The identity of Mexican sign as a language

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This paper addresses the question, "Is Mexican Sign Language (LSM) a distinct language, with a linguistic and sociolinguistic identity of its own?" We have examined LSM from three different angles. Is LSM different from other sign languages, particularly American Sign Language (ASL)? Is LSM different from the national spoken language which surrounds the Deaf³ community? Are there regional dialects of LSM which are significantly different from each other?

Mexican Sign Language vs. American Sign Language 1.

We have often been asked whether American Sign Language (ASL) and Mexican Sign Language (LSM) are roughly the same. Presented here are our findings on this subject.

There are two reasons why this question is being addressed here. First, many of the sign languages in Latin America are products of either missionary efforts from the United States or the Deaf Peace Corps. Although there is missionary influence in Mexican sign near the US/Mexico border, there appears to be little significant influence in the interior (with the notable exception of religious vocabulary). As far as we know there has been no Deaf Peace Corps influence in Mexico.

¹This 1999 version (available in English and Spanish) is a slight revision of a paper we wrote and distributed informally (in English only) in 1992. Since 1992, Karla (Faurot) Hurst and her husband have continued to investigate Mexican Sign Language, but we feel it is more important to make the present version available now than to wait for an opportunity to completely re-write and update it. Special thanks to Albert Bickford who helped in editing this paper and Doug Trick who served as a consultant. Thanks also to Bruce Hollenbach, Terry Schram, and Eugene Casad who made several helpful comments

²There was no standard Spanish name for Mexican Sign Language when this paper was written in 1992. The Deaf in Mexico refer to it simply as SEÑA 'sign' but will differentiate sign language used in Mexico from signing in the United States by referring to their signing as SEÑA ESPAÑOL 'Spanish sign'. However, since this paper was written, the names "lenguaje de signos mexicano" and "lenguaje de señas mexicano" and "lengua de señas mexicana" are beginning to be accepted among the Deaf, especially in Mexico City, so we will use LSM to refer to Mexican Sign Language. This paper discusses only the sign languages used in the urban situations. Other sign languages of Mexico, such as Mayan Sign Language used in the Yucatan (Bob Johnson in personal communication), which are recognized as separate languages, will not be addressed here.

³Throughout this paper the term "Deaf" (capitalized) will refer to those who identify themselves as members of the Deaf culture. The term "deaf" refers to all people who are hearing impaired but may or may not identify with Deaf culture.

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The second reason for questioning the similarity between LSM and ASL is that, according to informal Deaf history⁴, both languages came from Old French Sign Language and were brought over to the United States and Mexico within roughly 50 years of each other: to the USA in 1816 and to Mexico about 1869. However, as the sign systems were brought over from France, they were adapted to the situations that existed in each country. Both countries already had deaf people who used sign. These signs were incorporated into the new language and supplemented heavily by the French Sign system. It appears that the "founders" of the languages had different ideas as to how the new language should be structured. Mexican sign appears to be very strongly influenced by Spanish in its vocabulary. As we shall see below, there is a very high degree of Spanish initialization in the LSM signs. (Initialization is when a sign incorporates the handshape from the manual alphabet that corresponds to the first letter of the word used to gloss the sign.) On the other hand, ASL has comparatively little initialization.

This chapter will be divided into two sections: a lexical comparison, and an intelligibility test. Both show that LSM and ASL are quite distinct from each other.

1.1. Lexical comparison

The data in this section largely come from a lexical comparison of 100 signs based on a list of common words as found in Bickford's (1991) previous study of LSM. From this list, numbers and fingerspelled words were deleted (eight words) as they increased the difficulty in accurately scoring the results in several areas. They were replaced with words of similar semantic and grammatical categories, or words were added to semantic categories that were already in the list. The LSM signs were examined in depth with native LSM signers so that all known variations of a specific gloss or idea were taken into account. The ASL data were reviewed by experienced ASL signers.

Signs from the two languages were compared and rated according to their similarity. Signs that had one variation of the sign which was identical to one of the variations in the other language were rated as 10 (fully identical). Those signs which were close were rated as 5. This included pairs such as 'cold' which vary only in hand shape; the movement and location are identical. Signs which had more than one major difference were rated as 0. Although this type of analysis leaves room for error, it gives a useful estimate of the lexical similarity. Out of the 100 words, 16 were identical and 13 were similar. This figures out to be 23% lexical similarity. A similar study by Smith-Stark (1986) used an adaptation of the Swadesh 100-word list and found similar results.

