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## Historical Bases of American Sign Language

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#### INTRODUCTION

Studies of sign language and the education of the deaf in the United States often remark upon the fact that T. H. Gallaudet and L. Clerc brought French Sign Language (FSL) to the United States (e.g., Stokoe, 1960, Frishberg, 1975). This seems a very unsatisfactory explanation from what is known about language variation and change. Stokoe (1960, p. 13) has stated his own dissatisfaction with this orthodox history of American Sign Language (ASL): "One may guess that some notion of the French system had preceded Gallaudet's formal introduction of it to the United States. How else explain the rapid flourishing of the language and the schools using the method to the point where a national college for the deaf was deemed necessary and established by an Act of Congress in 1864 for the higher education of the graduates of these schools?"

How else indeed, unless perhaps, as Fischer (1975, p. 7) has

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suggested, there were some native influences of FSL from signs already existing in the United States. This chapter makes three contentions:

1. The great differences between modern FSL and modern ASL are not primarily the result of internal language change (by two men or the whole American deaf population), since internal language change involves constant, dynamic, but relatively rarely disruptive processes that are not related to influence from other languages.

2. The differences are more than those that arise out of normal language contact.

3. The differences are probably due to earlier creolization of FSL with sign languages already existing in the United States prior to 1816.

Language change that occurs in normal language contact would normally involve borrowing. In normal language contact, the language doing the borrowing might be more disrupted than it would be while undergoing its normal dynamic changes. However, the language doing the borrowing would still be easily recognizable as the same language before and after the borrowing. On the other hand, in creolization there is so much disruption that a new language is created, which is not mutually intelligible with any of the languages in the contact situation. The arguments for this creolization are both sociological and linguistic.

#### SOCIOLOGICAL EVIDENCE

Creolization usually involves one dominant and more than two subordinate language varieties that come into a special contact situation, usually because of colonization.<sup>1</sup>

In order to demonstrate the possibility of earlier creolization in ASL, it is necessary to demonstrate that some sign language varieties existed in the United States before 1816, that these varieties were widely divergent and perhaps mutually unintelligible, and that the

¹As Whinnom (1971) points out, if there are only two language varieties in the contact situation, the result will be linguistic hybridization instead of creolization, since one group will probably eventually learn the other's language perfectly. Alleyne (1971) gives the examples of Caribbean creoles as fitting this general description of creoles. In addition, Alleyne makes the claim that creolization can (and, in fact, did in the Caribbean) occur without prior pidginization. While creolization without prior pidginization seems a minority opinion in creole studies, it does seem to fit the ASL situation. Apparently ASL was nativized especially quickly, perhaps too quickly for prior pidginization to have occurred.

language contact situation of FSL and ASL was sufficiently "colonial" to rule out borrowing or language mixture as the primary cause of change.

Lacking proper documentary history of ASL, one can only appeal to documented parallel situations in the past and in the present. Below

are two examples of indigenous sign languages.

Épée himself states that deaf people in Paris were using a sign language (or languages) in Paris before he began any standardization attempts. There are no real records of this language, so we know

nothing of its structure.

There is also one modern example of an isolated community that may very well closely parallel the language situation in the United States before 1816: Providence Island Sign Language (PISL) (cf. Washabaugh, Woodward, & DeSantis, 1976). PISL is a sign language used on an isolated island in the Caribbean. There has been no direct outside influence on PISL. There have been and are now no educational facilities for deaf people. The individual villages are quite isolated, with very infrequent intervillage contact. Yet there is a group of sign language varieties whose syntax does not follow the oral language.

Because of the absence of urbanization and educational facilities for deaf people, the isolation of villages, and a good amount of integration of deaf people into daily activities of the island, there is no single unified deaf community, nor does there appear to be local communities as such. In addition, there is also a great deal of sign variation

among the villages.

The situation on Providence Island seems to be very similar to the situation that probably existed in the United States prior to 1816. Towns were isolated, transportation was poor, there was little urbanization, and there were no educational facilities for deaf people. In short, there were no factors to create a deaf community; it was a perfect place for home and/or town signs to develop as they have done on Providence Island.

But power and money have a way of changing things, and the search for education for Alice Cogswell and others became the motivating force for the transportation of FSL to the United States by Gallaudet and Clerc.

In America, FSL became a "colonial" language in the following senses:

- 1. FSL was one foreign standard language introduced into a heterogeneous-language local population.
- 2. FSL was introduced by a small minority of outsiders to the

heterogeneous local population. (Gallaudet was a hearing man with apparently no previous in-depth associations with deaf people. Clerc was a foreign educated deaf man.)

3. FSL as a language of education was the language of money, power, possible upward social mobility, and dominance.

However, meaningful acculturation of FSL cultural and linguistic norms was impossible because both Gallaudet and Clerc were poor models. Gallaudet was a poor representative because he was hearing and had only recently acquired some competence in FSL, and Clerc could serve only as an individual and not a group model.<sup>2</sup> The near veneration of Gallaudet and Clerc would also have proved to be more of a hindrance than a help in acquiring FSL cultural and linguistic traditions, since such veneration would have erected a boundary that maintained a vast social distance between the models and the learners. The logical outcome of this "colonization" was a new creolized culture with a new creolized language to act as one of its chief binding and identifying factors.<sup>3</sup>

Clerc himself in the collection of his writings at the Gallaudet College Library offers additional support for the possible creolization of FSL with indigeneous sign languages with old FSL. Clerc writes in 1852, only 35 years after his arrival in the United States:

I see, however, and I say it with regret, that any efforts that we have made or may still be making, to do better than the Abbe Sicard, we have inadvertently fallen somewhat back of Abbé de l'Épée. Some of us have learned and still learn signs from uneducated pupils, instead of learning them from well instructed and experienced teachers.

