individual words, and sometimes phrases, rather than situated in culture and history of the community. The vocabulary offered in such a method of instruction includes some basic everyday objects which may rarely be used daily. The lack of structured examples weakens reasons for learning this language as a form of communication and production of social action but reserves a function of the language as a repository of human knowledge. Additionally, presenting Blackfoot only with the word or phrase in focus aggravates reification of Blackfoot: this language becomes a subject of study rather than use, whereas English is the language of communication. Finally, this web resource is most likely designed to be a central tool for language learning, which could be used in classrooms in place of language instruction. Introduction to the Blackfoot E-learning course relies on the dominant language and limits the target language to decontextualized words or phrases, thus, it can be used to substitute language learning in classrooms, but also it presents the heritage language as a part of history separated from the contemporary life.
Anishinaabemowin Today, contrary to the previous website, emphasizes the communicative function of the Ojibwe language and requires every student to find a partner in achieving the goal of speaking the language. Devoting fifteen minutes a day would reportedly help the students not to lose contact with this language and help them recognize phrases with time. Unfortunately, lessons right now are limited to only the first five days of the program. Nonetheless, they introduce the learner to the conversational style of the language through audio and transcriptions and allow the student to test their knowledge in games, quizzes and flashcards. Relying on the interactive method of language learning, this website does not provide instruction of the grammar of the language except for introducing a question marker. The biggest limitation of this web site is that it does not promote creativity while speaking Ojibwe, and students’ knowledge becomes restricted to the phrases available here. Once again, this website does not require a teacher or a classroom to stimulate language learning.

“On the path of the Elders” is not a language-learning portal, but it still can be categorized under the collaborative type of language resource that teaches the history behind the events of Treaty No. Nine of the Mushkegowuk and Anishinaabe people with an interactive role-playing game. Although it barely focuses on the language, all of the elders in the game tell stories in the heritage language. This game, thus, creates an image of the Ojibwe language as an echo of the past, as a style of tradition, and as a voice of the elders. Such a limitation can have a crucial effect on language revitalization because it creates an association between linguistic tools and social behavior or even social identity. Reserving speaking ability for one social group restricts knowledge of the language only to those people and creates disaffiliation between community members of different language proficiency levels which can be turned around by extending contexts of language use to some contemporary domains. This example illustrates that subtle
language ideologies can be present in the materials that only use language to create a certain ambiance and may reflect the ideas of the language in the community.

Neither of the websites offers explicit language instruction; instead, they require the user to be an active learner by exploiting all of the possible resources, test their knowledge of newly learned material with interactive quizzes and games, and allow users to approach the learning of lesser-developed languages without help of a formal instructor. The collaborative nature of these resources suggests that a language does not necessarily have to be learnt in a traditional classroom setting and some language proficiency can be achieved by the means of online collaborations with other learners. This also means that the audience for these websites is restricted to young learners (grades five through ten), allowing the developers to incorporate games into language instruction. Nonetheless, I have not yet found sophisticated language games where a player may fully immerse him- or herself in the game and the language at the same time.
Instructional websites

The final categorization of the websites refers to the ones that offer a plethora of approaches and focus on digital instruction of the language. Instructional CALL resources rely on inclusion of language tutorials, such as grammar and conversation lessons, pronunciation drills and text reconstruction and some may also contain collaborative and facilitative resources. For example, these websites often share linguistic resources such as audios, videos, manuals, school curricula and digital versions of descriptive grammars as well as various interactive games. A “Lessons” section on these websites offers a variety of language instruction materials previously developed by the community or linguists, which address some of the basics of conversational phrases (e.g., greetings), basic vocabulary that refers to natural phenomena (e.g., weather or days, seasons or animals), and some of the vocabulary to describe food or clothing. While this selection is pretty standard across all of the websites, some additional topics may include hunting and fishing, and sometimes vocabulary for new technology.

Examples of using interactive technologies come from the East Cree and Anishinaabemda pages where games divide the vocabulary in to thematic units such as transportation, birds, clothing, weather, shelter, shopping etc. These units also incorporate some of the grammar of the Southern and Northern dialects of East Cree and Ojibwe. So in the unit for transportation the objective of the game is to memorize the animate or inanimate distinction in this semantic category and choose a correct form of the verb to match the noun. Some of the games are story-games without translations that tend to review the student’s understanding of previous units and that allow students to practice their vocabulary and grammar by filling in gaps in the text. Nonetheless, these games provide an opportunity to contextualize their knowledge of individual word-lists and grammatical rules and possibly use it in composing texts and stories.
This emphasis on portioning the language into individual themes reinforces compartmentalization of the native language, suggesting that speaking may only happen in these contexts. This is a very common instructional practice that can be observed virtually in any revitalization materials. On one hand, compartmentalization is a common approach in many second language acquisition methodologies that allows teachers to introduce vocabulary and grammar relevant to a particular thematic category. On the other hand, in language revitalization discourse, compartmentalization does not achieve the same educational goals due to the lack of learning resources: the vocabulary introduced in these units does not repeat anywhere else, and students may get an idea of exclusive use of the language in these specific contexts.

Both of these websites are striking examples of using all of the possible digital resources for the purpose of language revitalization. The variety of vocabulary creates a context for using Cree and Ojibwe in a range of situations without limiting it solely to more traditional domains. Of course, the endangerment status of Cree and Ojibwe is slightly better than the status of Arapaho, Blackfoot, Cheyenne or many other Algonquian languages, which allows such language resources to have slightly different objectives, and target language maintenance rather than revitalization. So, some Cree and Ojibwe websites do not provide translations in English of all of their materials and some even have bilingual interfaces. The option to change the interface of the website to Cree on East Cree, interactive games that allow students to test their knowledge of individual vocabulary items and an ability of forming full sentences are beneficial in creating a connection between the language and different social domains of interaction. Anishinaabemda also provides some information with regards to how some of the words for new technology are thought of and gives examples of phrases that may be used on the phone while leaving a voicemail.
Language also becomes a part of a community through inclusion of such sections on a website as “Forum” and “Guestbook” that allow users and visitors to discuss web-content or upcoming community events, share materials, and make friends. Information about upcoming language camps for Ojibwe also generates opportunities for acquiring language in an organized setting with other students. The goal of becoming a fluent speaker is common among users of both of the websites, and such options as getting in touch with other learners can have a positive effect in language learning. Thus, emphasis on community involvement encourages language learning in the creation of additional social domains of language use.

