

**ARTIFACTS AND ACTORS: DELVING INTO THE CONTEXT  
SURROUNDING THE LINGUISTIC LANDSCAPE ON THE SENECA NATION**

by

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# ARTIFACTS AND ACTORS: DELVING INTO THE CONTEXT SURROUNDING THE LINGUISTIC LANDSCAPE ON THE SENECA NATION

## ABSTRACT

The linguistic landscape is a powerful indicator of the linguistic communities within an area, their prevalence, and their position within the social and political hierarchy. Therefore, language artifacts in the physical space reflect the attitudes toward different languages in the area and toward language revitalization projects. This study examines the linguistic landscape on the Seneca Nation Cattaraugus Reservation. The physical language representations in this area are analyzed in conjunction with interviews from community members to understand how the linguistic landscape represents the local population, and their attitudes toward Seneca language revitalization. The intentions of this study are to understand how the linguistic landscape is influenced by, and how it influences, the population's attitudes toward different languages on the Seneca Nation, how the linguistic landscape is being used for Seneca language revitalization, and how it could be used for language revitalization in the future.

*Keywords:* linguistic landscape, Seneca, language revitalization

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## **Introduction**

We are surrounded by physical representations of our linguistic community in the form of our linguistic landscape. The linguistic landscape around us is often taken for granted even though it can have a powerful impact on the individual and communal identities of the speakers who inhabit a particular area. This is a relevant and worthy topic of academic consideration because the linguistic choices represented in the physical space are demonstrative of the wider social attitudes toward different linguistic communities. Studying the linguistic landscape within its social context can provide researchers with a better understanding of the power, ideologies and identities of a particular community. Therefore, academic research into the linguistic landscape of the Seneca Nation in conjunction with an understanding of societal attitudes toward the two major languages in the area, Seneca and English, will provide an understanding of the identities, ideologies, and power present within this community.

## **Problem**

The Seneca language has had a rich oral history, but within the last three hundred years the majority language population, English speakers, has harshly restricted it (Mohawk, 2003). This is representative of indigenous languages in general in the United States. As of 2000, there were only 175 indigenous languages spoken in the United States, which means that nearly half of the indigenous languages that existed in the U.S. have vanished (Baker, 2011b). This reduction in indigenous languages has occurred alongside the ascension of English as a global language. However, the dominance of English at the expense of indigenous languages was no accident. English-only policies have caused language endangerment and language death through the suppression of indigenous languages and punishments for using these languages (McCarty, Skutnabb-Kangas, & Magga, 2008).



Baker (2011b) states that around the year 1500 CE there were approximately 15,000 spoken languages, but as of 2011 only 6,000 languages existed. According to Skutnabb-Kangasa (2003), about 90-95 % of these spoken languages are at risk of dying out. Others argue that it's possible that half of them will go extinct by the close of the twenty-first century (Harrison, 2007). Focusing on the U.S., even though reports estimate that there are about 300 or more indigenous languages spoken, only 175 of them were present in representations on the 2000 U.S. Census (Baker, 2011b). One of the major factors that led to the disuse of indigenous languages, especially in the U.S., is the increasing use of English (Kachru & Nelson, 1996).

English currently holds one of the highest positions in the context of global languages. It is the most widely spoken, read, and taught language, and it is at the status of a global language (Kachru & Nelson, 1996). The dominance of English has further provoked English-only sentiments that have gone side-by-side with language loss for indigenous communities in the U.S. in the form of forced assimilation (Meek, 2011). The globalization of English alongside the abhorrent treatment of Native Americans and language intolerance has caused Native American children to learn and use English rather than their heritage language. These indigenous languages have often been neglected because of the fear cultivated by the mistreatment of Native Americans for using their heritage language (Wong Fillmore, 1991).

The fact that endangered languages are not being maintained contributes to the fact that language loss is currently occurring at a rapid speed (McCarty, 2008b). This does not need to be the norm, and language planning for the revitalization of that language can help to preserve the language and culture of that linguistic community. This causes a strong need for language revitalization efforts in the U.S., where indigenous languages are in critical danger. Therefore, the support of the speech communities of these languages is vital (Baker, 2011a).

**Purpose**

The purpose of this research is to discover how the linguistic landscape on the Seneca Nation reflects the status of the Seneca language in this community relative to the status of the majority language as well as the efforts for Seneca language revitalization. Studying the linguistic landscape is an appropriate method to evaluate the status of different languages in a multilingual community like the Seneca Nation because the linguistic landscape can powerfully influence and be influenced by the identities, ideologies, and power structures in that area (Puzey, 2007). Furthermore, this research aims to discover the attitudes of the linguistic community toward Seneca and English on the Seneca Nation, and understand how these attitudes are reflected in the linguistic landscape. This research will purposefully analyze the linguistic landscape and the attitudes of the Seneca Nation within the historical context of the relationship between the Seneca and the majority language, English.

Specifically, when conducting research, this study will ask:

1. How does the linguistic landscape on the Seneca Nation reflect the status and representation of all of the languages spoken within this linguistic community?
2. How does the linguistic landscape on the Seneca Nation reflect the efforts for Seneca language revitalization?
3. What are the attitudes toward the Seneca language and the majority language, English, of the linguistic community on the Seneca Nation?

**Significance**

This is a relevant and worthy topic for academic consideration because the linguistic choices represented in the physical space are demonstrative of the wider social attitudes toward different linguistic communities. Studying the linguistic landscape within its social context can

provide researchers with a better understanding of the power, ideologies and identities of a particular community. The context surrounding the linguistic landscape on the Seneca Nation is worth consideration because of the complicated relationship between English and Seneca over the past two hundred years. Additionally, the severe endangerment of the Seneca language means that it is vital that studies be conducted before the language goes extinct. This research aims to not only discover the attitudes toward Seneca and English on the Seneca Nation and how they are represented in the linguistic landscape, but also to make policy recommendations for how the linguistic landscape can be used as a tool of language revitalization.

This research is important because the Seneca language has been the victim of assimilationist policies and is critically endangered. Since this study aims to understand the attitudes toward the Seneca language and the majority language, it can help community members understand how the linguistic landscape can be used to influence public opinion about different languages. The results of this research stand to inform policy making because they will provide information about awareness of the status of the Seneca language. It will also reveal how the linguistic landscape on the Seneca Nation reflects the language revitalization efforts. This is important for policymaking because policymakers can use the linguistic landscape as a tool to promote language revitalization in this area.

The study of linguistic landscapes in language-minority communities is important because it is a visual representation of the power structures in the world. It is important to document and analyze this data in conjunction with research into attitudes toward this language, because it can help us understand our world. We are influenced by the linguistic landscape every day, consciously or unconsciously, and deliberate study of this medium can cultivate discussion of and advocacy for endangered languages and linguistic communities.

The relevance of this issue for advocacy and action in the field of language revitalization means that this study will be a tool for everyone involved in the Seneca language revitalization process. This includes officials on the Seneca Nation, teachers of the Seneca language, and activists who call for further support for this endangered language. Furthermore, since this is an issue that plagues indigenous languages across the U.S. and the world, this study can be a reference for policy makers and researchers interested in the subject of language revitalization.

### **Literature Review**

This literature review examines studies on linguistic landscapes, Seneca language history, and language revitalization. This review aims to understand the history of the Seneca language, specifically in relation to the majority language, English. Specifically it will focus on the status of the Seneca language, its endangerment, and the factors that have led to this endangerment. It will also examine the literature in the field of linguistic landscapes and language revitalization to develop an understanding of language revitalization efforts and their use of the linguistic landscape. Additionally, studies of the linguistic landscape will be presented that focus on the relationship between the linguistic landscape and the power dynamics within different communities. These will be analyzed in order to understand how the linguistic landscape can be used to analyze the relative power of linguistic communities within a given space. Finally, information about how linguistic landscapes are coded, analyzed, and understood will be presented leading to the design of the research for this study.

### **Background on the Seneca**

The Seneca are a part of the Iroquois language family (McCarty, 2008a). As of 2009 there are 8,000 members of the Seneca Nation (Seneca Indian Tribe History, 2009). The Seneca originate in the Great Lakes region of North America, and can be found in Western New York. The Seneca Nation is the largest nation in the Iroquois Confederacy with the other nations being the Onondaga, Cayuga, Oneida, and Mohawk. The Seneca people are divided into eight clans: Bear, Deer, Turtle, Wolf, Hawk, Heron, Beaver, and Snipe (Seneca Nation of Indians, 2015).

Historically, the Seneca Nation was a powerful group among the Indian nations in the United States, and the Seneca were also known as the Keepers of the Western Door because of their location relative to the other nations in the Iroquois Confederacy. They lived across the

Finger Lakes region of Upstate New York through the Genesee Valley and Western New York. Currently, the Seneca Nation is located on five reservations in New York State: Oil Springs, Cattaraugus, Niagara, Buffalo, and Allegany. Unlike other Native American groups, the Seneca Nation owns the rights to the land that their reservations occupy. This is rare in the United States, and most other reservations are held in trust by the U.S. government (Seneca Nation of Indians, 2012).

The current government of the Seneca Nation was established in 1848, which coincided with the adoption of their constitution (Seneca Nation of Indians, 2012). This is a democratic government, which has three branches of government: executive, legislative, and judicial. The legislative branch contains sixteen tribal council members. The judicial branch includes a Peacemaker, an Appellate, and Surrogate Courts, and the executive branch is made up of the President, Treasurer, and Clerk (Tribe History, 2001).

Approximately one hundred people in New York State speak the Seneca language (Seneca Indian Language, 2015). Elders in this community mainly speak it, but some young people are learning to use Seneca. Seneca is written using a modified Latin script. Seneca is traditionally an oral language, and this written script was developed through the Seneca Bilingual Education Project in Salamanca, New York as a way to maintain the language use. There is currently a Seneca Language Dictionary, as well (Vocabulary in Native American languages, 2015). Additionally, Seneca language is taught in several local school districts including Gowanda and Salamanca.

### **Language Policies**

A language policy is the stated goals and the means for achieving these goals as they relate to shaping language structures, use, and acquisition (Tollefson, 2008). Language policy is

a top-down mechanism, meaning that it comes from governing bodies or authorities. This can take various forms including legislation, judicial orders, or voter-initiatives. Language policy can also result from the inaction of governing bodies. An implicit language policy develops when the authority does not take action to protect endangered languages, or does not ensure that everyone has the opportunity to learn and communicate in their language. Language planning also stems from grassroots movements that may later become formalized through laws and practices (Ricento & Wright, 2008). Language planning may also be referred to as language management or language engineering. This is the deliberate and explicit use of strategies to influence the use and maintenance of certain languages (Baker, 2011a). In order to understand endangered languages in the United States, and the Seneca language in particular, an understanding of language policies and planning is essential.

**Policies on Native American languages.** In the United States, language policies have been primarily centered around indigenous and immigrant languages. The U.S. public school system was established in the 1850's. Shortly after, in the 1880's, a nativist movement erupted that resulted in English being the only language used in public schools, and by 1923 there were thirty-four states that used English for the only language of instruction (Ricento & Wright, 2008). Although these policies pertained to all languages, Native American languages were especially disrupted in the United States to the point that of the 175 indigenous languages that are still alive in the United States, only twenty of them are still being transmitted to children (Hornberger, 1998).

With the settlement of white Europeans in North America, Native American languages began to lose their power and status. This was exacerbated by policies that took aim not only at Native American languages, but their cultures and humanity as well. Beginning in 1802, Native

American cultures and languages became stigmatized, and the U.S. government sought to remove their culture from them (Ricento & Wright, 2008). The Naturalization Act of 1790 explicitly prevented Native Americans from obtaining U.S. citizenship, thereby lowering their status as a whole as compared to the European immigrants (Spring, 2004a). In 1819 the Civilization Act was passed in support of the conversion, education, and civilization goals of Christian missionaries, specifically those in English. Official policies during this period stated that Native American students should only be schooled in English, and that their own language was detrimental to their wellbeing (Warhol, 2011). At that time, Native American students who used their language were put into boarding schools, beaten, and otherwise punished.

