

# Foreign Language as an Axiomized System

By  
Maxx Nanson

Non-Euclidean Geometry, Hon 213  
Professor Bryan Smith  
Due April 25, 2003

## Introduction

There is currently an intriguing debate amongst the faculty at UPS regarding whether American Sign Language is a foreign language. If ASL is indeed a foreign language, then many UPS students argue that it should be counted for the Communication II core requirements. Originally, the consensus amongst the faculty was that ASL was not a foreign language and therefore should not be used for a student's core. However, there has recently been a reevaluation of ASL's worth as a foreign language.

Two criteria must be met in order for UPS' Foreign Language Subcommittee to view ASL as an acceptable language to satisfy the Communication II core. The first requirement was to determine ASL as foreign from English. The vote had long been unanimous amongst the five committee members that ASL was indeed different from English. However, the second criteria proved much more controversial. In addition to studying a foreign language, University policy states that students must learn about the language's culture. Herein lay the debate, for many on the committee did not view ASL as possessing a distinct culture. That opinion changed at the March 31, 2003 meeting.<sup>1</sup>

Four out of five of the members voted in favor of ASL possessing its own culture. The change came from the committee's interpretation of the word culture. Originally, they believed a distinct culture must belong to a nation/state, and in that situation ASL failed. However, that definition is no longer held as valid. Associate Dean William Barry stated "it is clear [in this case] that culture is not defined by nation/state but by institutions and traditions of art and other such things."<sup>2</sup> While a solid verdict has yet to

---

<sup>1</sup> University of Puget Sound Curriculum Committee Minutes, March 31, 2003

<sup>2</sup> University of Puget Sound Curriculum Committee Minutes, March 31, 2003

be reached, it appears that ASL will soon be recognized as an acceptable language to fulfill the Communication II requirements.

This paper will explore the history of American Sign Language and also seek to define ASL as a foreign language. My conclusion, specifically whether ASL should be counted for the Communication II requirements, will be reached by implementing an axiomatic system of language based upon Euclid's axioms for geometry.

I should stress at this point in the paper that I have had little sign language experience. My mother received her Masters in Special Education and is able to sign fluently, so I have some knowledge of ASL from her. However, I would not consider myself an expert in this field. Rather, I hope to use my experiences of learning Chinese and Japanese, two vastly different languages from English and readily acceptable as foreign, to see if the differences I noticed between these languages and English are also present in sign language.

## **History**

Sign language has long existed throughout human history, often acting to bridge two cultures that were unable to communicate orally. For example, simple signs were used between New England colonists and Native Americans during trade, as it would take time for oral communication to develop between the two cultures. Upon first contact, these two groups of people shared no words in common. Their languages differed in grammatical structure, and it can be safe to assume that any words they immediately learned were limited to the bare necessities, such as a person's name or the

words for food and water. Sign language's role in this situation helped to transcend the oral language barriers and communication occurred.

The communication between the New England colonists and the Native Americans is an example of a primitive form of sign language. More advanced forms of sign language existed, and the year 1770 is of special note, as a system of sign language was developed that greatly influenced the American Sign Language we use today. It was during the late 1700s that a Frenchman called Abbe de l'Epee sought to dialectize sign language with French.<sup>3</sup>

Dialectization occurs when speakers of a dominant language attempt to overpower a nondominant language. There are two natural courses between speakers of a dominant language and a nondominant language. The first course is that the minority language can be replaced, eventually forgotten or erased. The second course is that it can be dialectized. By leading the speakers of the nondominant language to believe that their language is substandard to the dominant language, a culture builds in which one language is reinforced, while the other language is viewed as inferior.<sup>4</sup> Often, this lower language is seen as a vernacular style of speech that should not be used in important settings, such as in education or the government. A modern example of a dialectized language from English is eubonics. Eubonics is certainly a language, and yet it is viewed as improper English in our society. One would never use eubonics to write a research paper, novel, etc, and yet it continues to exist. Hence, eubonics is an example of a dialectized language.

---

<sup>3</sup> Harlen Lane, Francois Grosjean, *Recent Perspectives on American Sign Language*. (Hillsdale, New Jersey, 1980), 121.

<sup>4</sup> Lane, Grosjean, 119.