The biggest drawback of these two websites is their limited topics of stories, read-alongs, sing-alongs and grammar games. Specifically, these pages do not provide examples of Cree and Ojibwe in contemporary conversations (except for voicemails) and may include references to social configurations, contexts of language loss and revitalization, or inter-cultural communications. Of course, an argument against this approach can be the fact that most of the language resources on this web site are oriented towards younger learners; nonetheless, omission of such context may produce an attitude towards this language as an echo from the past, which cannot be restored even with the most technologically sophisticated learning games.

Limitation in language use contexts leads to essentializing language learning to memorization of specific words of phrases, and can be found on Potawatomi language websites, such as Potawatomi Language and Neshnabek. In fact, in its children’s section, Neshnabek provides such resources as children’s songs, PowerPoints with the vocabulary limited only to animals, colors and numbers. Additionally it also has a section of words and phrases for counting money, fishing and hunting with some instructions on subjugations. Similarly, in its “Lessons,” Potawatomi Language gives partial instruction on grammar with just a few examples and no means of exer-
cising that knowledge. Both of the websites also have a section restricted to enrolled students of the language, so *Neshnabek* has online classes for which the users of the web site have to sign up and pay tuition of $10 per week or $408 per year. Online classes, as described on the home page, follow a schedule and are based on “seasonal activities of the Potawatomi” (Perrot n.d.), and are taught by means of a podcast. Similarly, *Potawatomi Language* offers two online classes in which language instructors closely observe the work the students do online. These classes differ in time goal – one of them is “Learn-at-your-own-pace” and another one is an 18-week course. I was not able to access either of the online classes to do further analysis.

Different types of linguistic resources of Ojibwe and a slightly different approach to sharing them are presented by *Noongwa e-Anishinaabemjig* which puts forth the indigenous community as the main audience. Right as the user first opens this web site, they notice that the home page features up-coming events and news about the community. A “Community” page additionally provides information about recent projects and celebrations with descriptions in English and Anishinaabemowin (or Ojibwe), slideshows and audio-recordings. These events are not restricted to only traditional celebrations and gatherings; instead many of them are informal gatherings, camps, dinners and academic meetings. By using Ojibwe during all of these events and sharing the materials afterwards, authors of the web site propose a legitimacy of this language outside of the traditional interactions.

Similarly, in the “Lessons” section, which originally was designed to follow the schedule of Ojibwe classes at the University of Michigan in Ann Arbor before they were canceled in 2013 (Noodin 2014, personal communication), the authors demonstrate that the language is alive and changing. Besides using the same vocabulary lists and grammatical emphases as the other websites, *Noongwa e-Anishinaabemjig* takes account of possible variations in speaking Ojibwe by
providing the examples of three different speakers (male, female and a child) saying the same phrase. The lessons additionally cover such current issues as American holidays (Halloween, Thanksgiving, St. Patrick’s day), politics, dating and powwows. Besides traditional songs of powwows, “Songs” features a number of popular American tunes translated in Ojibwe. Despite the fact that more contemporary linguistic resources are still scarce, authors appeal to the language as a possible tool for accomplishing social work and broadening potential contexts of this language for its learners. This is also achieved with public advertisements of these web resources that allow users to “share” their favorite pages by the means of different social media. In other words, Noongwa e-Anishinaabemijig offers an approach to using the web resources that extends language learning to broader contexts and, most importantly, involves the community.

Although all of these websites seem to be rather complementary to classroom instruction, they still offer sharing the page with other community members by the means of social media and spread the awareness of this resource. The instructional type of language websites covers all bases by facilitating language learning with additional resources of language revitalization and providing interactive collaborative ways of testing the knowledge and engaging in community events. The last one seems to be especially pervasive in the instructional websites, which indicates an approach to language revitalization through the inclusion of the whole community to assist the goals of language revitalization.

In other words, two main trajectories are seen in the approach to language teaching of the Algonquian digital materials. On one hand, in contexts of language instruction and testing linguistic comprehension, language is presented as a code for transmitting information. In these cases, following language contents such as grammar, vocabulary, pronunciation and writing supplements classroom instruction and is deemed sufficient for knowing how to speak. On the other
hand, some interactive materials, especially the ones that emphasize the history and tradition of the language, may be counterproductive to the goals of revitalization as they prioritize social groups and interaction contexts associated with tradition and history. Using interactive language learning initiatives may contribute to providing some contemporary conversations and dialogues.

The biggest problems of these resources reiterate some of the issues observed in the Arapaho classrooms. So, with only a couple of the resources featuring multilingual interface, framing of the language instruction in English is frequent and leads to objectification of the language. Additionally, the reification of the indigenous languages is achieved with the emphasis on memorization of the isolated vocabulary and limited contexts of language use. The websites that avoid this issue contextualize the information in a cultural framework, referencing the tradition and history by the means of oral narratives, which also produces an ideology of unchanging character of the heritage language. One of the Ojibwe web pages steers away from this ideology by including modern narratives: by providing contemporary songs in Ojibwe, authors respond to the requests of the community while also showing a possibility of using the language in modern discourse. Overall, the analyzed resources rarely targeted producing new language speakers who know how to manipulate language structures in the production of meaning. Instead, the goal of most of the websites is to assist language learning initiated in class.
The Arapaho Language Project

The Arapaho Language Project was created by linguists of the University of Colorado at Boulder to assist in the revitalization of the Arapaho language, in particular to “augment classroom learning” (Cowell, personal communications). Today with the help of the Center of Indigenous Languages of the West, the website features a variety of linguistic resources offering grammar lessons, materials for bilingual education, Arapaho-English dictionary and some narratives to anybody with access to the Internet. Technologically, this project may seem less elaborate in comparison to some other Algonquian online resources mainly due to the lack of additional interactive resources, lack of additional stimuli (such as graphics) and minor problems with links. The contents of the website are still under development but already present a helpful tool for introducing one to learning the language. The Arapaho Language Project is quite different from many other online resources because it actively engages in the dialogue with existing language ideologies and offers a different approach to learning the language than what can be observed in classrooms. This section will describe the Arapaho Language Project from the point of view of usability and will address major language ideologies displayed in the content of the website. Finally, I will also discuss attitudes and impressions of the website among current learners of the language.