One thing that we found is that a sign in one language often means something different in the other language. We counted the signs from the 100-word list which when signed in ASL meant something else in LSM. These false cognates scored 17%. Some of these false cognates are semantically similar, which can cause confusion.

LSM ASL

SABER 'know' DON'T KNOW

NO SABER 'don't know' FORGET PERDÓN 'pardon' WRONG

Some of the false cognates are extremely different and possibly offensive, as is seen in a few of the following examples.

⁴This information was related to us in personal interviews with several Mexican Deaf. Other historical records make similar speculations. Some, however, speculate that the language came from Spain.

LONA

LSIVI	ASL
AGUA 'water'	QUESTION
AMIGO 'friend'	ENGLISH
INGLÉS 'English'	LESBIAN
NIÑO 'child'	HOMOSEXIIAI

There appear to be very different attitudes regarding initialization. ASL showed only 12% of the 100 signs to be initialized. LSM showed 37% initialization. In the USA, initialized signs are often viewed as "hearing" signs. Initialized signs are commonly used in schools to help teach children to speak or spell English. The systems which make the strongest use of initialization in the USA are the various versions of signing based on a strict adherence to English grammar, i.e., Signing Exact English, Seeing Essential English, and others. LSM vocabulary, however, seems to have been developed with a very strong Spanish influence and has kept the initialization to this day. Initialization is not seen as a negative strategy, nor is it viewed as a characteristic of hearing signers.

1.2. Intelligibility test

We also conducted a short intelligibility test with four Deaf Americans. This method tests the language in context and therefore takes into account grammatical differences as well as lexical differences. During our time in Mexico, we realized that Deaf Mexicans could not understand our ASL, nor could Deaf in the USA understand LSM based on their knowledge of ASL. The intelligibility test was designed to give some empirical data to verify our impressions of low mutual intelligibility.

Two video tapes of short texts, one in ASL and one in LSM, were shown to four Deaf Americans who had no significant previous contact with LSM. They were asked ten questions on each tape relating to the text they had just seen.

The results of the intelligibility tests indicated that there was an average comprehension of the LSM text of 14%. Only two of the ten questions received any correct answers. One of these questions revolved around a highly mimed section of the story. The answer to the second question relied on one sign which happens to be a direct cognate in the two languages. It is interesting to note that other questions which also relied on direct cognates were missed, because they were in a context of non-cognate signs.

1.3. Conclusion

It is clear, on the basis of both lexical comparisons and a pilot intelligibility test, that LSM is extremely different from ASL. They are two distinct languages and LSM and ASL signers cannot understand each other's sign language without actually learning it. From our personal experiences, both in Mexico trying to use ASL, and in the United States trying to use LSM, these findings are completely consistent (in both cases our signing was met with great amusement and a total lack of understanding).

2. Mexican Sign Language vs. Spanish

Mexican Sign Language (LSM) is a language distinct from Spanish. It is not necessary to know Spanish in order to sign LSM, nor is proficiency in LSM to be equated with proficiency in Spanish. This is

⁵It should be noted that signers are typically very adept at communicating face-to-face. If they are from different countries and do not share a common language, they can communicate to some extent through mime, gestures, drawings, etc. This depends on both parties being able to interact and adjust to each other. In contrast, the intelligibility test (above) shows that when pure LSM is used, intelligibility is very low in the United States.

in spite of the fact that, when explaining their language, most Deaf Mexicans would say they sign SEÑA ESPAÑOL 'Spanish sign'.

It should be made clear that sign languages are not gestured versions of spoken languages. There is not a one-to-one mapping of signs to words. In sign languages the "surface forms" of lexical items are mapped directly to real-life referents, not to spoken words. That is, LSM signs are not connected directly to Spanish words, nor are American Sign Language (ASL) signs connected to English words; rather, each sign has a meaning independent of its Spanish or English gloss.