Returning to Epee's accomplishments, he is worthy of note because he succeeded in dialectizing a new language of French. Fascinated by two deaf sisters, Epee learned they had created their own signs for objects, and by studying with them everyday he eventually was able to communicate with them using only his hands. However, their language was not based upon French, and Epee's goal was to teach these two women how to read and write French. By establishing methodical signs, Epee took the signs the two sisters had created and added structure to their communication, such as French grammar. It was not long before the women learned how to read and write. Epee had done something that had never been done before. He had created a sign language that was based upon a culture's spoken language; he had created Signed French.<sup>5</sup>

Teachers of Signed French eventually came to the US, and two men, Gallaudet and Clerc, realized how important sign language could be to the deaf community. The two men managed to receive \$17,000 from the US government, and in 1818, opened up The American Asylum, which was the first school of its kind to teach sign language to the deaf. Signed English, rather than Signed French, was taught to deaf Americans, and schools began to spread to places such as New York, Kentucky, and Pennsylvania. The 1800s witnessed the rise of Signed English in the United States, but in both France and the US, major changes were about to occur in the current systems of sign language.<sup>6</sup>

It gradually became clear that dialectizing sign language was unsuccessful. Learning sign language in the current manner was not an efficient form of communication. Also, merely translating a French or English sentence into sign language did not help a deaf person's understanding. Therefore, both systems of sign language

---

<sup>5</sup> Lane, Grosjean, 121.

<sup>6</sup> Lane, Grosjean, 125-126.

continued to share traits with the spoken languages from which they originated, but evolved into newer, more efficient forms of communication. Signed French and Signed English gave way to French Sign Language and American Sign Language.<sup>7</sup> The difference between these new forms was that FSL and ASL developed their own grammatical structures, dropping unnecessary words. For example, in ASL, words dropped would include “the”, “a”, and “as”, but the differences did not stop there.

Think of Signed English as a very complex and tedious form of signing. The sentence, “The car went up the big hill” would require seven forced signs in Signed English. However, in American Sign Language one would simply make the sign for vehicle and run one’s hand upward, depicting the adjective “big” with a facial expression. ASL is a much less complicated form of signing, more dominated by concepts than by words. Also, its concept of time differs from Signed English as one uses an imaginary axis down the side of one’s body to relate time. Therefore, a gesture in front of the axis depicts the future, whereas a gesture behind the axis depicts the past. One can also distinguish the difference in the amount of time by going farther away from the axis. Hence, yesterday is slightly behind the axis, whereas one week ago is much further behind the axis.

By the end of the 1800s, both FSL and ASL had become truly unique. To consider them to be dialectized languages is questionable, for while Signed French and Signed English certainly were, FSL and ASL evolved into a higher form of communication not based upon a spoken language.

American Sign Language’s history seems to suggest that ASL is a different and distinct language from spoken English, and this idea will now be further explored.

---

<sup>7</sup> Lane, Grosjean, 126.

## Language Axioms

Trying to build an axiomatic system that applies to all of language is a daunting task indeed. The scope of such an attempt is well beyond the depth this paper shall explore, so please keep in mind that the following axioms are quite simplistic in nature, yielding answers that will result from the axioms' simplicity. By creating basic language axioms, I am attempting to prove whether or not American Sign Language should be considered a foreign language. Keep in mind, too, that this comparison is being made to determine whether or not ASL should fulfill the Communication II requirements at UPS. This is a highly specialized proof, and not necessarily universal.

As we are trying to determine what makes a language considered foreign, we first must establish that there is such a thing as a language. Herein lies my first axiom.

### *LAI-Languages exist*

This axiom begs a definition, though, for what exactly is a language? We shall use this definition, courtesy of Webster.

*Defn' Language: any means of expressing or communicating*<sup>8</sup>

And how, you may ask, does one communicate? It would appear we need another definition, but at this rate we are on track toward infinite regress. Therefore, I have chosen to make the word "communication" an undefined term. Think of it as we normally would. It's a sharing of ideas, words, etc.

Throughout this paper I shall also be using the term idiom. Now is a good place for its definition.

*Defn' Idiom: the way in which the concepts of a language are joined together to express thought*<sup>9</sup>

Thought shall remain an undefined term, for attempting to define thought is a topic for some other paper. And what is meaning? That too, is no mere question, and shall also be left as an undefined term. Therefore, our current undefined terms are:

Communication

Thought

Meaning

My second language axiom is such:

*LA2-For every language, thoughts are communicated*

These two axioms lead me to form a proposition:

*Prop 1-If communication occurs, then a language is being used*

Proof

- 1) Communication occurs (hyp)
- 2) This communication is expressed by a language (defn' language)
- 3) So a language exists (LA 1)

-QED

My third language axiom is such:

*LA3-Given two or more distinct thoughts, there is a distinct language such that their meaning is communicated.*

---

<sup>8</sup> Webster's New World College Dictionary, 3<sup>rd</sup> Edition. (New York, NY, 1997), 805.