Technological aspect of the Arapaho Language Project

In the categorization of the language resources, the Arapaho Language Project can be identified as an instructional resource that also provides some facilitative activities. Functionally, this project is intended to facilitate language revitalization, share the materials, and supplement classroom learning, all of which is done primarily with the use of English. Visually, it has a simple design: each page features the Arapaho flag in the top left corner, a banner with the project’s
name and logo in the top center and some links to Arapaho glossary, pronunciation, table of contents and sections along the left margin; the body of the website is located in the center, and on most of the pages the text lacks special formatting. The website lacks some of the most common technological innovations for sharing the linguistic resources and presents opportunities for further development. While some weaknesses are the results of the web design, others can be attributed to the intentions of the main content features of the project such as facilitation of classroom learning; most importantly, all of these weaknesses must be imputed to very limited funds that support the project and even more limited human resources that allow these mistakes.

The website’s technological aspects can be discussed with regards to the drawbacks (or mistakes) and benefits. Some of the website’s slips include an incorrect image of the Arapaho flag; a missing link on the main banner that is intended to bring the user “Home”; links to the lesson sections that do not specify their purposes; links to the parts on language use, additional resources, and bilingual materials are absent on the bar on the left and can only be accessed going back to the table of contents; and, finally, the website lacks interactive methods. By interactive, I mean the kind of program design that stimulates simultaneous observation, response and input from the user, the latter of which also triggers appearance of new information connecting the concepts presented at first. Whereas the website employs hyperlinks to connect information, even on the exercise pages, it does not solicit a response from the user. Nonetheless, one of the major advantages of this website is the use of more than one perceptive stimulus. Lessons are not just visually accessible with text, but some components have attached audio and can be listened to. To access an audio, the user needs to click the link, which transfers him or her to the page with the audio recording that can be played, paused, forwarded and downloaded but it cannot be
accessed at the same time with the text. In other words, while the *Arapaho Language Project* provides aural and visual materials for language learning, it does not explore interactivity.

Some modifications need to be made to enhance presentation of the website. Fixing the minor problems discussed above can be a first step in attending to the condition of this linguistic resource. To make this project user-friendlier, the page may include some minor, inexpensive interactive materials. Adding some imagery, whether it is computer graphics, photos of community members or, perhaps, videos, can boost the overall look of the website, encourage younger learners and link the page to the community. Finally, following steps of other successful language revitalization projects, a social media button could increase awareness of this valuable resource in the community.

**Language Ideologies in the Arapaho Language Project**

Opening the main page of this website, the user is greeted with short instructions, a list of available language materials, and acknowledgements to those involved in this project. The project developers invite any speaker of Arapaho to contribute to the development of this website by submitting language lessons. Bold typeface reads that the Arapaho Language and Culture Commission have approved all of the materials on the website. While a statement like this introduces to the notion of the authority of a fluent language speaker, it also pays respects to the speakers of the language. Although this statement does not define the rules of dissemination of the language materials, it implies the necessity of an official approval and may even raise an issue of authorship of the Arapaho language. On the other hand, such an overt statement also grants an authority to the website and suggests that all of the materials presented here are authentic. Socioculturally permitted norms are, thus, reproduced on the website so that the learner can absorb the materials officially intended for language learning and appropriate for learning Arapaho in particular.
In a short description of the functions of the website, authors advise the user to follow the site’s sections in order to maximize learning. Although the website claims to focus on teaching vocabulary and some grammar by reading and listening to phrases, it does not have a vocabulary section per se, nor does it offer common vocabulary items in the exercise sections; instead, lessons focus on productive manipulation of the grammatical forms, and most of the exercises and examples use the same vocabulary over and over. Focusing on manipulation of the language allows the Arapaho Language Project to avoid the decontextualization approach used in Arapaho classrooms and by many other Algonquian websites while teaching how to be creative with the rules of grammar. Thus, following the sections of the lessons, users can also learn how to apply some of this material in a meaningful conversation.

Proceeding to the first section of the lessons, the user finds that each lesson is structured around phrases rather than individual vocabulary and focuses primarily on verbal inflections. While grammatical rules briefly explain meanings of these inflections in simple terms, verbs are given multiple times accounting for every possible person inflection (e.g., “I am strong,” “You are strong,” “He/she is strong,” etc.). The presentation of these phrase lists is rather dull and ineffective: even though it shows a repeating pattern with verbs broken into morphemes, language learning is essentialized to memorization of forms, in spite of the proposition that to create new meanings, words can be manipulated. A better approach to achieve this view may be, for example, by color-coding repeating morphemes or involving some interactive methods in first

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1 By memorization here I do not mean the necessary inclusion of memory in the language learning process when words and phrases enter memory, and then, in appropriate contexts, can be retrieved along with some grammatical forms to produce a creative and a unique utterance that serves to create social meaning. Rather memorization that I refer to here is a full reliance on the cognitive apparatus of memory as a way to acquire and reproduce the language. In such case repetition of citation forms from the memory would be considered speaking.
sections to familiarize the student with the verb structure. Similarly, changes can be made at the end of each section where students test their comprehension. So, providing a field in which students could type their answers and submit them to the website for immediate automatic corrections, may encourage students’ full involvement in the exercises with employment of interactive resources. The website’s approach to online instruction effectively addresses common Arapaho ideologies, whereas the technological limitations prevent from fully elaborating on the possible methods of language instruction.

Absence of more elaborate teaching technologies can be ascribed to the intention of developing this website to assist classroom learning as well as the expectation of necessary human interactions, explanations and practice of the language provided by a classroom teacher. So, accessing the website without a classroom support decontextualizes the materials present here and subtly insinuates that Arapaho can be learned memorizing individual words and their possible forms. Because the web instructions lack immediate contexts for uses of these words and phrases, Arapaho is presented as a subject, or topic of studying, whereas English, which is used for all of the instructions, appears as a language for daily interactions. Including Arapaho in the language of the interface and instructions can address this problem and posit Arapaho as a communicative tool.