The strong arm of the U.S. acculturation strategy was the boarding school. This strategy sought to find Native American youths and move them to white, English schools where they could learn the English and white way of life (Mohawk, 2003). As evidence of the U.S. condescension toward indigenous language and culture, the boarding schools were hoped to have a civilizing effect on the Native American youths (Spring, 2004b). This method of language planning was funded by the Civilization Act of 1819 that set aside ten thousand dollars per year for the establishment of English schools for Native American children (Spring, 2004a).

Removing children to boarding schools, also known as forced assimilation, was a harsh treatment that required the children to be moved far from their families and homes (Burich, 2007). Furthermore, the treatment of the children once inside the boarding schools was abysmal. The children were provided with a poor diet, and were forced to live in overcrowded dorms that were unsafe and unhealthy which led to diseases like tuberculosis spreading quickly (Spring, 2004a). The students were forbidden from speaking their language with a rule called, *No Indian Talk* (McCarty et al., 2008).



The Seneca Nation was not immune from the boarding school method of carrying out the English-only language policy. In Western New York, the English-only efforts were spearheaded by the Quakers, and their goal was to acculturate the Seneca (Mohawk, 2003). There was a Quaker school established for this purpose on what is currently the Alleghany Indian Reservation. Joseph Elkinton established this school, and English was the only language allowed in the classroom or in the living areas. The Seneca children faced harsh punishments for everything from attending their local ceremonies, to falling asleep.

At the time, the Seneca Nation had two boarding schools, one on the Alleghany Reservation and the other on the Cattaraugus Reservation, called the Thomas Indian School. This school was established in 1855. Children at the Thomas Indian School were stripped of their culture, language, and families. This school was in operation for over one hundred years, and assimilated over two hundred Seneca children. Like Elkinton's school on the Alleghany Reservation, this school was also founded by Quaker missionaries (Burich, 2007). Parents were told that they were unfit to care for their children, and many of the students lost contact with their families. The school took over guardianship of their students and made any important decisions regarding the children and their health. The school was shut down in 1957, but the distrust and negative feelings caused by the school still remain (Burich, 2007). Boarding schools, specifically used as a method for English-only language planning, are directly responsible for the loss of the Seneca language.

**A shift in language policy.** The 1960's and 1970's brought about a shift in attitude toward Native American languages. Two acts were passed that aimed to reclaim tribal sovereignty and aid in the creation of Native American language bilingual schools. These were the Indian Education Act of 1972 (IEA), and the Indian Self-Determination and Education

Assistance Act of 1975 (ISDEAA). Although these acts have noble goals toward Native American self-determination and language revitalization, they are often criticized because there have been few positive results toward language revitalization (Warhol, 2011).

In 1990 the U.S. Congress passed the Native American Languages Act (NALA) to preserve Native American languages. NALA tried to overturn the past two hundred years on language policy toward Native Americans by creating a federal role for the protection of Native American languages. NALA further amended the Native American Programs Act of 1974 to provide support for community language programs, language documentation, and material development for the revival and maintenance of Native American languages (Warhol, 2011). Despite these positive steps, the scars from acculturation programs still haunt the Seneca Nation because of their language loss, and the distrust it created toward the English-dominant population.

### **Language policy and its impact on the status of Native American languages**

Two examples of how subtractive language policies in the United States have impacted the status of indigenous languages are visible in the shifting vitality of the Hawaiian language and the Navajo language. These languages were victims of subtractive policies, but grassroots movements in these communities have demonstrated how language revitalization programs can combat the negative effects of subtractive language policies.

In the case of Hawaii, the indigenous Polynesian language was spoken in Hawaii until it was colonized in the United States. The subtractive language policy of the colonizers forbid its use, and the traditional Hawaiian language was banned (Lippi-Green, 2012). From that point on, the Hawaiian language was endangered as its use was disallowed in the public space. However, in the late twentieth century, grassroots movements organized and Hawaiian was declared an

official language of Hawaii (Lippi-Green, 2012). This action alone did not reverse the negative effects of the previous language policy. Grassroots programs increased their presence in 1983, and they continued through the 1990's with the aim of saving and revitalizing the Hawaiian language. These programs modeled themselves around the Maori language revitalization efforts and included having the native speaker, (the elders), work with the youth of the community to expose them to the Hawaiian language (Rawlins et al., 2011).

The Navajo language also demonstrates how restrictive and subtractive language policies can decimate a language and culture. The Navajo faced the same restrictive language policies endured by indigenous communities across the United States. Their language was banned, and they were forced to learn the language of the colonizers. The Navajo language originated in the southwestern United States in what is now New Mexico. It is currently spoken in Colorado, New Mexico, Utah, and Arizona. The Navajo Nation is the second largest indigenous nation in the United States, with 300,000 members (McCarty et al., 2012). In order to combat the effects of restrictive language policies, Navajo linguistic activists created bilingual and trilingual schools to support Navajo, English, and sometimes Spanish in their communities. The Navajo recognize the importance of knowing and using your native language to keep your culture and community alive (Hernandez-Avila, 2003).

### **Language revitalization**

In order to understand the relationship between the Seneca, the Seneca language, and the community, it is essential to understand language revitalization and revitalization programs. The essential problem behind language revitalization is that languages are becoming endangered and dying out (Baker, 2011b). Language and culture are irrevocably tied together. When a language dies, the culture dies with it (Harrison, 2007). There are five explicit reasons to preserve

endangered languages. The first is the need for diversity of language and culture in the world. The second reason for language revitalization is that languages express identity. It is essential that every human is able to construct a meaningful and authentic identity for himself or herself. The third reason is that languages contain the history of that culture and community, and the fourth reason is that languages contribute to human knowledge. Each language is a different way to understand the world around us, and the history of humanity. The final reason is that each language is interesting in itself. It is unique and worthy of existence (Crystal, 2002).

Furthermore, culture and language is a basic human right that must not be denied (Skutnabb-Kangas, 2001). One strategy for the preservation of language and culture is through language revitalization projects. There is evidence that suggests that language education and language policy can promote the stability, versatility, and vitality of endangered languages (Hornberger, 1998).

Language revitalization projects aim to not only increase the number of speakers of the target language, but to also increase the presence of the target language in the community. Therefore, language revitalization efforts should coincide with increased visibility of the target language in the linguistic landscape (Brown, 2012). In order to understand language revitalization in relation to the physical space in the community, further understanding of the definition, parameters, actors, and methods of study and analysis of the linguistic landscape is necessary.

There have been multiple language revitalization efforts across the globe that aim to maintain and revitalize indigenous and Native American languages. Two of these successful projects worked with the Welsh and Maori languages (McCarty et al., 2008; Baker, 2008).

The Welsh language was the indigenous language that was used in Wales, in the United Kingdom. It suffered from strict language policies in favor of English when it was under English control. However, in 1952 Trefor Beasley began a campaign to revitalize Welsh after he moved to an area where many citizens spoke Welsh, but received their tax documents in English (Berdichevsky, 2004). His campaign demanded that the notices be printed in Welsh and English, and this movement started the language revitalization process. This language revitalization program used four strategic focuses to keep Welsh alive: status planning, corpus planning, language planning, and acquisition planning. They have also relied on a combination of top-down and bottom-up approaches. This language revitalization project has been largely successful, and the Welsh language has been used increasingly in interactions for social networking, education, and employment (Baker, 2011a). The increased use of Welsh can also be seen because of its use in television media, especially in news programs (Berdichevsky, 2004)

Another successful example of language revitalization can be seen in the Maori language. This is a grassroots, or bottom-up language revitalization effort. Maori citizens noticed that the Maori language was in danger in the 1970's, when only the elderly spoke it. At that time it was reported that only five percent of the Maori population spoke Maori (McCarty et al., 2008). Within this language revitalization projects, schools had a major role in increasing the use of the language. Maori language and culture were intertwined and inserted into the schools, including preschools. This strategy increased proficiency in speakers at a younger age, and it encouraged adults such as teachers and parents to increase their own use of the language (McCarty et al., 2008). These successful language revitalization projects have been models for other projects around the world, including the language revitalization efforts on the Seneca Nation.

**Seneca language revitalization.** Fishman's "Graded Intergenerational Disruption Scale" measures language endangerment using a 1-8 rating system. 1 represents the least endangered languages, and an 8 represents the most endangered languages (Fishman, 1991). On this scale the Seneca language is at a 7, which means that most of the fluent speakers of this language are past childbearing age (Borgia & Dowdy, 2010). Despite the serious nature of Seneca language endangerment, the Seneca are working to revitalize their language.

Based on Gautieri's thesis research on attitudes toward the Seneca language (2013), 59% of participating students and teachers working in Seneca language programs felt the Seneca language was valued in their community. Additionally, 91% of participants felt that the Seneca language was valued in their school. The participants were asked to describe the areas of their life in which Seneca is important, and 40% of participants stated that it was important for their national identity. Over 50% of participants stated that Seneca was important for cultural activities. However, 90% stated that only English was important for business, nearly 80% believed that English was important for education, and over 80% believed that English was important for social activities (Gautieri, 2013). This breakdown demonstrates the need to incorporate more Seneca language into these activities. Once Seneca is used as the medium for communication in the essential sectors of business, education, and social activities, it will be less likely to become extinct.

One approach that the Seneca are using to revitalize their language is through education. This includes a few different methods. One method is known as language nests. Language nests are designed for preschool-aged children, and are attended in the place of conventional preschool or daycare. Language nests provide daycare for the children in the target language, in this case, Seneca. These programs usually take place in a home where elders and adults transmit the

culture and language to the children while taking care of their needs. Sandy Dowdy, a fluent Seneca speaker who was inspired by the successful Maori language nest program, created the first Seneca language nest. She also created a variety of brochures and learning materials for parents to take home so that they could continue their children's language instruction.

In addition to the language nests, the Seneca Nation has created the Faithkeepers School. This community school hosts Seneca programs, language classes for adults, and summer immersion classes for Seneca students (Borgia & Dowdy, 2010). The Faithkeepers School and the language nests work together to encourage fluency in young speakers of the Seneca language and improve the community's knowledge of the Seneca language by including it in cultural events and classes. Local school districts also announce their lacrosse games in the Seneca language (Huge Push to Save Endangered Seneca Language, 2014).

The Seneca Nation has also worked to preserve the Seneca language by writing it down. Seneca is historically an oral language, meaning that the language was passed from one generation to the next through stories and speaking without the creation of a written orthography. However, the Seneca worked with linguist Wallace Chafe to create this orthography. Creating a writing system for this traditionally oral language was essential because of the endangered status of the Seneca language (Chafe, 2007). It is also crucial for a study of the language as it is used in the physical landscape. Therefore, because of the modern nature of written Seneca, a study of the linguistic landscape will be constricted to its recent use in the physical environment.

### **Linguistic Landscape**

The linguistic landscape is as old as written human language, even if it has only been studied for the past few decades (Coulmas, 2009). In their seminal work, Landry and Bourhis (1997), state that the linguistic landscape of an area, region, or urban center is comprised of

public road signs, street names, shop signs, advertisements like billboards, and public signs on government buildings. Including both public and private signs, the linguistic landscape contains the visible language written on the markers of a given space. The linguistic landscape is closely related to the concepts of linguistic mosaic, the linguistic market, and the ecology of languages. It implies that there is a multilingual community because it refers to situations in which multiple languages appear (Gorter, 2006).

The explicit message of the sign and the language or languages it contains are not the only relevant factors to consider. The researcher should also consider factors related to their informational functions such as their material and their style (Dagenais et al., 2009). When considering linguistic artifacts in these communities, it is important to note their color, location, the words written on them, and how noticeable they are (Ben-Rafael, Amara, & Trumper-Hecht, 2006). Signage that is divided by public or private functions can also be termed ‘in vitro’, or ‘in vivo’. In vitro signage is the domain of the authorities and includes road names, official signs, and traffic rules. The private citizenry writes in vivo signs and these include graffiti, shop names, and advertisements (Backhaus, 2006). The actor or group of actors responsible for the language in the physical space is important because their motivations reflect the identity, ideology, and relative power of their community.