2.1. Grammatical differences

There are some major differences between LSM and Spanish, such as:

- Verb conjugation in LSM. Instead of inflecting like Spanish for tense, aspect, and mood, as well
 as agreement with the subject in person and number, LSM verbs do not show marking for tense
 or mood. However, some verbs can optionally be marked for aspect and/or can agree in person
 and number with subject and object or with either subject or object, or show no agreement at
 all.
- 2. Possessives in LSM rarely use DE 'of'. Instead of signing HIJO DE JUAN 'son of Juan', either JUAN HIJO, JUAN SU HIJO or HIJO JUAN is used.
- 3. Many verbs in Spanish subcategorize for prepositional phrase complements; the corresponding verbs in LSM do not.
- 4. A verb meaning 'to be' is rarely used in LSM.
- 5. Generally, the order Verb-Subject is not accepted as grammatical in LSM, even though it is a common order in Spanish.
- 6. In LSM, objects may be freely left out if understood from context or if their identity is made clear by verb agreement; Spanish needs a pronoun to replace the object.
- 7. In LSM noun phrases, the number may follow the noun. In Spanish, numbers precede the noun.
- 8. LSM uses an extensive system of classifiers which are incorporated into some verbs and used to express spatial relationships; Spanish does not.
- 9. One sign may be held constant with one hand while other signs done with the other hand act upon or with the first sign. It is impossible in Spanish (or any other spoken language) to say two words simultaneously.

2.2. Oralism and bilingualism

The standard method of education for deaf children in Mexico is oral. A few deaf schools permit and/or promote the use of sign language, but most are strictly oral. Since Spanish orthography and pronunciation are so closely linked, some deaf can learn to "crack the code", i.e., pronounce words, lipread, etc., and there are a certain number of oral successes. These people may or may not associate with the Deaf community or learn sign language; they speak, lipread, read, and write Spanish well enough that Spanish is their first language.

However, Deaf whose primary language is LSM make up the vast majority of the deaf population. For this group, Spanish is a second language, in essence a foreign language. They are generally less oral and have a more difficult time reading Spanish, rarely reading for pleasure.

Other Deaf are more hidden. They have never attended school and do not use LSM. Rather, their only form of communication is what is usually referred to as home sign, a non-standardized set of gestures they use with their families and possibly a few other people who know them well.

When hearing people interpret for the Deaf, they often use Spanish word order. The Deaf themselves say that Spanish is ORDENADO 'in order' and LSM is REVUELTO 'mixed up' or CORTADO 'abbreviated', possibly an indication of the lower prestige of LSM. They often have problems understanding signs in Spanish word order; it is not unusual to see one person who better understands the Spanish word order re-interpreting for others who don't understand it as well.

The term "signed Spanish" refers to signing that uses the signs of LSM but the word order of Spanish and some representations of Spanish morphology. There is a group of suffixes that signed Spanish uses in a way similar to that of signed English. These symbols represent Spanish suffixes such as *-dor* and *-cion* (for nouns), *-oso* and *-al* (for adjectives), *-ado/-ido* and *-ando/-iendo* (for verbs), *-mente* (for adverbs). Some nouns that name people are specified as feminine by a feminine morpheme signed after the unmarked (usually masculine) sign. Articles and pronouns are fingerspelled (e.g., *el*, *la*, *los*, *las*, *le*, *les*, *me*, *te*, *mi*, etc., but not *nos*, *nosotros* or *nuestro*) by interpreters and during public reading or song-leading. In natural conversation, these articles and pronouns would be omitted entirely or the referents would be pointed to; only rarely would the Spanish-influenced morphemes be used.

Some of the difficulties we noticed when Deaf people signed songs or read for a group were caused by misreading Spanish accent marks. They might read *esta* 'this' instead of *está* 'is', *pago* 'I pay' instead of *pagó* 'he paid', etc. Other times the problem was confusion of two similar words, e.g., *seguir* 'to follow' for *según* 'according to', *entonces* 'then' for *entona* 'sing', etc. The meanings of the substituted signs did not fit the context of the original signs, but no one questioned it. These types of mistakes help make it clear that most Deaf have very little command of Spanish.

Mexican deaf, signers and non-signers with their varying language abilities, fall into a spectrum of different communication systems.

No	Home		Signed	Spoken
language	sign	LSM	Spanish	Spanish
		- — — — — — — — —		

The diagram above demonstrates the general range of systems in use by deaf people in Mexico. Any one person will be able to use some range of this spectrum, but different people use different ranges. Most Deaf people who know LSM shift along this spectrum depending on the addressee: How much LSM does he know? Does he need Spanish word order?, etc. However, most can only shift so far in either direction.