To present Arapaho as a functional linguistic variety, the authors include a “Language in Use” page (Figure 2). Using these resources, students are encouraged to learn common conversational phrases appropriate in certain contexts: topics for these phrases cover contemporary situations encountered daily such as “Cooking”, “Child Care”, “Casino”, “Snagging” and others. Each phrase is provided with possible alternations that emphasize the structure of the lexical category. In addition, phrases are deconstructed into morphemes, and basic roots are highlighted
using different color and bold typeface encouraging the students to look for differences between possible verb forms. Listing some of the variations of the same phrase allows the student to see how it can be done with other words, so that the whole approach of introducing functional conversational phrases turns into grammatical manipulations.

“Language in Use” focuses on promotion of language use rather than instruction of how to be creative with the phrases featured here. The guidelines to this section suggest the same: some of the features of the phrases are emphasized for “ambitious” and “advanced” students. Distinguishing between different kinds of student involvement, the authors point to differences in learning motivations among students, suggesting that some would only be interested in learning basic forms of the language, whereas others would want to know how to create and recreate the language. The basic forms of the language are the ones associated with idiomatic phrases.

Figure 2 Screenshot of the "Language in Use" section of the Arapaho Language Project
used in conversations, such as greetings, vocatives or other frequent categories. Not knowing how the Arapaho word is constructed, many current Arapaho speakers tend to mix English and Arapaho, consequently producing ungrammatical combinations. Such expressions as “my nebési-iwóó” (my grandfather), where the first person possessive of English “my” repeats on the prefix n-, and suffix –oo indicates vocative without actually using this expression to address a grandfather, are frequent among the Arapaho speakers. These ungrammaticalities also project the belief that a word in a language almost always equals a function, so after learning lots of words, one would be able to speak the language. Thus, deconstructing phrases and words, authors of this website also proclaim that the language does not consist of fixed units that must be constantly memorized. Instead they offer a view of a language in which a speaker is an agent who has an imagination and creativity for combining de-constructible elements in a way that would convey a different notion with every possibility.

One of most common language ideologies prevalent on the websites refers to the idea of the indigenous language being connected to the traditional way of life, elders and history. Such an ideology creates an environment for the appearance of the attitude that an indigenous language must be pure, untouched and stable. Any change in the structure of the grammar of this language is unexpected, as are the additions to the vocabulary. More generally, it is understood that the indigenous languages “lack” certain words because there are no such concepts in their native culture. Such claims as “language X is a nature-based language, therefore it does not have words for modern technology” can harm the attempts at language revitalization by distancing the language and current reality. In avoidance of this ideology, the Arapaho Language Project offers a set of phrases in Arapaho that refer to some recent inventions and concepts. Although some young fluent speakers already know and use these words, not everybody in the Arapaho speech
community is aware of existence of such vocabulary. Additionally, authors, by choosing not to give a detailed account of production of these words, are able to free the connection of the Arapaho language with elder speakers as well as deemphasize elders’ authority for changing the language. The latter can also be an enabling action, encouraging speakers of the language to engage in creation of the language to suit their daily needs. Providing the words for new technology contextualizes Arapaho for use in some of the more recent interactional environments.

The web page makes available a variety of scanned resources such as guides, textbooks or even handouts distributed in language classrooms and provides suggestions for additional materials developed and produced by the Arapaho community, which display the language ideologies circulating in the community. Because most of these materials are intended for school use, they only cover some grammar, vocabulary and traditional culture. Most of these resources are bilingual, with the instruction and interpretation in English. There are some Arapaho-only resources too, but most of them are made for younger learners and feature only vocabulary with pictures. English monolingual materials cover culturally relevant topics and ensure that young learners of Arapaho fully comprehend the material. All of the scanned language learning materials present very similar language ideologies observed in the Arapaho classrooms and feature framing Arapaho in English and suggest that English is the language that can be used to get a point across.

These resources resemble other Algonquian classroom supplies shared on the web and offer similar language ideologies. So, these resources cover a very limited amount of themes or topics restricting it to food, clothes, basketball, animals, family, etc. Such compartmentalization of the indigenous language prevents speakers from using the language in *any* context or environment other than in the ones presented in the resources. Compartmentalization restricts speak-
ing the heritage language to very few concepts and stimulates the perception of the language as a composition of detached words or phrases pertaining only to some domains of real life. Also, conversations, actions and word lists are separated and discussed in individual resources, so that actions are presented in Total Physical Response books, whereas conversations are offered in conversational textbooks, which are comprised of lists of interactional phrases in Arapaho with translations in English. These textbooks cover a variety of topics and refer to persistent issues on the reservation like drinking, bad health, law enforcement and such. The presence of contemporary discourse in these textbooks makes them less detached from the real life conversational situations, but these topics are not sufficiently discussed to allow the Arapaho learners to be able to talk about them in Arapaho (for more on the issue see Cowell, 2002). The separation of the linguistic activities into different books or resources implies that connection between these domains of the language may not exist, and, thus, it produces an ideology of using the language specifically for specific linguistic events individually.

My last remark on the contents of the Arapaho Language Project concerns the small amount of cultural and historical materials, which are limited to a flag song and some prayers. While there already is a resource about the traditions and history of the Arapaho nation – The Arapaho Project (http://www.colorado.edu/csilw/newarapproj2.htm), which is also developed by the Center of Indigenous Languages of the West, – there are no links or overt connections to this website on the language project. On one hand, such limitation refocuses a common attitude about the indigenous languages and their tight connection to the past by not emphasizing this connection. On the other hand, however, this approach may also lack sociocultural resources helpful in language learning. Referring to culture and traditions in language learning can be an effective
way of supporting the cultural and linguistic identity of the learner, so it should be considered in any further development of the language website.