Within a community, language can be found everywhere from leaflets, to traffic signs, and shop windows, to posters (Gorter, 2006). Spolsky (2009), recommended that the category of signage should be extended to include street signs, traffic signs, advertisements, warning notices, building names, informative signs, objects, graffiti, and commemorative plaques. Including such a wide range of signage will cause a more holistic understanding of the linguistic landscape (Spolsky, 2009).



Studies focusing on the linguistic landscape examine the literal use of language as they are used in the public space. Linguistic landscapers describe and analyze the linguistic situation of particular countries, specific regions, or the use of languages across larger geographic regions (Gorter, 2006). Part of this analysis includes the reasons why the linguistic landscape has been constructed in this specific way.

The linguistic landscape that these artifacts come together to form has two functions: informational and symbolic. The linguistic landscape provides information about what language people should anticipate using in that territory (Landry & Bourhis, 1997). The written language on a space also conveys information about the language community that lives within that space. It tells both in-group and out-group members about the language and linguistic characteristics of the community while also informing them about the territorial limits, or language boundaries of the area.

The linguistic landscape informs speakers about the language they should use to communicate and use necessary services (Torkington, 2009). It also provides an overview of the languages spoken within a territory, and gives speakers a snapshot of the linguistic diversity of the population (Gorter, 2006). Beyond representing linguistic information, the linguistic landscape also has an economic, social, and cultural purpose. It gives signals about which languages are valued in this society (Dagenais et al., 2009). Furthermore, the linguistic landscape can represent the status and power of different linguistic groups. Therefore, it is both an informative source about the sociolinguistic context of an area, and a symbol of the relative power and prestige of different languages within that area (Cenoz & Gorter, 2006).

The symbolic function of the linguistic landscape is equally as important as the informational function. The use of a certain language in the physical space within a given

territory can symbolize the vitality of that language, and contribute to that language's ethnolinguistic strength (Landry & Bourhis, 1997). The linguistic landscape can represent the status and power of different linguistic groups. All signs and visual representations of language within a community are symbolic markers of power and status. These linguistic choices for public and private signage and markers show the attitudes toward different languages and speakers of those languages within a society. They can also reflect the explicit or implicit language policies of a government, or the local linguistic practices of different ethnic groups (Torkington, 2009). These symbolic functions have impact on the speakers' identities, and are also manipulated based on cultural and ideological goals.

**Culture, ideology, and identity.** The linguistic landscape can powerfully influence, and be influenced by, culture, ideology, and identity. Within a community, the linguistic landscape can contribute to the sociolinguistic situation since individuals absorb the information from signage, and that information influences their understanding about the status of different languages while also influencing their behavior toward language (Puzey, 2007). In Puzey's (2007), comparative study of multilingual road signs across Europe he found that movements to incorporate minority languages onto signage was often connected to political parties or movements. Additionally, he found that reactionary movements aimed at removing minority languages were often based on fears of ethnic uprisings (Puzey, 2007). The linguistic landscape as a symbolic construction of language within the public space can be a method for individuals to express and present themselves to the public. It is a physical representation of the language ideologies and the power relations of a given territory and its linguistic communities (Ben-Rafael et al., 2006).

In a study of language attitudes in the Anglo-Hispanic context, Daily, Giles, and Jansma (2005), found that the linguistic landscape was the most powerful indicator of in-group vs. out-group strength. They studied 190 Anglo and Hispanic adolescents by having them rate Anglo-accented and Hispanic-accented speakers. Their findings showed that the Anglo-accented speakers were rated more favorably, and that the Hispanic adolescents were even more likely to rate the Anglo-accented speakers favorably. However, the linguistic landscape influenced their ratings. Hispanic adolescents who saw Spanish represented in their linguistic landscape were more likely to favorably evaluate the Hispanic-accented speakers. The more often the adolescent subjects were exposed to their language in their community, the more likely they were to have a favorable opinion of their language and use it within their social networks (Dailey et al., 2005). This demonstrates the powerful impact of the physical representation of language on an individual's identity, and the strength of a language within a community.

Language visibility within the physical space of a community can also lead to the legitimization and a positive image change of minority languages. The visibility of languages can increase the linguistic awareness of them, and can cause debates within communities about attitudes toward different languages. Multilingual signs can cause change in these language attitudes as well. If minority languages are not represented in the physical space, their linguistic culture may not be recognized or valued by the community. This visibility of languages is crucial for the young speakers of minority languages because their exposure to their home language in the community can help them achieve a positive attitude toward their culture and identity. Road signs may be the first artifacts read by children, and children who interact with their language in public settings are more likely to use it spontaneously in many environments (Puzey, 2007).

Furthermore, the linguistic landscape may represent the ideological viewpoints of the actors within that community. These actors can be adding to the hegemonic ideologies through the language representations in their society. The identities of social groups or communities can be based on these ideologies and the accompanying viewpoints about the characteristics of certain social groups (Torkington, 2009). It is this emphasis on ideology and identity that leads actors from different linguistic or cultural groups to act upon their environment.

The importance of the linguistic landscape in representing ideologies and hegemonies within a community is represented in Cenoz and Gorter's 2006 study into the use of the minority languages Frisian in the Netherlands and Basque in Spain. They found that Basque had a much stronger presence in Spain than Frisian had in the Netherlands. One explanation for this is that Basque also has a strong political movement tied to it. The political ideology within this minority pushes them to call for increased use of their language in the physical space. Alternatively in the Netherlands, the hegemonic majority has oppressed the Frisian language and ethnic community. It is not represented in the physical space because it is totally dominated by the majority community (Cenoz & Gorter, 2006).

Actors work independently alongside institutions to mold the linguistic environment (Malinowski, 2009). Researchers should assume that these actors are rational, and are motivated by their hope for expression of their identity through their use of certain linguistic patterns. It is crucial to consider the motivations and acts of people within the linguistic landscape because they shape it to match their interests, ideologies, and identities (Ben-Rafael et al., 2006). Additionally, the researcher must consider that often several individuals are involved in the making of a sign (Spolsky, 2009).

The study done by Ben-Rafael et al (2006) in multilingual Israeli cities demonstrates this connection between the interests of actors and the linguistic landscape. This study examined both Jewish localities and Palestinian localities and found that the Jewish localities did not demonstrate much difference between the bottom-up and top-down signs. This is significant because it demonstrates that the individual actors in the community share an identity with the government in power. However, the Palestinian localities did not have the same consistency between the bottom-up and top-down signs, demonstrating a lack of cohesion with the majority government (Ben-Rafael et al., 2006).

Once the researcher considers the motivations of actors, both individuals and groups, within a society, they will be able to develop an understanding of how the linguistic landscape reflects the community at large. These considerations will need to be correlated with other factors that contribute to the linguistic landscape.

**Policy, power, and globalization.** When examining the linguistic landscape, researchers need to consider who is targeted for consumption of the written language, who is in charge of creating the written language, where it is positioned, and the influence of different language groups on the language policy in the area. These factors give rise to the importance of policy, power, and globalization within a linguistic community as they are represented through the physical linguistic context.

The structure of the linguistic landscape represents the linguistic hierarchy within a given territory. The visible languages represent the linguistic communities in power within that territory, and the more visible languages are perceived to have more power than those who occupy a smaller visible space. It is impossible to give the same physical space to multiple languages, and this situation creates the visual hierarchy of languages (Backhaus, 2006).

Furthermore, the position of languages on a sign implies a hierarchy as well. The dominance of one language over another can be understood based on its location compared to the minority language. The dominant language will be on the top, at the left, or in the middle of the sign, while the minority language will be on the bottom or to the right of the sign (Scollon, & Scollon, 2003). This is further emphasized when translations are involved, as the language in the prominent position is considered to be the original version of the message and all other languages are seen as translations (Backhaus, 2006). The linguistic hierarchy in a given space can be representative of the language policies within that space.

Language policy is the collection of ideas, regulations, laws and practices aimed at achieving planned language change. It is the explicit plan of a group of social actors. Language policy can come about through negotiated agreements, or external or internal events (Sloboda, Szabo-Gilinger, Vigers, & Simicic, 2010). These policies result in top-down expressions within the linguistic landscape.

The linguistic landscape explicitly and implicitly marks status and power. The language of power is explicitly used in government signs, multinational corporation signage, religious buildings, cultural centers, and hospitals (Huebner, 2006). These representations of language are known as top-down signs, because they are created by authorities and reflect the locus of power in that community (Cenoz & Gorter, 2006). Implicit language policies represent the grassroots identity of different language communities through local business signs, advertisements, posters, and graffiti that includes the minority languages (Huebner, 2006). These markers are known as bottom-up signs because they come from individual members of the community, who represent the private rather than the public sphere (Gorter, 2006). Whereas top-down signs are representative of the authority's commitment to the majority culture, bottom-up signs have more

freedom to be influenced by the individual (Ben-Rafael et al., 2006). The combination of explicit and implicit representations of language policy creates an understanding of the power relations within a given community.

Increasingly, implicit and explicit language policies are affected by globalization. Huebner's study of the linguistic landscapes in neighborhoods in Bangkok, Thailand found multiple motivations for the inclusion of English, a global hegemonic language, in these communities. One motivation was to appeal to the increasing numbers of tourists who use English to function abroad. This was evident both in top-down signs, like street signs or traffic signs, and bottom-up signs including shop names and flyers. However, Huebner also found that individuals and corporations were incorporating the language associated with power and prestige, English, to try to align those same qualities with their brand or business (Huebner, 2006). This example demonstrates how the linguistic landscape is inseparable from identity, power, and ideology.

In this example of the integration of English into the linguistic landscapes of Bangkok neighborhoods it is evident that business owners attempted to appeal to the youth community and create an identity of wealth and power for their customers by integrating English into their signage. Furthermore, the hegemonic position of English is apparent because of the use of English on top-down signs created by the government. In another study of a tourist area in Almancil, Portugal, the use of English on bottom-up signs showed that shop owners were motivated to use English on their signs to increase their sales to tourists. This demonstrates the economic power of tourists, and the material benefit of using English for businesses (Torkington, 2009).

**Linguistic landscape and language revitalization.** Rules about language use in the physical space have been created in various areas. Specific regulations about the linguistic landscape often accompany language policy regarding the media, education, and other aspects of communal life. While this can be done to restrict minority languages, as it has been done to the Seneca language, it can also be used to strengthen the use of minority languages. For example, in Catalonia, there is a regulation that the Catalan language must be present on all public and private signs. This robust effort to include Catalan in the linguistic landscape has had a strong effect on the linguistic landscape in the Basque region (Cenoz & Gorter, 2009).

Another example of the use of policy regulating the linguistic landscape in the name of language revitalization is occurring in Wales. Welsh language and culture were once suppressed by the English. However, there has been a vibrant revitalization effort to restore Welsh that can be seen in the physical landscape. In a 1993 act, the public sector was ordered to treat Welsh and English equally, and to provide all public services in Welsh. As late as the 1970's, Wales has moved for place names to revert to Welsh spellings, and for public signs to include, or exclusively use, the Welsh spelling. This language planning measure has helped to give Welsh and Welsh speakers more power in their community (Coupland, 2010).

**Methodologies and analysis for studying the linguistic landscape.** The linguistic landscape can provide a picture into how different languages are utilized within a geographic area, and it is often analyzed in conjunction with other methods like surveys, and interviews. Analysis of the linguistic landscape can be either quantitative or qualitative. As with any other sociolinguistic study, there are essential questions that researchers need to ask themselves before they begin.



Quantitatively speaking, researchers can count and classify all of the public signage within a geographic area based on the language used and the actor who made the sign (Torkington, 2009). When analyzing the linguistic landscape quantitatively, a coding system is necessary. Researchers take into account the location of the sign, the placement of language on the sign, the size of the font, order and number of languages, and whether the text has been translated (Gorter, 2006). Research into this area is qualitative when the researcher examines the nature of the texts and asks why a certain text was used within a certain place, time, and with a particular language.