3. LSM dialects

3.1. Geographic distinctions

Mexican Sign Language is one unified language used by the Deaf population in cities of Mexico. Mexico, D.F. is the central hub of the language, followed by Guadalajara and Monterrey. Many other cities also have significant signing populations. There are a number of different considerations that lead us to conclude that LSM is one unified language.

There have been at least two lexical studies of LSM (Bickford 1991 and Smith-Stark 1986). Both found relatively high percentages of lexical similarity (80-90% and higher) between the various samples they studied. These may suggest that LSM should be considered to be a single language.

These findings are comparable to what we found while living in both Guadalajara and D.F. for over a year, visiting Monterrey several times, meeting Deaf from several other Mexican cities, etc. Our general impression is that LSM is one language with a small percentage of lexical variation.

When speaking with Deaf friends, we asked them if there were places where people signed differently. Most of the people told us they could understand signers from other cities; occasionally they showed us variations of certain signs that they knew. One man said that sometimes it was difficult to understand fast signing between two people from another city. However, the overall impression is one of easy and clear communication between different cities, based on a common linguistic system. Extensive traveling by Deaf salesmen, vacationers, church groups, and sports clubs, among others, may have contributed to the standardization of LSM. New signs are learned easily and spread quickly.

This is not to say that the language is completely uniform. Sometimes Deaf people would tell us that although they could understand people from other cities, those signers "use the wrong signs." This may suggest that there is a standard or recognized prestigious variety of signing. Quite frequently, however, we saw them adapting their own signs to the signs the other person used and understood.

3.2. Other distinctions

Geographic distinctions do not seem to be as important as other differences. The greatest lexical variations seem to result from three factors: religious differences (for religious terminology), age distinctions, and levels of education.

Religious terminology differs from church to church (and between denominations) and from city to city. If there are two variations of a sign, sometimes the Deaf would refuse to use the sign that more closely resembled the corresponding ASL sign as "American influenced," if the church that used that sign had had an American missionary at some time.

In some of the cities, but particularly in D.F., we heard that older and younger Deaf people do not sign the same. The teenagers seem to have a street slang that older signers do not use or know. Also, some of the Deaf, older than 50, had attended a now-closed school for the deaf where they had learned signs that were no longer being used by younger signers.

Educational level also influenced a person's signing. Those with more education were more likely to use signed Spanish or a more Spanish-influenced sign, and therefore less likely to be understood by those with less education. There was a five-minute segment of news signed for the deaf on television both in the mid-1980s and in the early 1990s. Deaf friends told us it was signed very quickly and used a high percentage of finger spelling for names and places they were not familiar with, as well as technical vocabulary that most did not know. These factors made it difficult for the Deaf to follow. It was discontinued in 1992.

⁶There is also a sector of D.F. called Iztapalapa that has what appears to be a higher-than-normal incidence of deafness. Some Deaf there use a variety of sign that other Deaf call SEÑA IGNORANTE 'ignorant sign' which is also used to refer to home sign. These Deaf know very little Spanish, may or may not have attended school, and use many signs that are not part of LSM vocabulary but seem to be more highly mimed. The term "ignorant sign" is an indication of the low prestige given by other signers to this group's form of communication. In 1992, we noted that this variety of sign needed to be studied further. Since then, we have learned that it is essentially just a mixture of mime, gesture, idiosyncratic signs, and some LSM signs (often used in non-standard ways), with considerable variation from one person to the next and only rudimentary grammar. Thus, it is apparently not a separate language.

This variety of sign will need to be studied further before a valid decision can be made about its being either a dialect of LSM or a separate language or possibly just a mixture of mime, gesture and home sign that does not have a sufficiently developed grammar for it to be considered a language.

⁷It resumed in 1997 as a two-minute summary of news headlines.

4. Conclusion

LSM is a distinct and full language. It is distinct from other sign languages, such as ASL, and distinct from the national spoken language, Spanish. There are also a significant number of Deaf persons who are largely monolingual in LSM. This means that ASL and Spanish are not adequate for full communication in the Deaf community in Mexico, in any form (video written, or personal contact). There is some regional variation in LSM as well as some variation between religious, age and educational classes. This variation may need to be examined more closely. However, most of the evidence points to a high degree of similarity, not at all unlike the regional variations found in American English or Mexican Spanish.

5. References

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