My analysis shows that although the *Arapaho Language Project* is a work in progress, it addresses some common language ideologies present in many communities of endangered languages. Even though this website does not stress the connection between the language and the elders of this community, previous collaborations with the elder fluent speakers are emphasized while everyone is invited to contribute to the project. Younger generations of Arapaho are encouraged to begin learning and speaking this language in the implication that it is not limited to the elders of the community. The website accentuates that language learning is not a simple memorization of words; instead it portrays the language as de-constructible for creation of meaning. In this point of view speaking is equaled to a creative process and a function of human experience, and language learning, therefore, is a work that requires a certain degree of commitment. To accommodate the ability to create the meaning by the means of lexical construction and reconstruction, the authors offer some detailed examples, encouraging students to produce new phrases. Other phrases introduce the functional aspect of the Arapaho language, showing that speaking Arapaho is limited to the contexts offered in educational materials used in language classrooms. In fact the site’s settings are enabling, and allow students practicing their speaking with other learners or fluent speakers and even begin to transmit the language to their children in case of “Most wanted” daycare phrases.

To conclude, the attempts of the website to bypass common language ideologies have been successful. The content of the website addresses most of the common attitudes about language, its speakers and language learning in a way that becomes beneficial for the efforts of language revitalization. Most importantly, it offers contexts for speaking Arapaho, and access to the
language, previously possible only by the means of interacting with elders. Instead of offering the language as an artifact or non-functional form, this website attempts to present it as a device for communicating meaning by avoiding long lists of vocabulary (although they are still present in scanned materials) and changing the focus of language learning from memorization of individual words to creating new linguistic material. Additions to the website that respond to the technological drawbacks need to stress this language ideology to help language revitalization. And finally, functionality of the website can also be extended from supplementing classroom learning to production of the Arapaho speakers.

**Common issues with the Arapaho Language Project**

During my fieldwork at the Wind River Indian Reservation I had a chance not only to observe the implementation of some digital technologies in the attempts at language revitalization but also to learn about the attitudes of teachers and students towards these initiatives by means of a survey. It turns out that, despite the fact that the Arapaho Language Project seems to be a worthwhile resource for a beginning learner or even a resource that supplements classroom learning, not everybody on the Wind River Indian Reservation is aware of it, and only a few people use it. Moreover, according to the responses I received, practically only teachers are aware of the resource and use it, while the learners more often use social media to access Arapaho learning materials. In this section I briefly outline the results and issues of the survey.

The survey distributed among the adult learners and teachers of the Arapaho language had a double focus attempting to find out more about their motivations to learn Arapaho and their attitudes towards learning by means of technology. The most interesting questions in the survey for current analysis are:

- Do you use the web for learning?
• How often do you use social networking websites such as Facebook, Twitter, Myspace, YouTube, G+, SecondLife or others to learn Arapaho?

• Did you know about the Arapaho Language Project before today?

• Do you think you would use this website when you study alone?

Among twenty-one participants who filled out this survey, only twenty answered the first three questions and only seventeen answered the last two. The results of the answers were subdivided into groups based on the identities of the respondents such as occupation (teacher or student), gender (male or female), age (18-25 or 25+) and status on the reservation (residing on the reservation or outside). Such classification aided in finding common trends among the respondents based on their demographic responses (Error! Reference source not found.). Some identities distinguished here overlap, while others may not be known. For example, one of the respondents failed to provide his age, and another respondent did not answer these questions altogether, thus, some answers were not taken into account in the comparison.

Figure 3 Survey data regarding the awareness of the Arapaho Language Project; use of Internet for learning Arapaho; and use of social media for learning Arapaho
The graph above demonstrates variability in the answers of the respondents and indicates some common demographic trends. One of the first most noticeable trends is the fact that over sixty percent of all of the respondents claim to use the Internet to assist learning Arapaho. There seem to be no major demographic differences among the people who have answered this question positively, except for the fact that about fifteen percent more respondents living outside of the reservation prefer the web as a tool for learning the language. This could be due to the fact that Internet providers offer services at much higher price on the territory of the reservation than outside of it. Additionally, computers are rather rare on the reservation and may be accessed only at the local tribal college library. Nonetheless, the community members on the Wind River Indian Reservation have access to the Internet by the means of mobile devices, which explains the overall tendency of using the Internet for learning.

Based on the results of the study, not every learner of the Arapaho language is aware of the Arapaho Language Project, whereas about every teacher knows it and references it frequently. Only thirty percent of the students who knew about the website have claimed using it, whereas only one teacher has never seen it before. These students were very excited to find this resource and often commented that they would use it from now on while preparing for their Arapaho classes. These students were asked specifically what on the website was most helpful. The most common answers included sections “Language in Use”, in particular “Casino” and “Snagging”, and the grammar and pronunciation guide. Considering that over eighty percent of the student-respondents are attempting to learn the language so that they will be able to be able to converse daily with their friends and family, some of the suggestions to improve the website targeted adding the content to the “Language in Use”. Because the teachers have not been able to share this information with their students, many students have specifically asked to install social
media buttons on the website, so anybody would be able to “share” the page with their social networking followers.

As I have previously mentioned, not many people on the reservation access the Internet with the computer; instead most people prefer using mobile devices and cell service providers. Despite the fact that more people on the reservation know about the Arapaho Language Project, the outside residents have claimed to use the web in general more often. The reservation residents tend to use social networking for learning the language more than the web in general, while about sixty-four percent of the respondents living on the reservation use social media for learning the language. In fact, individual respondents have told me that there are about three different Arapaho learning initiatives on Facebook, where individual learners and teachers post language lessons or commentary, members ask questions about the language or even request certain lessons and all of them engage in discussions of the community events, sometimes in Arapaho. The social media on the reservation substitutes for the web in general, providing the learners of Arapaho with an opportunity to access some learning materials, practice the language and stay connected with some of the tribal members.

With regards to the demographic differences in the use of the social networking projects, it seems that residency status plays the most important role. About thirty percent more users of social media live on the reservation, whereas all other categories have a difference of about fifteen to twenty percent. Recognizable demographic tendencies seen on the chart above generalize that the use of social media seems to be relatively more frequent among women, responders of twenty-five years or older and among teachers. There was no single demographic category that claimed no use of social media for learning the language altogether. Additionally, about a quarter of all those respondents who use the web do not use social media for learning. Regardless, the
demographic variation in the use of social media for learning Arapaho is rather insignificant, especially comparing the raw numbers instead of the percentages, and most likely depends on the accessibility to other methods of web learning first.