When studying the linguistic landscape, there are a few methodological frameworks already in place including the Critical Discourse Analysis (CDA), and Geosemiotics. CDA sees public discourse as a social practice that is influenced by society while also influencing society. It considers language and social practices to be entwined, and researchers using this approach consider the ways that social hierarchies and power structures are fortified through language. (Torkington, 2009).

Another similar approach to studying the linguistic landscape is geosemiotics. This is an approach to the study the physical placement of signs and discourses and human interaction with language in the material world through the lens of social meaning. Within this framework, a crucial element in examining linguistic markers is the context in which that marker is placed (Scollon & Scollon, 2003). Therefore, language cannot be separated from the social context, as its entire meaning is drawn from the social identities, ideologies, and power within that context. This is an effective approach to understanding the social relations in relation to the public discourse and linguistic markers of a given community.

Before choosing an approach to examine the linguistic landscape of an area, researchers have certain questions to consider or problems to overcome. First, they need to decide what area they are going to photograph or classify, and if a representation of that city, country, or area is worth studying in relation to its linguistic markers. For example, some areas may not represent the entire society as a whole, but rather might represent the linguistic diversity within that area. This is essential to consider, as it will influence the implications of their study.

After choosing a location, linguistic landscapers have to carefully consider what markers are truly pieces of the linguistic landscape. The landscape can change on a daily basis as people change signs, moving objects like buses pass by, and posters get ripped down or put up. Researchers need to make decisions about which artifacts are important representations of the linguistic community, and which should not be considered. For example, should small hand-written stickers, receipts, or pieces of clothing be considered linguistic artifacts? Each situation will be different based on the context of the linguistic landscaper's research design (Gorter, 2006).

The fact that studies of the linguistic landscape are complex and multidimensional further supports the idea that the linguistic landscape is a physical representation of the dynamics of ideology, identity, and power within an area. Each research design will have a different contextual basis depending on those three factors, and therefore must have a unique, yet carefully constructed premise.

## **Conclusion**

The linguistic landscape is the physical representation of a linguistic community. Although researchers make deliberate choices regarding the artifacts they analyze in a specific area, there are certain elements that generally constitute the linguistic landscape. These elements

include: roach signs, government signs, commercial shop signs, advertisements, and posters.

Certain elements on these artifacts provide linguistic landscapers with clues about the societal dynamics of that area. They consider the size of the font, the location of the sign, the color of the sign, the number and location of the languages on the sign, and the visibility of the sign.

These factors provide researchers with valuable information and symbolism to help them understand the linguistic community. However, as noted by Scollon and Scollon, (2003), these artifacts must be understood within their context. Researchers must endeavor to understand the ideologies, power structures, and identities that both manipulate and are manipulated by their linguistic landscape. Once the linguistic landscape and the social context have been considered, it is possible to establish an understanding of how the linguistic landscape and the community surrounding it interact and affect each other.

The Seneca Nation presents a complex and unique linguistic landscape for analysis because of the history of the interactions between its two languages: Seneca and English. An analysis of the current linguistic landscape alongside the societal context will provide information about the language revitalization efforts, and attitudes toward these efforts.

## **Methodology**

### **Research Design**

The main body of this study is made of a thorough inventory of the linguistic landscape of one street and one roundabout on the Seneca Nation in Irving, New York. The street selected for this study is a central route for traffic through the Seneca Nation, and it is also a busy shopping center. The analysis of the linguistic landscape is supported with three interviews of Seneca Nation residents on their opinions and attitudes toward the Seneca language and English in their physical landscape.

The approach taken in this study first involved taking digital pictures of all of the text seen from the street. The next step was the creation of a codification process that was used to analyze the data. Each sign, or item with text on it was considered a unit for analysis. The coding scheme that was used to analyze the linguistic landscape had 6 variables. These included the type of sign, the number of languages on the sign, top-down versus bottom-up signs, the languages present on the sign, the fonts of bilingual signs, and the placement of the different languages on bilingual signs (Landry & Bourhis, 1997).

The next step was to conduct three informal interviews with Seneca Nation residents. I asked them about their attitudes toward, and opinions of, English and Seneca on the Seneca Nation. The purpose of this was to correlate the data obtained through the analysis of the linguistic landscape with the attitudes of members of this linguistic community. Since this study is based on the theoretical frameworks of Critical Discourse Analysis and Geosemiotics, it was essential to interview members of the community and analyze their attitudes alongside the linguistic landscape. These frameworks state that the linguistic landscape and the social sphere are irrevocably linked (Torkington, 2009).

## Setting

The location of this linguistic landscape study was the Seneca Nation Reservation in Irving, NY. As seen in Figure 1, this reservation is also called the Cattaraugus Territory. This is a major traffic area because it includes the intersection of US Route 20, NY Route 5, NY Route 438, and Interstate 90 (GIS Department, 2015). This means that this area is a commercial hub where the Seneca Nation displays a large amount of public and private text. This is also an area

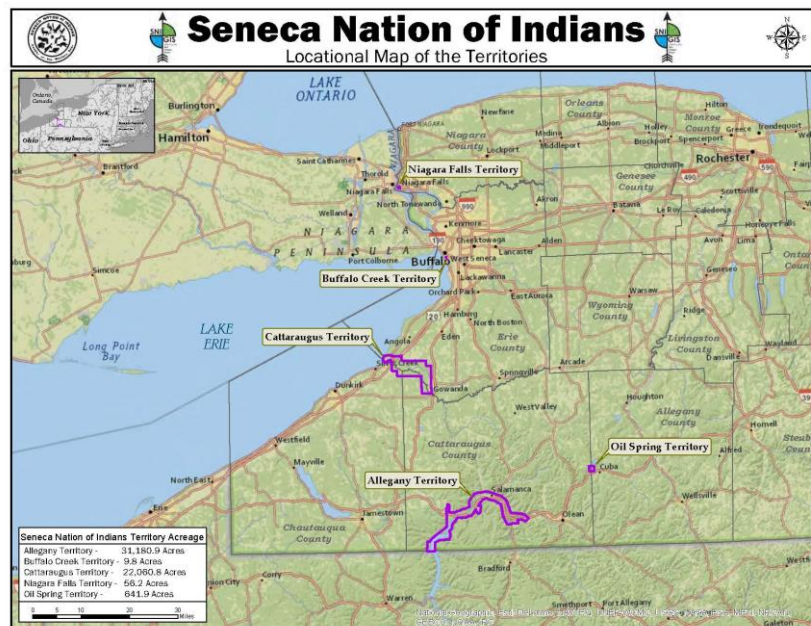


Figure 1. Location of the Seneca Nation Territories (GIS Department, 2015). This figure illustrates the location of the Cattaraugus Territory, where this study took place.

that has undergone recent development, and it is a place that is rich in both top-down and bottom-up signage. The specific stretch of road that will be documented is Route 20 starting at the intersection with Buffalo Road through the roundabout. This area was chosen because of its large amount of signage and commercial activity, which makes it an authentic representation of the linguistic landscape.

Demographically, Seneca mainly populate the Cattaraugus Reservation. Based on the U.S. Census Bureau's Population Estimates (2014), the Cattaraugus Reservation has a total

population of 1,868 people, 801 of them are male and 1,067 are female. The median age of citizens on the Cattaraugus Reservation is 38.5 years old. The demographic breakdown estimates that 82 residents are White, 4 are African American, 178 are Hispanic, 1,579 are American Indian, and 63 are Asian (ACS Demographic and Housing Estimates, 2014).

### **Linguistic Landscape Sample**

The sample included all signs visible from the road along Route 20 from the intersection with Buffalo Road to the end of the roundabout. It will included both private and public signs, and all fixed text. This means that posters and flyers were also considered, even though they are not permanent fixtures of the community. Text on clothing or bumper stickers were not considered as they could have come from other locations, and may not have represented the linguistic community in this area. It is essential to include both top-down (private) and bottom-up (public) signs because both types of signage communicate basic information as well as symbolic information to the viewer. If this study were to focus on one top-down, or only bottom-up signage, it would provide only a partial understanding of how language is used in this linguistic community for both symbolic and informational purposes (Landry & Bourhis, 1997).

### **Interview Participants**

The participants for the informal interviews were members of the Seneca Nation, and residents of the Cattaraugus Reservation. There were two participant groups interviewed for this study. The first group of participants were involved in the language revitalization project in some way, and this gave them enough background knowledge of the topic. These people were also ideal because they were familiar with the linguistic characteristics of both Seneca and English. Examples of these people include Seneca language teachers at the local public schools, teachers

and caretakers at the language nests or Faithkeeper schools, and language advocates. These individuals were contacted and interviewed via email, which is discussed later in this section.

The second group of participants was interviewed while the landscaping photography took place. As the researcher photographed the local signage, she also asked the informal interview questions to local residents including shop owners, pedestrians, and shop patrons. It was important to include this sample in the interviews because it provided the perspective of individuals in the community who were not necessarily experts in language revitalization, but interacted with the linguistic landscape in this area on a daily basis.

### **Data Collection**

**Interviews.** Interviews are an important component of this study because they were correlated with the analysis based on the data collected from the linguistic landscape. Without the interviews, it would be impossible to determine how individuals in this community interact with the language of their environment, or how their attitudes are reflected in the linguistic landscape (Torkington, 2009).

Interviews are a method for qualitative research. Interviews permit researchers to understand how a participant feels or thinks about a certain topic (Jacob & Furgerson, 2012). For this study, I interviewed 3-4 people based on the parameters listed above. They were informally asked about their opinions and attitudes toward Seneca and English. Additionally, they were asked how they relate to language in their physical environment, if they believed that Seneca should be further incorporated into the physical environment, and if they believed that the linguistic landscape should be incorporated into language revitalization planning policy.

The people interviewed were all members and residents of the Seneca Nation. The researcher interviewed two Seneca language teachers, and they both considered themselves to be

language advocates as well. The interviewees were selected based on their positions as Seneca language teachers in public schools because they are familiar with language revitalization efforts because of their intimate position within the Seneca language revitalization project. The researcher contacted them via email, and sent them the interview questions to review and respond to. These informal interviews were conducted electronically for the convenience of the interviewees, so audio-recording was unnecessary.

It was beneficial to conduct these interviews via email because it saved time for the interviewees, who were able to thoughtfully respond to the open-ended questions and prompts at their convenience. It is also beneficial because it creates a safe space for shy individuals to express their opinions in an environment that makes them comfortable. Finally, this method eliminates transcription errors, as the participants answers are self-recorded (Lokman, 2006).

The informal interviews that were conducted with the second group of participants took place in person rather than via email. The researcher approached four members of the Seneca Nation as they were conducting their daily business within the area of the study. The participants were not formally involved in language revitalization in any way. For these interviews, the participants were asked to relate their attitudes and experiences with the linguistic landscape by answering a series of open-ended questions. This is important because it allows the participants to reveal information that the researcher may not have considered before the interview took place (Jacob & Furgerson, 2012). Their answers were recorded with pen and paper by the researcher, who decided against recording the participants. Since these interviews were conducted without prior arrangements, a recording may have made the participant feel uncomfortable, or decline to participate. Additionally, it helped to remove any technological barriers between the participant and the researcher.



**Landscape.** The main corpus of this study is the physical landscape in the commercial hub of the Seneca Nation's Cattaraugus Reservation. Data from this environment was collected via digital photos. One photo was taken of every physical artifact within the designated area on US Route 20. The photos were taken on an iPhone 5c. Once the photos were taken, this data was coded based on the designed coding system, and then compared to the attitudes and opinions collected during the informal interviews.

### **Data Analysis**

This study aims to understand the relationship between the two languages, English and Seneca, present on the Seneca Nation Cattaraugus Reservation. In order to do that, there were two steps to the analysis process. First, the photographs were coded based on certain variables. Coding is important to the research process because codes give data value (Fraenkel, Wallen, & Hyun, 2012). The variables were considered in this study are: the type of sign, the number of languages on the sign, top-down versus bottom-up signs, the languages present on the sign, the fonts of bilingual signs, and the placement of the different languages on bilingual signs. This codification system is based on the two frameworks discussed in the literature review: Critical Discourse Analysis, and Geosemiotics (Torkington, 2009; Gorter, 2006). Once each artifact had been measured on this scale, the researcher had a more thorough understanding of how this artifact contributes to the linguistic landscape, and how it reflects the attitudes of residents of this community toward the different languages that are represented.