<sup>9</sup> Webster's, 708.



This third axiom was created to stress that the language must be mutually understood, and the existence of distinct thoughts implies a language communicates them.

Let us now examine what we consider to be languages, and see how they fit in with these axioms. Let's begin with English.

- 1) Suppose English is a language (hyp)
- 2) We know it exists (so LA 1 is satisfied)
- 3) Thoughts are communicated (satisfies LA 2)
- 4) And the meaning is communicated (satisfies LA 3)
- 5) Therefore, English is indeed a language

-QED

Do these three axioms apply to Sign Language? They most certainly do. Similar to English, we know ASL exists, thoughts are communicated, and the meaning is communicated. Therefore, ASL is certainly a language in our axiomatic system. Now, let us begin to tackle the uniqueness of languages, and try to uncover what it means to be considered foreign. A few more axioms need to be invoked.

*LA 4-A language is considered foreign from a second language if it is distinct from that second language.*

And what exactly makes a language distinct?

*Defn' Distinct: Two languages are said to be distinct if their idioms differ.*

Therefore, if we were to compare two languages A and B, A could be considered foreign if its idioms differed from that of language B.

We are coming closer to our goal of determining whether or not ASL is a foreign language. Let us contrast the idioms of English with American Sign Language idioms. Are English concepts joined together to express thought? Yes. And are ASL concepts joined together to explain thought? Yes. So now we must ask the most important question. Do their language idioms differ? They most assuredly do.

It should come as no surprise that English's idiomatic structure is made up of sounds. Spoken languages are easily recognizable as distinct because of our immediate perception in the difference of sounds. For example, in Japanese there is no sound for the letter "R". Trying to pronounce the letter R can be very difficult for a Japanese person speaking English, and often the word "rabbit" will sound like "wabbit". They simply don't know how to use the R because it's not something they use in their language. Hence, we can easily see that Japanese idioms are different from English idioms. Similarly, ASL is different just as much from English in its idiomatic structure.<sup>10</sup>

Whereas English is made up of sounds, ASL can be said to be made up of gestures. To be more technical, ASL has five different parameters:

- 1) Hand shapes-what we commonly call signs
- 2) Location-where the signs are placed (the time axis)
- 3) Movement-what direction the signs move in (the car went *up* the big hill)
- 4) Palm Direction-a simple flipping of the palm can change the meanings of signs, say from good to bad

5) Non-manual Motions-facial expressions (the car went up the *big* hill)

The five parameters of ASL clearly demonstrate that it differs from English idiomatically.<sup>11</sup>

At this point I do not feel we have enough information to classify ASL as a foreign language. We have convincingly argued that ASL's language idioms are indeed different from English's language idioms, but in reality, that does not seem to be enough to classify ASL as a foreign language. I turn to a real life example to illustrate why we have yet to prove ASL as a foreign language.

Let us examine Eubonics again. Contrasting Eubonics with English in our axiomatic system, Eubonics would also be classified as a foreign language. After all, its idiomatic structure is made up of complicated slang, and that forces it to be unique from English. However, most people would not believe that Eubonics should be considered a foreign language, and I am one of them. Therefore, our axiomatic structure is not yet adequate to justify ASL as a foreign language.

There are some glaring factors left out of our axiomatic system so far. I believe the grammatical and syntax structures of languages have been well addressed, but language extends beyond the technical. A language must also have a culture associated with it, leading to my fifth axiom (and the cause for debate amongst the foreign language committee).

*LA 5-A distinct language will have a distinct culture*

---

<sup>10</sup> Deaf World Television Program, March 2003

<sup>11</sup> Deaf World Television Program, March 2003

So what, you may ask, is culture? Culture has been a word that I have struggled a long time with. This is the most adequate definition I have created.

*Defn' Culture: a distinct set or sets of thoughts and customs of a people that are communicated to succeeding generations.*

A few of the words in the definition have been identified as undefined terms. However, “customs”, and “generation” have not been defined. The word “generation” is not possible to define using our three undefined terms, therefore, generation will become a fourth undefined term.

Let us define customs:

*Defn' Customs: distinct concepts communicated to succeeding generations*

Herein lies the problem that ASL has always had in gaining acceptance as a foreign language. People do not believe ASL satisfies the fifth axiom. In other words, ASL does not have a distinct culture; it is not made up thoughts and customs passed down to succeeding generations. This is a hotly contested subject, and lies at the heart of the ASL debate. I, for one, do not find this view to be true. ASL does possess a very distinct culture from English, and the following evidence will demonstrate that to be true.