To determine whether the learners agree that the *Arapaho Language Project* is a helpful resource that may assist their learning, at the end of the survey each participant was asked if they would use it when studying by themselves. Out of the seventeen received responses fifteen were affirmative and two were uncertain. These two respondents clearly stated that the contents of the website are too complicated for them to be able to use it daily while studying alone, and that if the descriptions of the grammar rules are somehow simplified, they may be more interested in using it more often. This concludes that despite some of the issues surrounding the accessibility of resources, both students and teachers recognize the helpfulness of the website and consider it an important tool for learning and revitalizing the language.

The survey of technological habits of these teachers and learners of Arapaho has shown certain tendencies and issues that may be helpful in further development of the materials available on the *Arapaho Language Project*. Specifically, it pointed out the problems of Internet access among the residents of the Wind River Indian Reservation, and their response to these issues by the means of social media. The fact that less than half of the respondents were aware of this language resource suggests that neither the developers nor the teachers were able to promote and advertise this resource. The question also arises as to why teachers were not able (or preferred not to) share this resource with the students. Further developments of the website should want to address this issue and possibly allow the project users to be able to automatically share either the whole website or a particular page on their favorite social media. More generally, the project de-
velopment needs to account for both teachers’ classroom methodology and students’ learning styles.
Discussion

This study has approached issues of language revitalization from a sociocultural perspective. The questions raised here relate to the problem of implementation and re-reorientation of language ideologies relevant to the Arapaho revitalization in order to enhance the effectiveness and the use of web-based resources. Previous studies conducted to account for Arapaho language ideologies, my personal observations in Arapaho language classes, analysis of similar web-based revitalization projects, and the analysis of the Arapaho Language Project have provided a collection of data that helps answering the original questions and proposing future steps on development of the Arapaho Language Project. In this section, I will examine the implications and limitations of the current study, and propose questions for further investigations.

The Arapaho language has acquired social and symbolic value but has lost its functionality as a language. Some of the methods used to teach Arapaho in classes restrict the language to the speech community of “Arapaho language advocates.” As a result, speaking the language receives an economic value: teaching appointments as well as lifetime positions in the NALCC are often granted to literate fluent speakers (Cowell 2013, personal communications). The reification of the Arapaho language contributes to socioeconomic issues and blocks further progress in language revitalization. Moreover, loss of the language in daily use affects functionality in two ways: first, the exclusive native fluency prompts competition in a tight job and creates social tension, and, second, the production of new speakers is diminished.

Previous theoretical assumptions of indexicality indicate that the social meaning is constructed by the means of indices available to the members of the speech community and can be modified. In her analysis of variation, Penelope Eckert (2008) constitutes that social meaning of linguistic variables cannot be fixed; rather, they all create a field of potential ideologically relat-
ed meanings, an indexical field. Notably, Eckert’s study looks at different speech communities and phonetic variables available to the individual members, while I am comparing the indexicality of the whole linguistic system with regards to one speech community of the Arapaho language advocates. Eckert suggests that a speaker may use the same variable as a different index each time, constructing the social meaning through the variety of already existing ideological associations with the index. Applying this finding to my research I would like to propose that the indexical field of the Arapaho language is also constructed of such indices, with Arapaho potentially indexing a communicative tool, tradition, age, history and ethnic identity. But because there are limited contexts in which the language may be used, I claim that Arapaho has undergone indexical narrowing: each social meaning of a fluent use of Arapaho historically has been narrowed down to a specific set of identities, and, consequently, domains of language use. The indexical narrowing explains how the language ideologies pertinent to the speech community of the Arapaho language advocates are produced and recreated in speaking the language in classes.

Addressing these obstacles within the framework of language revitalization would mean creating new domains for language use. Sustaining language ecology, or the social domains that promote use of the traditional language, has often been proclaimed one of the goals of language revitalization. Salikiko Mufwene (2003), for instance, claims that features like social capital, literacy and pride do not have as much influence on language loss, as it has been often stated before. Instead, Mufwene suggests, the socioeconomic ecology plays the most important role in retention of heritage languages. Thus, lack of socioeconomic domains for language use contributes to linguistic shift and may result in language loss. Similar can be said about Arapaho people not speaking the Arapaho language: except for in Arapaho language classrooms, there are no socioeconomic contexts at which Arapaho can be used for communication. Consequently, the de-
velopment and promotion of new domains for language use that reflect current socioeconomic issues of a community are key success factors in attempts at language revitalization.

Studies in Arapaho revitalization also highlight the necessity of establishing the new socioeconomic domains for language use. So, in her study of language preservation methods in Arapaho immersion schools, Hannah O’Brien (2010) proposes a similar solution emphasizing the development of teaching and learning materials that encourages peer-centered learning. As a result, attempts to develop new contexts for use of the language have been seen in Arapaho bilingual learning materials and some individual initiatives of students and teachers, specifically, Andrew Cowell (2002) reports that current bilingual materials used for teaching Arapaho in schools often employ new contextual domains of language use that rely on social issues on the reservation. My observations of popular American children games such as Go Fish, Spot it! and Uno in Arapaho classes indicate that the teachers are not only looking for new methods of language instruction but also seek to supplement some of the sociocultural domains of language use. Creative use of the heritage language was also observed among the youth members of the community I studied, who try to make hip-hop music using Arapaho. However, the fear of making a mistake while rapping in Arapaho forces them to seek linguistic advice from Arapaho elders, reiterating the mainstream language ideology. The avoidance of language reification and commodification may be avoided by the means of the Internet, which, I argue, can improve the Arapaho language ecology.