One example of how this process went is as follows. A large sign that says, "Gas Station" would be coded as a private sign, with only English present on it. It would be considered a bottom-up sign because a private citizen created it instead of the government. Since it is a monolingual sign rather than a bilingual sign, it would not be coded for font or placement of

different languages. Each artifact was coded and analyzed in this way so that this study could better understand the trend of signage represented in the linguistic landscape of this community.

The next step was the analysis of the interview responses. The answer of each participant will be coded based on whether they feel positively toward Seneca and English, and whether they feel that the linguistic landscape represents the linguistic community, or not. Their answers were organized based on whether they believed that the linguistic landscape should be incorporated as a part of the language revitalization project. Specifically, the interviewees' answers were coded based on patterns. For example, in question two, the interviewees were asked about their feelings toward Seneca and English. For each answer, the researcher noted if they responded positively toward each language, and which specific feeling word was used (ie. Annoyed, pleased, excited, frustrated). The purpose of coding based on patterns in the interviewees' answers is to determine if there are any consistencies in community attitudes toward and interactions with the linguistic landscape (Saldana, 2012).

Finally, the participants' answers were compared to the data collected from the linguistic landscape. Their answers about their attitudes and opinions of the linguistic landscape were compared to the data and trends that were obtained from the linguistic landscape photographs and analysis.

### **Validity Considerations**

The validity of this study is increased by comparing the data from the linguistic landscape to the informal interviews of members of the linguistic community. The specific area used for the linguistic landscape increased the validity of the project because this area includes a great deal of both bottom-up and top-down signage. The large amount of signage, and the busy commercial nature of this area will provide many samples from which to draw conclusions.

However, a study of this nature would be more valid by including a larger area for the linguistic landscape analysis, and by including a larger sample size for the interview participants. The limitations of this study in those areas limit the validity of the results, especially in the extrapolation of the conclusions to the Seneca Nation as a whole. In order for someone repeating this study to obtain more validity in their conclusions, it is suggested that they incorporate a larger sample size.

An additional limitation to the validity of this study is my role as the researcher. I am an outsider to this community, and the attitudes of the participants toward me may influence their answers. This could also have limited the amount of interview responses I received, and the types of people who were willing to be interviewed by me. For example, elders in the community may be more wary of discussing such sensitive issues with an outsider. Additionally, some people who refused to be interviewed may have accepted the invitation from an insider in their community. If this study were conducted by a member of the Seneca Nation or the Iroquois Confederacy, they may achieve higher validity.

Validity was also influenced by the statuses and positions of the individuals interviewed by the researcher. I interviewed people who were involved in the linguistic revitalization of their community, and tended to be very active in cultural and communal events. These people may have reported themselves to be more interested in seeing Seneca language revitalization represented in their physical community than another member of the Seneca Nation who was not involved in cultural or communal events. This is a limitation on the validity of the study, and in order to increase the validity, future researchers should attempt to take a more equal sampling from individuals across the community.

### **Anticipated Results**

Gorter (2006) argues that the relationship between the linguistic landscape and the sociolinguistic community is bidirectional, meaning that they influence and are influenced by each other. Based on this theory, the researcher anticipates that the linguistic landscape will represent the linguistic communities on the Seneca Nation. Since the majority language is English, the researcher expects that most artifacts will be in English, and that English will have the dominant position on any bilingual signage. The researcher expects that the interview results will show that the participants would like to see more Seneca in their linguistic landscape, to represent their cultural heritage. The Seneca language revitalization project may influence their opinions and cause them to indicate that they would prefer to see more Seneca language. Finally, the researcher anticipates that the results of the linguistic landscape analysis and the interview analysis will follow the same trend based on the theory that linguistic landscapes and linguistic communities are fluid and influence each other.

### **Findings**

After the study was completed, the categorizations of signs were tallied and used to determine a comprehensive understanding of the linguistic landscape of this area. The signs were categorized based on the languages used on each sign, and their purpose. For example, a sign could be both Seneca only, and a public, or top-down, sign. Then, within each larger category of public or private, each sign was also categorized based on its purpose. Examples of purposes could be traffic signs, advertisements, or decorations. Therefore, a single sign could be a private, English-only business name with an informational purpose. The different categories and groupings that can apply to a single sign demonstrate the complexity of physical language in our communities. The results of this study were graphed for a better visual understanding of the area (Figures 10 and 11).

Once the study began, it became clear that a larger area needed to be catalogued to provide a full understanding of the linguistic landscape of the Seneca Reservation. The original intention was to photograph and analyze the signage along Route 5 from the intersection with Buffalo Road just before Cattaraugus Creek, to just after the roundabout at the intersection of Route 20 and 4 Mile Road. In order to include more signage, the researcher included the stretch of road from the roundabout down Interstate 438 to the Seneca Nation of Indians Cattaraugus

Community Center and the Seneca Nation of Indians Library. The community center was also the location of the informal community interviews meant to provide a deeper understanding of how the linguistic landscape interacts with the community. Note Figure 2 as the original street for analysis, and Figure 3 as the added area. This area was an important addition because it allowed the researcher to photograph more public buildings and signage, whereas the main

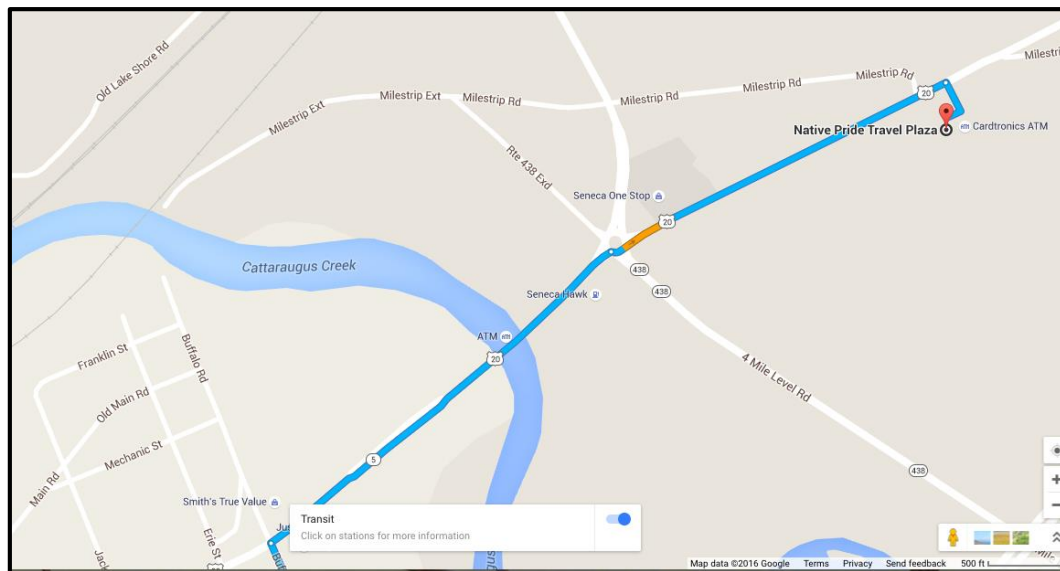


Figure 2. The original location for the study. It took the researcher along the main thoroughfare in the Cattaraugus Reservation.

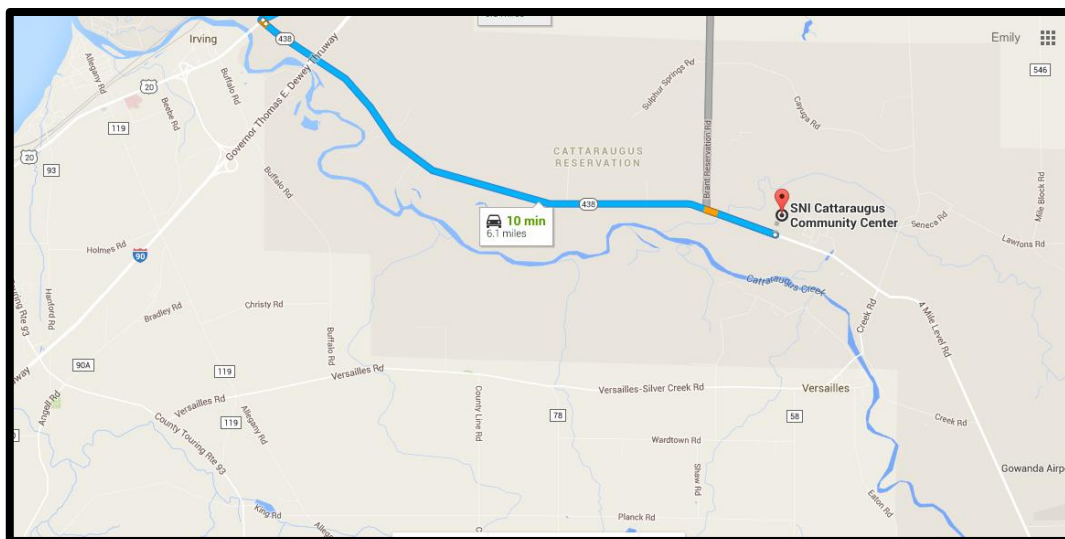


Figure 3. This shows the added route for this study. This route included more of the public buildings used in the Cattaraugus Reservation.

thoroughfare contained mostly private commercial signage. As these two streets are connected and they constitute the same neighborhood and community, they will be analyzed together. The results will be broken down and analyzed by sign type to provide a better understanding of where the signage comes from and lead into an analysis of individual motivations.

### The Artifacts

During this study, every visible piece of signage was photographed and categorized. This included advertisements, road signs, building names, billboards, and flyers. Since a great deal of this area contains gas stations, all of the signage at the gas pumps was also documented. The idea



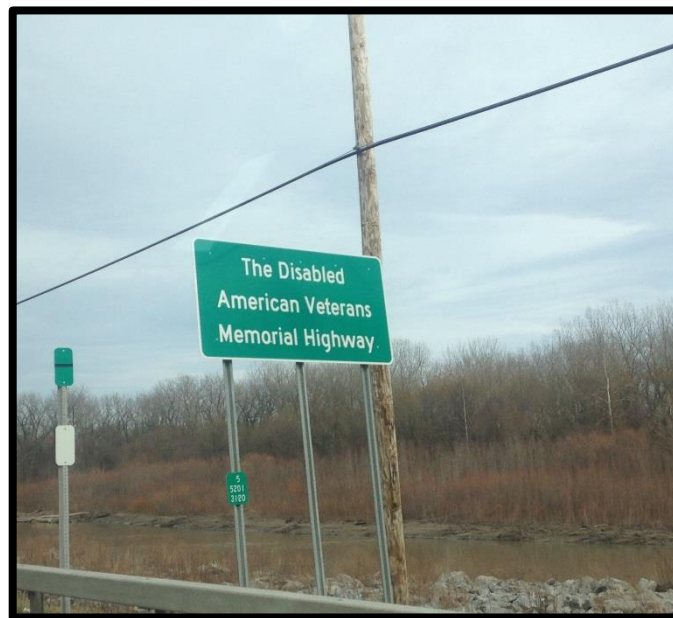
Figure 4. This shows an example of a private billboard, which is considered one piece of signage.

was to capture all of the visible language that individuals interact with on a daily basis. In total, there were 169 signs photographed and catalogued. This may seem like a small number for such a large physical area, but this is a rural community that contains less visible language than an urban setting. In order to understand the context of the number of signs, it is also important to understand how they were catalogued.

Large signs with lots of language, like billboards, were counted as just one sign. This is because the main message of the sign was unified, and all of the language on the sign was

created and dispersed by the same individual or group. Figure 4 demonstrates an example of such a billboard.