A great myth about sign language is the belief that it has always been universal. Even the founder of Signed French, Epee, thought sign language would become a universal language. He pictured a future in which hearing people of all nations would be

able to communicate using his language.<sup>12</sup> As time went on, though, it became quite clear that nothing could be further from the truth. Just as there are glaring differences between spoken English and spoken Japanese, so too are there glaring differences between American Sign Language and Japanese Sign Language. To name but a few, American Sign Language, British Sign Language, Japanese Sign Language, French Sign Language, and Danish Sign Language all differ from each other as much as their spoken languages do. How did this happen? Why was Signed French not accepted in America? Why was there a need to create Signed English? The answer is culture. Culture can be accredited to ASL's evolution, for American culture adopted Signed French in the 1800s, and then altered it to fit the American beliefs of spoken English.

A nation's culture has a tremendous affect on language, and that holds true for both spoken and signed languages. It is due to culture that there are so many variances in the sign language world, for a person fluent in American Sign Language is unable to communicate with a person fluent in Japanese Sign Language. An example of cultural differences between ASL and JSL can be readily demonstrated by the two countries views on sex.

American culture is fascinated and obsessed with sex, and as a result, sex has permeated our spoken language. Compare our spoken language with spoken Japanese. The Japanese have very few words related to sex in their language. Their society and culture is one in which sex is taboo, and it is only recently that a young couple can hold hands in public (although even this is frowned upon). Therefore, it is not surprising that Japanese sign language also shares Japan's aversion to sex. In ASL, sexual terms exist, although they do happen to be signs that are much smaller and more discreet. However,

---

<sup>12</sup> Harlan, Grosjean, 1.

there are hardly any JSL sexual terms, and one would never think of signing about sex in public. Even though Japanese signs are much more discreet than ours, Japanese believe that signing about sex is far too visual and embarrassing a topic. Hence, JSL was immediately forced to become different from ASL as cultural variances affected the language.

By showing how great an impact a nation's culture holds in influencing a country's sign language, we can now see that the sign languages being used around the world possess their own cultures. However, one valid question still remains. Is ASL culture the same as spoken English culture? The opinion of many is that ASL culture and English culture are one and the same, therefore, ASL should not be considered a foreign language. However, I have yet to find evidence that this is true.

While ASL certainly evolved from American culture, people of the deaf community nonetheless possess their own, unique culture. I defined culture earlier as distinct thoughts and customs of a people that are communicated to succeeding generations. One can see this in the deaf community, but it is only visible once one becomes imbued by deaf culture. The moment this occurs, one can clearly see the differences between ASL culture and English culture.

I hope I have shown the last language axiom (a distinct language will have a distinct culture) to be satisfied. There is no doubt in my mind that ASL is a distinct language and possesses its own, distinct culture.

### **Conclusion:**

While sign language was originally a dialectized version of French, it has transformed over the past 200 years to become a distinct language. Our first three

language axioms established ASL's existence as a language, whereas the last two axioms defined its uniqueness. Because we were able to see the sharp differences between ASL and English, we can finally see that American Sign Language is a foreign language and does possess its own culture when compared to English. It is my conclusion that the university should view ASL as a foreign language.

## **List of Undefined Terms, Axioms, and Definitions**

### *Undefined Terms:*

Communication

Thought

Meaning

Generation.

### *Language Axioms:*

LA 1-Languages exist

LA 2-For every language, thoughts are communicated

Prop 1-If communication occurs, then a language is being used

LA 3-Given two or more distinct thoughts, there is a distinct language such that their meaning is communicated

LA 4-A language is considered foreign if it is unique from another language.

LA 5-A distinct language will have a distinct culture

### *Definitions:*

Defn' Language: any means of expressing or communicating

Defn' Idiom: the way in which the concepts of a language are joined together to express thought

Defn' Distinct: Two languages are said to distinct if their idioms differ.

Defn' Culture: distinct thoughts and customs of a people that are communicated to succeeding generations

Defn' Customs: distinct concepts communicated to succeeding generations



## Bibliography

- 1) Deaf World Television Program, March 2003
- 2) Lane, Harlen, Francois Grosjean, *Recent Perspectives on American Sign Language*.  
(Hillsdale, New Jersey, 1980).
- 3) University of Puget Sound Curriculum Committee Minutes, March 31, 2003
- 4) *Webster's New World College Dictionary*, 3<sup>rd</sup> Edition. (New York, NY, 1997).