Some of the websites have already begun to respond to the diminishing ecology of endangered languages by supplying additional contexts for their daily use and providing reasons for community involvement. Rarely, however, do these websites provide opportunities for using the target languages on the spot, and they are often limited to bilingual interfaces and forums.
Even on the forums, most of the conversations occur in English, leaving the endangered language as the subject of interaction. The attempts of some of the communities to artificially develop new linguistic expressions, new contexts, and to include some of the resources from informal settings have undoubtedly become extremely beneficial. As for the Arapaho Language Project, inclusion of examples of language use among younger Arapaho speakers may be the way to expand the community involvement into this web project and to respond to the aforementioned indexical narrowing.

The development of a successful web site for language learning would depend on the involvement of the community it is intended for. One of the reasons Noongwa e-Anishinaabemjig stands out among the other web pages is the variety of linguistic data it presents. New contexts for speaking this language have been created not just by the developers of the web site but also by the potential audience who frequently request and supply these resources. Considering this, understanding the type of content and voice needed for the web presence of the speech community is crucial to the development of a web resource.

Additional expansion of the Arapaho Language Project to social networks may be helpful in gaining new followers, and eliminating the issue of not knowing about the website. Although not all of the followers would get fully involved in learning the language through the website, some community members may be able to offer their personal resources. Also, providing a virtual space for community discussions, such as a forum, a guestbook, or advertisements of past and upcoming community events, can show the presence of the community in the attempts at language revitalization. While there are quite a few possible ways of including the community in this project, perhaps, the most important one is to encourage the community members in the development of the website, for example, during language classes, camps, etc.
Another suggestion with regards to the *Arapaho Language Project* is to consider the development of a mobile version of the website, or possibly a mobile application. Since most language learners use smartphones for language learning, a considerable investment may be made to create some resources for use on a smartphone. To avoid creating a language ideology according to which a language may be learned with the minimum available resources, a survey of technological devices will help to decide on the specific website features that will include only the web resources directly benefiting classroom learning.

One of the biggest drawbacks of the *Arapaho Language Project* is its complicated jargon in language instruction. Because it is intended for aiding classroom instruction, the authors expect teacher’s input to the explanations of the grammar rules. Additionally, lack of users’ input in the development of this website has led to creation of the ideologies specific to expert knowledge, restricting comprehension of some of the information among some learners. A few of respondents in my surveys commented on the technical jargon, asking to simplify the instructions. To understand the actual problems with the instructions, a further investigation with a possible test among actual learners could be done. To fit the contents of the website to learners needs, the website needs to simplify the material, include more interactive examples, and provide options for a mode of input other than mouse. Also, providing an option for backchannel with the developers of the website may be done once there are more human and material resources available.

It is also important to consider the symbolic value of the heritage language instruction online. Considering that the Arapaho language has become an index of the advanced age and only the elder speakers are ratified to speak Arapaho, introduction of web resources may assist overturning these dynamics. The access to the Internet and other digital technologies is tradition-
ally associated with the younger members of the community: as mentioned above, some elders may not even know the Arapaho words for the technological innovations while the younger community members already use them. The production and development of online language learning resources, especially the ones with connections to social networks, creates virtual space that legitimizes younger speakers of the language. The website will acquire a symbolic value among the younger learners and can help them in establishing an identity of the authentic language speakers.

Because the implementation of web resources for language revitalization is recent, the literature on the account of development of computer-assisted language learning resources offers very few suggestions and focuses on the technological aspects. In their analysis of the Tagish FirstVoices project, Moore and Hennessey (2006) conclude that the development of web resources is a powerful tool to guide local language ideologies into a successful language revitalization context. Similarly, Tracey McHenry (2002) believes that the inclusion of the Native American communities in initiatives on the web is not only an encouraging opportunity for distribution of language materials but also a step towards the establishment of a modern identity through manipulations of language ideologies. In my communications, Margaret Noodin, the developer of Noongwa e-Anishinaabemig (and Ojibwe.net, which is still in progress), said: “One of the most important lessons I learned was that language revitalization needs to be in the hands of community members.” Community involvement is central to the development of any language revitalization materials, as those have to be tailored to the needs of language users specifically. Online resources need to take into account socioeconomic status of the endangered language and be informed of the existing language ideologies, which can be achieved with further research in studying and evaluating the web-based resources and their impact on language revitalization.
Due to the length of the research and limited previous studies, this thesis presents some limitations. Most importantly, the survey of the attitudes towards the *Arapaho Language Project* had a rather small sample number with only twenty-one participants. Possibly expanding the survey pool to include more teachers and students might give different proportions and suggest more website use. Additionally, including questions about the kinds of online Arapaho resources and the kinds of social media used may enhance our understanding of the future direction to the development of this website. Also, this study does not offer a specific trajectory of increasing the *Arapaho Language Project*’s accessibility. A survey of technological devices available to the learners and teachers of Arapaho need to be conducted to assist this venture. Last, the current research did not have the capabilities of studying the effectiveness of the Arapaho project. Eventually, such study may contribute to our understanding of the involvement of web resources in language revitalization.

This thesis intended to show that even the development of web resources for language learning is not done vacuously without the influence of language ideologies; in some cases, they may produce new ones. My analysis of the Algonquian websites has shown that the resources that have been developed for the use without classroom instruction often create an idea that a language may be learnt just using the materials offered in the “Lessons” section of the website without direct exposure to the language. At the same time, however, the websites that supplement classroom instruction produce an ideology that language learning may not be successful unless involves a formal teacher. To negotiate both of these ideas, a website like the *Arapaho Language Project* may want to consider dividing its contents in two parts: one would offer resources for classrooms that explain tough linguistic material in simple words and the other part would provide resources that may help a user to begin learning the language alone. Overall, the
development of any web resources needs to respond not only to any language ideologies imped-
ing learning processes in classrooms but respond to the needs of a community as well. The most
important modifications of the website, besides fitting it to the needs of the learners and teachers,
need to emphasize sociocultural contexts of the language use and, perhaps, even create new ones.
Conclusion

Although language ideologies are rarely considered in the discourse of language endangerment, they pose very urgent problems to language revitalization. In the Arapaho community, a set of ideologies constructed a very current obstacle that does not allow the revitalization to progress: these ideologies connect the Arapaho language with the tradition and history, limit the function of the language to commands and expression of knowledgeable authority, and associate the speaker with the advanced age. As a result, such attitudes have assisted commodification of the language and allowed the native fluent speakers to control the efforts of language preservation, narrowing them to a minimum. Using web resources such as the Arapaho Language Project, while not a guarantee to an avoidance of any of these ideologies, may allow the community to circumvent them in the efforts to language preservation.