**Public, or top-down, signage.** The linguistic study of this area revealed that most of the signage was not public. Public signage refers to signs that are created by government institutions. In this area there were 76 total public signs photographed and documented. These signs included street signs, place names, and all of the signage on public buildings. The public buildings



*Figure 5.* This is one of the first public signs you see as you enter the Seneca Cattaraugus Reservation. This sign is located on the right side of the road as you move down Route 5 toward the roundabout.

photographed were the Seneca Nation of Indians Cattaraugus Community Center, the Saylor building that houses the Department of Education, the Seneca Nation of Indians public library, the Early Childhood Learning Center (ECLC) that houses the preschool program, and the Seneca Nation of Indians Tourism Historical Society. The only signs on these buildings that were not included in the public category were posters for events held by private groups. Examples of public signage can be seen in Figures 5-7.





*Figure 6.* This shows the only bilingual sign found and photographed in studied area. It is a public sign located on the right side of the road as you move down Route 5 toward the roundabout.



*Figure 7.* This example is located outside of the ECLC that is also an example of one of the few Seneca-only signs. It is one of only four Seneca-only public signs.

Categorization of these signs revealed that almost all of the signage was in English without any use of Seneca language. This was true for both the New York State signs, like speed limit signs, and the Seneca Nation of Indians signs. The only bilingual sign in this territory was also a public sign. It can be seen in Figure 6, and it is the sign that greets visitors as they enter the

Cattaraugus Reservation. This sign contains both Seneca and English, with the English information at the top of the sign.

The public signage in this area consisted of 3 street name signs, 33 traffic signs, 8 place name signs, 9 public flyers, 6 decorative signs, 2 public notices, and 16 signs on or part of public buildings. The category of decorative signs includes banners located around the roundabout that do not fit in any other category. These signs all say, *Seneca Nation of Indians*, and are created and dispersed by the Seneca Nation of Indians.

**Private, or bottom-up, signs.** This area contained 92 private, or bottom-up signs. This means that the signs were created by private individuals rather than government institutions. These types of signs included flyers for events, advertisements, billboards, business names, decorations, and safety signs on businesses. The safety signs were not created by the businesses, but they were included in the private signs category because it was the individual business owners who chose to include them in the landscape. Specifically, there were 5 flyers, 34 advertisements, 5 billboards, 33 business names and informational signs, 8 decorations, and 7 safety signs. The business informational signs included things like, *Enter*, or, *Self Service*. These are items that were counted alongside the business names because they were created by the same individuals who created the business name signs, and they have the same informational rather than persuasive purpose.

One group within the category of private signs that had been originally included within the context of this study was graffiti. Since graffiti is a semi-permanent fixture of the linguistic landscape, it would be pertinent to the investigation of linguistic artifacts to include it. However, during the course of this study no graffiti was found to catalogue and analyze within the boundaries of this study.

Out of all of the private signs, only seven of the signs were in Seneca while 85 of the signs were in English. The English signs appeared in every group within the private category, but the Seneca signs were exclusively in the decorative category. Figure 8 provides an example of such a decorative sign. This sign is one of seven similar signs which show an animal with its Seneca name. These signs were found directly at the roundabout, and adorned the windows of a private gas station. These signs were put in the decorative category along with the public banners at the roundabout because they serve a decorative purpose rather than an informational purpose.



*Figure 8.* This photo shows one of seven decorative private signs that are in Seneca only. These signs received their own category because of their decorative rather than informative or persuasive nature.

The eighth decorative sign was in English and was located on a different gas station on Route 5, and said, Honor Indian Treaties. This sign also did not seem to fit with the informational nature of the other business signs, or the strictly persuasive nature of advertisements. Therefore, it had to be put in the decorative category.

The English-only signage fell into the other groups within this private category. For example, the advertisements, safety signs, and business names were exclusively in English. Further analysis of why that might be will occur in the Discussion section of this study. An example of English-only advertisements can be seen in Figure 9. This image shows an advertisement outside of a gas station on the right-hand side of Route 20 after you pass through



*Figure 9.* This image is an example of an English-only advertisement located on the Seneca Cattaraugus Reservation. It is located outside of a gas station on Route 20.

the roundabout. This sign clearly determines their target audience as English speakers.

### **Linguistic Artifacts by Language**

Although the purpose of the linguistic artifacts is essential in understanding the linguistic landscape, the actual languages represented, and their relative location within the linguistic landscape is a crucial element as well. Figures 10 and 11 provide a visual understanding of the linguistic breakdown of the signage in the Seneca Cattaraugus Reservation.

In Figure 10, note that for both the private, or bottom-up, and public, or top-down signage, English was the predominant language. You can see that there was also only one visible

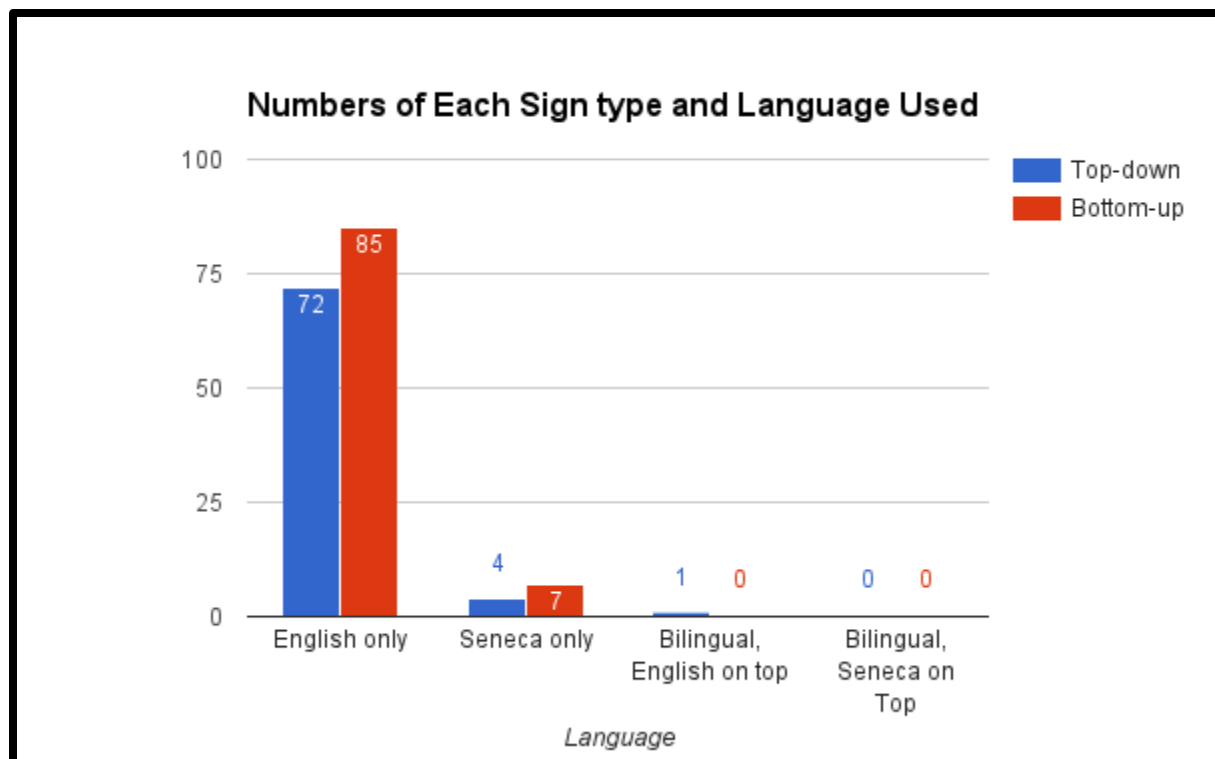
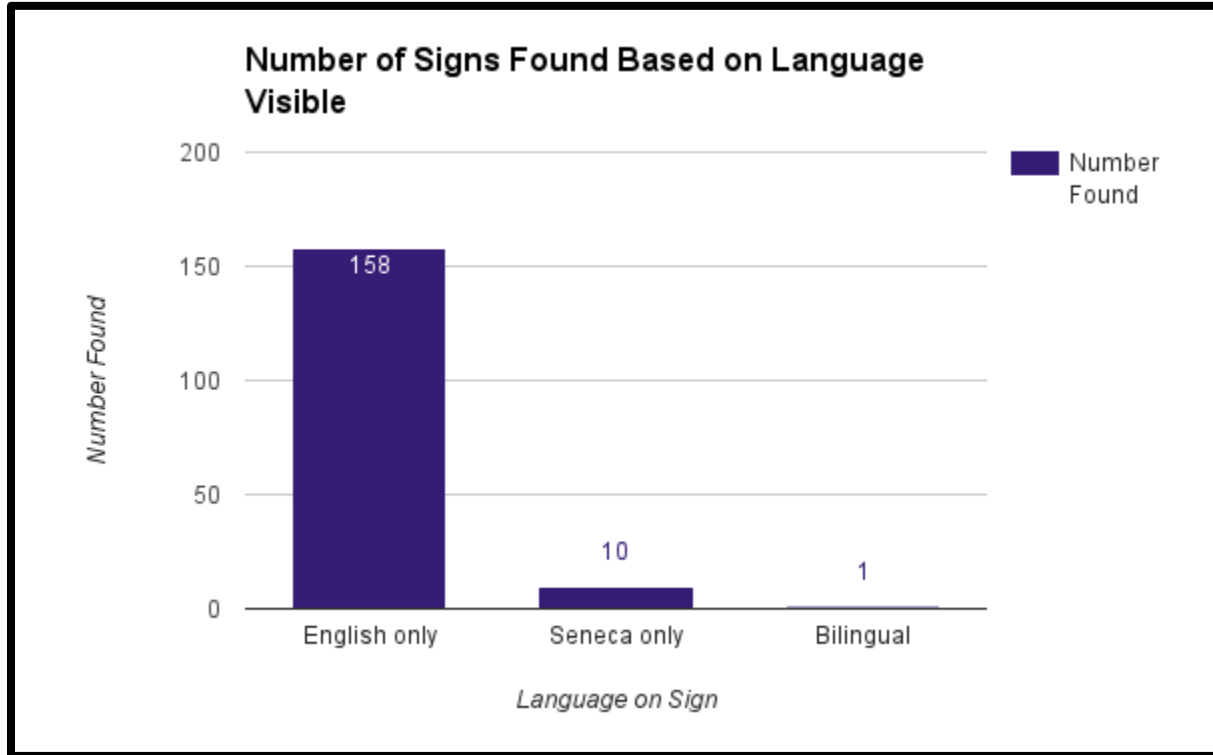


Figure 10. This chart shows the linguistic artifacts based on their languages.

bilingual sign, and it had English at the top, and Seneca at the bottom. This sign can be examined in Figure 6. In this chart you can also see that this linguistic landscape only used English and Seneca, making this a bilingual landscape rather than a multilingual landscape. Although there are Spanish-speaking individuals in the community, Spanish was not represented visually in this area. Additionally, this chart clearly breaks down the number of private vs. public signs in each language.

It may be surprising to see that there was actually more Seneca language created by private individuals than by the government considering that the Seneca Nation of Indians Department of Education is involved with Seneca language revitalization. However, it is important to note that all of the Seneca language signage was created by one individual business. If that business had not incorporated its seven Seneca signs, all of the Seneca language in the physical space would have come from the government.

Figure 11 shows a representation of each language that is represented on each linguistic artifact without considering the creator of the sign. This provides a clear picture of the vast amount of English signage compared to the small amount of visible Seneca language. This is



*Figure 11.* This chart represents the amount of signs in English, Seneca, and with both languages present on them.

significant because it creates a quantifiable understanding of the endangered status of the Seneca language.

**Seneca language.** Seneca language appeared on eleven total signs, and appeared exclusively on ten total signs. As stated above, most of these signs were located on one private business, and the other three signs that exclusively had Seneca language were public signs. Two of these signs were identical, and were placed at the same place but at opposite sides of the street. They each faced a different path of traffic. An example of these signs can be seen in Figure 12. The purpose seems to be to inform the public about the name of the location. These signs were located below identical signs with the same place name in English. The relative

location of these two signs reflects the status of each language within the community. In Figure 12 you can also see how fonts play a role in demonstrating the role of each language. The



*Figure 12.* In this photo you can see two separate signs. Each sign has the same meaning and are essentially translations of each other. The English sign is located directly above the Seneca sign.

English sign is not only above the Seneca sign, it has bold lettering. Alternatively, the Seneca language is in a more decorative font. This suggests that the role of the Seneca language is symbolic in this location, while the English sign is for informational purposes. This reflects the surrounding community in which most individuals are English speakers.

The final Seneca sign can be seen in Figure 7. This sign contains Seneca in a large bold font without any other language on the sign. It is located outside the ECLC and is pointed at traffic in each direction. This implies that it is showing a name to the traffic that goes by. The ECLC is at the center of the Seneca language revitalization efforts in the Cattaraugus Reservation, and it is an important location for Seneca to be highly visible.

**English language.** English can be found everywhere within the area studied. It was the more prominent language for both public and private purposes within this area. As shown in Figure 12, English occupies an informational role in this area compared to the Seneca language's symbolic and cultural role. English was also used for advertisements like the one in Figure 9, and another on Route 20 that said, *Big Indian Smoke Shop: Huge Savings*.

The fact that English takes an informational and a persuasive role demonstrates the fact that it is the language predominantly spoken by the population. In order to disseminate information effectively, attract customers, and communicate ideas, it is essential for individuals and institutions to use English. This conclusion is based on the information shown in Figures 11 and 12, where it is apparent that English is largely chosen over Seneca for these purposes.

**Seneca-English bilingual signs.** Although the bilingual nature of the two signs in Figure 12 was discussed, these were considered two separate signs because of their distinct physical separation. Therefore, there was only one truly bilingual sign found in this area, and it can be seen in Figure 6. This is the sign that welcomes travelers to the Cattaraugus Reservation along Route 5 before the roundabout. It contains both Seneca and English. Viewing the sign makes it apparent that the English lettering is larger and above the Seneca. This again demonstrates the necessity of using English for informational purposes and Seneca for cultural and symbolic purposes.

Although this quantifiable data provides information into the linguistic landscape of this area, this and other conclusions cannot be permanent without the integration of data from community members. This study is based on the theory of Critical Discourse Analysis, which makes it clear that an understanding of the linguistic landscape must include an understanding of the linguistic community which inhabits it (Torkington, 2009).



**Informal Interviews**

In order to gather information about this linguistic community informal interviews were conducted at the Seneca Nation of Indians Cattaraugus Community Center, often referred to locally as the CCC. The interview protocol used for this interviews is located in Appendix A, and the consent form used is located in Appendix B.

This location was chosen for the informal interviews for a number of reasons. First, it is at the center of the public area of the Cattaraugus Reservation. This particular area gives a feeling of community that is not as noticeable in typical commercial areas like the one around the roundabout. This building was also chosen because the people using its services are making a conscious choice to participate in their community. Since the interview questions pertain to the linguistic community, this was an optimal location for interviews.

Three interviews were administered. After the participants signed the consent forms, they were asked the questions on the interview protocol, and notes of their answers were taken by the interviewer. The participants were approached individually in a low-stress environment.

In order to understand the participants' answers as they pertain to this research, the questions have been grouped by theme. The first theme is, "The Role and Use of Seneca and English?" This theme incorporates Question 1: How often do you use Seneca/English? What do you use them for?, and Question 3: Do you think that Seneca language revitalization is important? Why or why not? The second theme is, "Community's Attitudes Toward Seneca and English?" and it incorporates Question 2: What are your feelings associated with each language?, and Question 4: How do you feel about having both languages represented physically in your community? The final theme is, "The Role of Increased Seneca Signage" This theme included Questions 5: Do you think that increasing the amount of Seneca language on

signs/posters/advertisements would encourage more people to use this language? Why or why not? It also included Question 6: Should the government take steps to put Seneca on more official signs?, and Question 7: Should business owners be encouraged to include Seneca on their signs. In this way, the third theme attempts to take both the public and private sectors into account.

**The role and use of Seneca and English.** Based on these interviews, individuals use Seneca language every day. One participant even stated that they use more Seneca than English, and then wrote a little frowny face next to the interviewers notes indicating that they thought this was a problem. The other participants highlighted the use of Seneca for greetings, place names, and after eating. The second participant stated that they usually use English, but can remember some Seneca. The answers to the first question demonstrated that there is a wide variability in the amount of Seneca/English used by community members. Therefore generalizations would be unwise.

The third question, which asks if and why Seneca language revitalization is important belongs with this theme because it reflects how viable this language is as viewed by the community. All three participants indicated that they believed Seneca language revitalization was important and that Seneca language use should increase. Participants cited reasons such as it is beneficial to know both languages, and wishes for community members to speak more Seneca. The first participant stated that using both languages and revitalizing Seneca provides a way to live in both worlds, the Seneca world and the outside world. They explained that understanding both languages is crucial for understanding who, “we” are, (we referring to the Seneca people).

The positive views of these community members toward Seneca, and their statements that they use Seneca often, one even more than English, indicate that an increase in the amount of visible Seneca would be a welcome and appropriate addition to the linguistic landscape.

**Community's attitudes toward Seneca and English.** This theme, and its relevant questions, are essential in understanding a linguistic landscape in the context of the revitalization of a heritage language because the relationship with each language is tempered by the history of language policy. One participant stated that they feel Seneca language is a way of life that their people have strayed from. The same participant said that they love using Seneca, and wish that they were fluent in Seneca rather than English.

All three participants expressed wishes to be fluent in Seneca, or to know more Seneca. One participant felt that it is beneficial to know and see both languages in the community. The third participant said that the Seneca language is who they are, and it scares them that the language is dying. All three participants indicated that they love Seneca, and one said that they love both languages.

In the participants' answers it is apparent that the Seneca language has a strong cultural and emotional role in their lives. None of the participants indicated any aversion to having so much English around, and one participant thinks it is better to have two languages around the community. However, the third participant who was scared of the language dying also stated that the Seneca language is who they are. This fear of losing the language associated with their identity shows the punitive effects of a nearly English-only linguistic landscape in a community that is linguistically diverse.

**The role of increased Seneca signage.** The goal of this theme and the questions within it was to understand if the small amount of Seneca language in the linguistic landscape represents

the linguistic desires of the community, or if more physical efforts for language revitalization would be welcome. The answers to the questions in this theme were overwhelmingly positive toward increasing the presence of Seneca. All three participants wished to see more top-down and bottom-up signage in the Seneca language. The most common theme in their answers was respect. The first participant thought both languages should be on all government signs as a show of mutual respect toward both cultures. The second participant thought that the increase use of Seneca language on signage would not only show respect but would open more doors for preserving Seneca. Finally, the third participant took it a step further and considered not only the Seneca language, but all of the Iroquois languages including Mohawk and Onondaga. For this participant the linguistic community extended beyond the Cattaraugus Reservation borders and included all of the Iroquois Nations.

In considering both public and private signage, all three interviewees agreed that it would be beneficial to have more Seneca physically represented because it would increase the use of the language. One participant echoed their own earlier thoughts and stated that they wished the community spoke more Seneca. Another participant explained that the more exposure to Seneca, the better.

These participants indicated that they were aware of certain efforts for Seneca language revitalization that were related and unrelated to the linguistic landscape. Related to the linguistic landscape, the participants stated that they had seen new signs created by the government that have place names in Seneca language. They found these signs to be encouraging, and one participant thought that the signs' presence indicated that further emphasis on the Seneca language would be happening soon. Two of the participants brought up the language nests that

are used to promote the Seneca language with young speakers. One of these participants stated that more classes should be offered for adults who wish to learn and use Seneca.

**Interview considerations.** The intention of this study was to compare the answers of citizens in their community to interviews conducted via email with individuals involved in the language revitalization project. Three individuals were emailed, but as of yet none have responded. The researcher used multiple connections with the community to reach out to these individuals, and continues to hope to expand this data with their responses.

### **Discussion and Conclusion**

In order to understand the significance of this research and reach a conclusion, it is essential to examine how the linguistic landscape analysis in connection with the linguistic community interviews answers the essential questions of this study. In keeping with the Critical Discourse Analysis, the results of the physical landscape will be analyzed in connection with information about the Seneca linguistic community, the language revitalization project, and the informal interviews with community members.

#### **How does the linguistic landscape on the Seneca Nation reflect the status and representation of all of the languages spoken within this linguistic community?**

Based on the physical linguistic landscape, English holds a much higher status in this linguistic community than Seneca does. It also clearly shows that English has an informational and commercial role, while Seneca has a symbolic and cultural role. This can be seen in the overwhelming number of English artifacts compared to Seneca artifacts. It is also visually understood on the bilingual sign, and the relevant placement of English and Seneca signs. English consistently has a larger and more visible font, while Seneca is always placed below English in a lower font. This physical distinction of status is a symbolic representation of the status of each language within the community.

However, this perception of status was not reinforced by the community members' interview answers. These individuals reported using Seneca daily, which undermines the idea that only English could clearly convey important messages on signage. They also unanimously spoke of Seneca language representing their identity. While this idea supports the representation of Seneca as a symbolic and cultural language in the linguistic landscape, the paltry number of Seneca linguistic artifacts does not represent the identity of the community.

With this apparent contradiction between what the landscape represents and what the community reports, it is essential to look at the greater surroundings. While the Seneca Nation members may speak Seneca daily, and wish to see it represented more often in the physical space, the Cattaraugus Reservation is located on several main highways including Interstate 90, Route 5, and Route 20. The overwhelming use of English could be explained by businesses and institutions attempting to appeal to the many English-speaking travelers on these highways. With this consideration in mind, the linguistic landscape may not reflect the languages spoken by the residents of the area, but instead mainly represents the status of each language. This indicates that Seneca maintains a lower overall hierarchical position compared to English.

The small amount of Seneca language in this physical space also reflects the historical language policies in this area. Policies aimed at removing Native American cultures and languages, such as the Naturalization Act of 1790, lowered the status of Native Americans and their languages (Ricento & Wright, 2008). The effects of these types of legislation, and past attitudes toward Native American languages are apparent today on the Seneca Chautauqua-Cattaraugus Reservation as the Seneca Language is almost completely absent from the physical space. The long term effect of attitudes and policies like the 1819 Civilization Act, which aimed to support the conversion and education goals of English missionaries, and pushed Native American children into English-only schools, are also apparent in interviews with Seneca Nation members (Warhol, 2011). These individuals focused on a need for more respect for the Seneca language, which has historically been absent from this area.

**How does the linguistic landscape on the Seneca Nation reflect the efforts for Seneca language revitalization?**

Based on the small amount of Seneca language artifacts in this area, it would suggest that the linguistic landscape is not an area of language revitalization that has been heavily addressed. The Seneca Nation of Indians has installed some signs seen in Figures 6, 7, and 12 that use Seneca in a symbolic way to integrate it into the community. The sign outside of the ECLC is particularly relevant because it highlights how education has been used to increase the use of Seneca in the community. However, Seneca language has not been integrated physically in large enough numbers to have a substantial effect on language speakers.

Additionally, the private sector has not been fully involved in initiating grassroots use of the Seneca language on private signage. The only private use of Seneca was used on decorative signs seen at one gas station. This suggests that business owners have not been encouraged to integrate more Seneca into their physical language representations.

Alternatively, the answers given by the interview participants are positive and hopeful that the Seneca language will survive. One participant stated that it is dying and that scares them. These thoughts suggest that more aggressive language revitalization policies would be welcome by the linguistic community. For example, all three interview participants shared that it would be beneficial for the government to put Seneca on more official signs, and for businesses to include more Seneca on their signs. This shows that there is an audience ready to consume more Seneca language in their linguistic landscape. It shows that the disparity between English and Seneca signage is not reflective of the community's wishes for respect for the Seneca language and identity.