The analysis of other web resources shows some success in attempts to escape from the reiteration and production of language ideologies. So, less structured websites, which involve the community more and rely on collaboration, offer a variety of instructional methods and more diverse contexts to language use, and, as a result, advance language learning. The input from the community, their requests, suggestions and direct involvement, are all necessary for the future of the Arapaho Language Project. The construction of the website so far has been directed by expert knowledge and allowed it to avoid some of the language ideologies but also restricted its contents to linguistic gibberish in some places. Collaboration between experts on one hand and the speech community on the other would benefit not only the project itself but all of the efforts of Arapaho language revitalization.
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Warschauer, Mark, Keola Donaghy, and Hale Kuamo‘o

Woolard, Kathryn A.
Appendix 1 Website links

Arapaho Language Project (http://www.colorado.edu/UCB/AcademicAffairs/ArtsSciences/linguistics/csilw/alp/index.html)
Algonquian linguistic atlas (www.atlas-ling.ca)
Anishinaabemda (http://anishinaabemdaa.com)
Anishinaabemowin Everyday (https://sites.google.com/site/anishinaabemowineveryday/lessons)
Cheyenne Dictionary (www.cdkc.edu/cheyennedictionary/index.html)
Doug Ellis Audio collection (http://spokencree.org)
East Cree (eastcree.org)
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Ojibwe at University of Wisconsin (http://www.uwec.edu/Flang/academics/ojibwe/ojibwe-I.htm)
On the path of the elders (www.pathofelders.com)
Potawotami Language (potawotamilanguage.org)
Appendix 2 Survey Instrument

This survey will help us collect attitudes towards the Arapaho language and some of the issues with learning this language to develop better access to the learning materials for everybody interested in it. Your responses are completely anonymous, no personal identifiable information is necessary to partake in the survey. Please answer to all of the questions, providing additional comments if necessary.

Section 1. A little about yourself.

1. How old are you?
_________________________________________________________________________________________________

2. Are you:
   Male
   Female
   Other

3. What is your job? (check all that apply): Student
   Teacher
   Full-time worker
   Part-time worker
   unemployed

4. Where do you live?:
   Wind River Reservation
   Another Native American Reservation
   Outside of the Reservation

5. Do you consider yourself a fluent speaker of Arapaho?
   Yes
   No

6. What languages can you speak other than English?
_________________________________________________________________________________________________

Section 2. Arapaho in your life

1. Rate your interest in learning to speak Arapaho: (1 – very high interest; 5 – no interest)
   1  2  3  4  5

2. Why are you interested in learning Arapaho?
_________________________________________________________________________________________________

3. How important is Arapaho for you? (1 – extremely important; 5 – not important at all)
   1  2  3  4  5
4. When and where do you want to use Arapaho instead of English?

____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

5. What are some topics that you want to talk about in Arapaho?

____________________________________________________________________________________
____________________________________________________________________________________
____________________________________________________________________________________

6. Does anybody in your family speak Arapaho?
   Yes
   No

7. Did your grandparents or parents speak to you in Arapaho when you were growing up?
   Grandparents
   Parents
   Both
   Neither

8. Did you take Arapaho classes in school?
   Yes
   No

9. What language would you rather speak to your children?
   English
   Arapaho
   Other

10. How often do you participate in traditional ceremonies?

11. Can you understand everything during the ceremony (check all that apply):
   I can understand all of it;
   I can understand most of the ceremony;
   I understand only some parts;
   I do not understand anything in it.

12. In your personal opinion, who should be fluent speakers of Arapaho?

13. In your personal opinion, who should have access to the language learning materials of Arapaho?

Section 3. Learning process

1. How much time per week do you spend on learning Arapaho?
   Less than 15 minutes
   About one hour
   One to three hours
More than three hours

2. How much of this time do you study by yourself (e.g. using a book/dictionary, listening tapes or using any other materials)?
   Most of the time I study by myself.
   About half of the time I study by myself.
   I only study with other people.
   Other (please, specify) __________

3. How much time would you rather spend on this activity based on your current schedule?
   ________ hours/minutes (please circle one)

4. What is the hardest for you in Arapaho (check all that apply):
   Grammar
   New words
   Reading and writing
   Speaking
   Making a text
   Using it in conversation

5. 

6. What materials do you use when you are learning Arapaho?
   ____________________________________________________________________________
   ____________________________________________________________________________
   ____________________________________________________________________________

7. Do you use the web for learning Arapaho?
   Yes
   No

8. How often do you use social networking web-sites such as Facebook, Twitter, Myspace, YouTube, G+, SecondLife or others to learn Arapaho?
   Every time I study
   Once a week
   Every other day
   Never tried it.
   Other (please, specify)______________________________

9. Did you know about this web-site before today?
   Yes
   No

10. How would you rate helpfulness of this web-site? (1 – extremely helpful; 5 – not helpful at all)
    1   2   3   4   5

11. How well do you understand what is on the web-site (1 – very well, I can understand everything without problems; 5 – I can’t understand, too many unknown words):
    1   2   3   4   5

12. Did you have any problems using the web-site?
Yes (please, specify):
_________________________________________________________________________________________________________
_________________________________________________________________________________________________________
_________________________________________________________________________________________________________

No

14. What were your favorite pages on the web-site?
_________________________________________________________________________________________________________
_________________________________________________________________________________________________________
_________________________________________________________________________________________________________

15. Do you think you would use this web-site when you study alone?
Yes
No

16. Do you have any suggestions about how we could improve it?
_________________________________________________________________________________________________________
_________________________________________________________________________________________________________
_________________________________________________________________________________________________________

17. Is there anything else you would like to about Arapaho or its speakers, or about learning Arapaho?
_________________________________________________________________________________________________________
_________________________________________________________________________________________________________
_________________________________________________________________________________________________________
_________________________________________________________________________________________________________