The results of this study agree with Gautieri's research, which demonstrated that survey participants in this area value Seneca as a cultural language, and English as a language of business, education, and socialization (Gautieri, 2013). These attitudes are reflected in the overwhelming amount of commercial and official signage in English, and the delegation of Seneca language to decorative and symbolic signage. However, as demonstrated by the Welsh language revitalization project, the increased use of an endangered language in the physical space of the linguistic community promotes its use within that community (Baker, 2011a). Since the interviews revealed a population that is interested in more Seneca language use in the community, Seneca language in a more informational role would be appropriate.

**What are the attitudes toward the Seneca language and the majority language, English, of the linguistic community on the Seneca Nation?**

Based on the signage, the use of English in prominent positions, and with bolder fonts, suggests that the attitudes toward English are more respectful and positive than toward Seneca, which is barely visible in the community, and is relegated to lower and smaller positions in relation to English signs. The fact that Seneca is used in a symbolic and cultural manner suggests that the attitudes toward it are as if it is a relic of the past. Many of the important government buildings, including the Saylor building, and the William Seneca building, do not have and Seneca on them. Seneca may be flourishing on the inside of the buildings, but to the observer of the communal linguistic landscape, it is not present in a prominent way.

The prominent use of English, and the lower and smaller physical position of Seneca again reflects the subtractive language policies that dominated the 18<sup>th</sup> and 19<sup>th</sup> centuries in the United States. It demonstrates the relative success of these acculturation policies, which have

effectively destroyed the presence of the Seneca language within this community (Spring, 2004a).

The two main themes that were apparent in the community members' interviews was that they *are* the Seneca language, meaning that it is irrevocably tied to their identity, and they desire more respect for the Seneca language, and therefore themselves within the community. This desire, and their feeling that the Seneca language and culture is alive and thriving within their community, is wholly unrepresented by the linguistic artifacts in this area. Therefore, there is an apparent disconnect between the attitudes of artifact-creators and community members when it comes to the attitudes toward the Seneca language. While the signage may point to Seneca being essentially a historic language, the population insists that it receives daily use. Furthermore, while the signs put Seneca below English, the population wishes it had more respect and an equal standing with the majority language.

Attitudes toward the majority language were positive, even though participants wanted a more equal representation of the two languages in the linguistic landscape. One participant said that they love both languages, and another insisted that both should be visible in the community, while the third said that having both represented is a sign of mutual respect. Among the participants there was no ill will toward English, as they were all English speakers. The attitude among participants was that both languages have a place, and both should be respected.

The researcher was surprised by their positive attitude toward English. Historically, English is the language of the colonizers, and English-only policies hurt not only the Seneca language, but Seneca families when Seneca children were forced into boarding schools, and Seneca culture when the acculturation policies took place (Burich, 2007). However, these interview participants are bilingual Seneca and English speakers, and both languages are tied to

their identities. Rather than harboring resentment because of historical policies and their lasting repercussions, the interview participants wished for respect for both languages and cultures.

Attitudes represented by the physical signage told a different story. Rather than seeing English as one of two important and equal languages, the linguistic landscape skews in the favor of English as the prestige language. The fact that every sign conveying information, or persuading individuals to buy something was in English shows the viewer that in order to function in this area, an individual must speak English. The use of Seneca on mainly decorative signs, or underneath the English translation relegates the Seneca language to a secondary place within the linguistic hierarchy.

Again, there is a disconnect between what the linguistic landscape suggests, and what the community members state. This confirms the conclusion that further use of the Seneca language in the linguistic landscape in functional rather than symbolic roles would heighten the status of the Seneca language, and increase the success of the language revitalization project.

### **Implications**

This study yields several implications for the state of the Seneca and English languages on the Cattaraugus Reservation, and the potential for language revitalization strategies utilizing linguistic landscaping in this area. These implications are concluded from the information gathered from the linguistic landscape and the linguistic community through informal interviews.

The first implication of this research is that the Seneca language and its linguistic community do not see themselves sufficiently represented in their linguistic landscape. This is reflected in the participant who stated that the Seneca language is dying, and that makes them scared. When walking around this area of the Cattaraugus Reservation, one might come to a similar conclusion that the language is dying because it is noticeably absent when you are

looking for it in the physical space. If individuals see their identity through their language, as these participants stated that they did, they would feel lost when trying to find their identity in their linguistic landscape.

Additionally, the overwhelming response toward increasing the use of Seneca in the landscape by the participants, and even toward using more Seneca in conversation and interaction, demonstrates that there is a hunger for more language revitalization efforts in this area. Participant 1 said it best when they stated that the more exposure individuals have to the language, the better. This gives the researcher the distinct impression that further community involvement in the increase of Seneca in the linguistic landscape would be a welcome measure.

The Seneca language revitalization project has modeled some of its aspects from the Maori language nest strategy. In order to diversify their language revitalization, they could model their linguistic landscape policy after the Welsh. The Welsh included a component of physical linguistic artifacts in their language revitalization project, calling for more Welsh signage in their community (Baker, 2011a). Following this Welsh model could help Seneca language experts to increase the presence, status, and use of the Seneca language in the Cattaraugus Reservation. The first step would be to introduce more top-down signage throughout the community in the Seneca language, and this could include more Seneca-English bilingual signs. However, policymakers should take steps to ensure that the signs do not always have English in a more prominent position. These steps will provide more exposure to the Seneca language, and they will show that the community values the continuation of their language.

A second step, which was supported by the interviewees, would be to encourage business owners, private organizations, and private individuals to include Seneca on their signs. The Seneca Nation of Indians could provide tools or services so that these private actors could

contribute to their linguistic landscape by including Seneca in more than just a decorative sense. Depending on how aggressive the policy toward language revitalization is, the Seneca Nation of Indians could require all signage in their territory to be in Seneca, or they could offer incentives to businesses who do so.

These implications for language revitalization are drawn from the community and the landscape itself. While the landscape demonstrates that there is a need for a more significant role for the Seneca language in the Cattaraugus Reservation, the interviews with community members provided deeper insight into this issue.

### **Limitations**

The greatest limitation of this study is its limited scope. In order to get a better understanding of the linguistic landscape of the Seneca Nation as a whole, more research should be done on the other reservations as well. Additionally, the number of people interviewed is too small to generalize to the greater population. The circumstances of this research required that it be of a smaller size, but further research into this issue involving more participants and a larger area would be beneficial.

For this study, the researcher focused on one commercial area, and one government area within one of the Seneca Nation of Indians reservations. However, a more thorough study would also include similar areas in the other reservations. It could even be taken a step further to include the Iroquois as a whole, and sample from the different Iroquois Nations. The fact that this study relied on only one reservation within the Seneca Nation means that it is not meant as a reliable measure of the Seneca Nation as a whole, but rather only of the Cattaraugus Reservation.

The second limitation, the limited number of interview participants, was caused by two factors. The second intended group of participants, Seneca language experts contacted by email,

did not respond to the requests to take part in the interviews. This limits the scope of this study because their insights into their own linguistic community would be an invaluable asset when assessing the way that the linguistic landscape reflects the languages present within this area and the status of Seneca language revitalization. The fact that this researcher is an outsider to this community may have influenced their choice of whether or not to respond to the request. If this researcher was better known in the community, they may have gotten a more favorable response.

A final limitation to consider is participant bias. The interview sample contained three participants who were very eager to speak with the researcher about the Seneca language and share their pride for their culture. Those that refused to participate in the informal interviews may have represented a less optimistic group of community members. The interview participants all reported that they speak Seneca frequently, and wish that Seneca was represented more visibly in their community. These reports may be accurate, or they may be participants demonstrating their bias by exaggerating the health of their language in order to express their identity to an outsider.

### **Suggestions for Further Research**

This study cracked the surface of the linguistic landscape of the Seneca Nation and the language revitalization project. Suggested further research should address the limitations stated in the previous section. Specifically, the researcher should find a way to immerse themselves in the community as authentically as possible, as if they were a cultural anthropologist creating an ethnography. This would allow the researcher better access to individuals who could provide an understanding of how the community identifies with, shapes, and responds to their linguistic landscape.

Future research should focus on collecting data from a larger area. The sample should include locations in each of the Seneca Nation Reservations. Additionally, the researcher could

collect data from other Iroquois Nations if they were interested in studying the Iroquois Nation as a whole.

Further research should include interview data from more participants. Ideally it should include participants from each reservation. The researcher should also include responses from individuals who are involved in the Seneca Nation government, or who are active in the Seneca language revitalization project. This could include Seneca language teachers, or individuals who are involved in mentoring and advocacy.

These suggestions are intended to provide a guide for further research that would provide a more encompassing understanding of the linguistic landscape of the Seneca Nation as it relates to its linguistic community and language revitalization. This study takes the first steps, and further research would be beneficial for the preservation of this language, which is integral to the identity of many individuals.

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*Appendix A*  
**Interview Protocol**

Questions for Interviews:

1. How often to you use Seneca/English? What do you use each language for?
2. What are your feelings associated with each language?
3. Do you think Seneca language revitalization is important? Why or why not?
4. How do you feel about having both languages represented physically in your community?
5. Do you think that increasing the amount of Seneca language on signs/posters/advertisements would encourage more people to use this language? Why or why not?
6. Should the government take steps to put Seneca on more official signs?
7. Should business owners be encouraged to include Seneca on their signs?

*Appendix B***Participant Consent Form****Consent for Participation in Interview Research**

I volunteer to participate in a research project conducted by Emily Voegler from SUNY Fredonia. I understand that the project is designed to gather information about the linguistic landscape on the Seneca Nation, and attitudes toward Seneca and English. I will be one of approximately 4 people being interviewed for this research.

1. My participation in this project is voluntary. I understand that I will not be paid for my participation. I may withdraw and discontinue participation at any time without penalty.
2. If I feel uncomfortable in any way during the interview session, I have the right to decline to answer any question or to end the interview.
3. Participation involves being interviewed by the researcher from SUNY Fredonia. The interview will last approximately 5-10 minutes. Notes will be written during the interview.
4. I understand that the researcher will not identify me by name in any reports using information obtained from this interview, and that my confidentiality as a participant in this study will remain secure.
5. I understand that the researcher will use my answers to better understand the relationship between the population in this area and the linguistic landscape.
6. I have read and understand the explanation provided to me. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this study.
7. I have been given a copy of this consent form.

\_\_\_\_\_ My Signature

\_\_\_\_\_ Date

\_\_\_\_\_ My Printed Name

\_\_\_\_\_ Signature  
of Investigator

For further information, please contact:

Emily Voegler





*Appendix C***Citi Completion Sheet**

**COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI)  
HUMAN RESEARCH CURRICULUM COMPLETION REPORT**

**LEARNER** [REDACTED]  
**DEPARTMENT** [REDACTED]  
**PHONE** [REDACTED]  
**EMAIL** voeg3676@fredonia.edu  
**INSTITUTION** SUNY - College at Fredonia  
**EXPIRATION DATE** [REDACTED]

**GROUP 1.**  
**COURSE/STAGE:** Basic Course/1  
**PASSED ON:** [REDACTED]  
**REFERENCE ID:** [REDACTED]

REQUIRED MODULES	DATE COMPLETED
Introduction	[REDACTED]
History and Ethical Principles - SBE	
Defining Research with Human Subjects - SBE	
The Regulations - SBE	
Assessing Risk - SBE	
Informed Consent - SBE	
Privacy and Confidentiality - SBE	
Research with Prisoners - SBE	
Research with Children - SBE	
Research in Public Elementary and Secondary Schools - SBE	
International Research - SBE	
Internet Research - SBE	
Avoiding Group Harms - U.S. Research Perspectives	
Vulnerable Subjects - Research Involving Workers/Employees	
Conflicts of Interest in Research Involving Human Subjects	
SUNY Fredonia State College	

**For this Completion Report to be valid, the learner listed above must be affiliated with a CITI Program participating institution or be a paid Independent Learner. Falsified information and unauthorized use of the CITI Program course site is unethical, and may be considered research misconduct by your institution.**

Paul Braunschweiger Ph.D.  
 Professor, University of Miami  
 Director Office of Research Education  
 CITI Program Course Coordinator