Also in a letter to Clerc's son written in 1895, we find the following information about an event that happened in 1867, 2 years before Clerc's death.

Soon after dinner at our hotel, he [Clerc], your father, asked me to take a walk with him which I said I would do. When we had walked two or three blocks, he stopped me, telling me that he wished to tell me something. He said with some tears in his eyes that the graceful signs which he and Gallaudet had brought from France to Hartford were being degenerated or changed into

<sup>&</sup>lt;sup>2</sup> Because Clerc was an individual man, he could not have served alone as model for appropriate FSL conversational models in such areas as turn taking (cf. Baker, 1977). In addition he could not have adequately demonstrated female signing or cultural behavior to women naïve of FSL women's behavior.

<sup>&</sup>lt;sup>3</sup> Padden and Markowicz (1975) and Markowicz and Woodward (1975) both contain discussions of the importance of language in maintaining modern community boundaries in the United States deaf community.

other ugly signs [both of these quotes are found in the collected writings of L. Clerc, Gallaudet College Library].

Additional support for the hypothesis of early creolization in ASL is seen in the obvious linguistic differences between modern FSL and modern ASL.

#### LINGUISTIC EVIDENCE

As Southworth (1971) points out: "brusque restructuring of features ... at all levels of structure [p. 260]" occurs in both pidginization and creolization, since they involve "a sharp break in transmission and the creation of a new code [p. 255]."

The linguistic arguments that follow aim at demonstrating restructuring at the lexical, phonological, and grammatical levels. Even though our comparative knowledge of FSL and ASL is still extremely slight, there is sufficient evidence of restructuring to support a hypothesis of early creolization in ASL.

#### Lexical Differences

Lexical differences between modern FSL and modern ASL are quite large, and the gap has widened at an astounding rate. This section utilizes the techniques of glottochronological analysis to illustrate just how astounding these changes are.

Gudschinsky (1964) provides an in-depth discussion of glotto-chronological analysis. Basically glottochronology attempts hypothetically to date time depths or separation between related languages. This involves several steps: "collection of comparable word lists from relatively stable core vocabulary, determining the probable cognates, computing the time depth, computing the range of error [p. 613]." The time depth is computed by a formula that assumes a constant retention rate of 80.5% in basic core vocabulary over 1000 years, "the average change over thirteen languages in which there are historical records (of such a span) [p. 613]." The range of error is a way of estimating the accuracy of the time depth. "The higher the level of confidence (i.e., the more certainty the true answer lies within the range cited) the wider the range of years [p. 619]."

As Hymes (1971) points out, glottochronology has many problems but has been useful in arguing for possible earlier creolization of a language (cf. Hymes, 1971; Cassidy, 1971; Frake, 1971; Southworth, 1971):

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The glottochronological distinctiveness of pidgins and creoles was first discovered by Hall (1959), who showed that Neo-Melanesian had diverged from its base language, English, at a rate far exceeding that normally found. Whereas glottochronology nromally errs in the direction of underestimating the time depth of divergence between languages, here it greatly overestimates the time-depth [p. 198].

In the discussion of glottochronology that follows, the classic procedures described by Gudschinsky (1964) have been followed. Let us now look at a comparison of modern FSL with modern ASL and of modern ASL with older ASL.

The data from modern FSL comes primarily from Oléron's (1974) dictionary of modern FSL signs and from my own field experience in Paris during the summer of 1975. The signs were compared with their ASL counterparts. Four analyses comparing modern FSL and modern ASL were performed.

The first analysis compares data chosen on the basis of the Swadesh 200-word list, the normal list used for glottochronological analysis. Signs from ASL signers in their 20s and 30s were compared with data from Oléron's dictionary. All indexic signs and numerals were eliminated from the 200-word list. The results showed a 61% rate of cognates for 77 pairs of signs. This would hypothetically date the arrival of FSL in the United States between 504 A.D. and 1172 A.D. with a 90% level of confidence. This is between a 645- to 1300-year discrepancy from 1817, the actual date of FSL's arrival in the United States.

The second analysis compared the same FSL signs with those of a deaf American man in his eighties who attended the Kendall School for the Deaf in Washington, D.C. who studied under Hotchkiss. Hotchkiss, a deaf man, grew up on the campus of the American School while Clerc was residing, interacting with students, and teaching sign language at the American School. Thus our informant might be considered a second (linguistic) generation informant for ASL. The comparison of his signs showed the same rate (61% out of 77 pairs) of cognates. This would also indicate a 645- to 1300-year discrepancy.

The third analysis compared all of the 872 available FSL signs with their counterparts from younger ASL signers. The results showed a 57.3% rate of cognates from 872 pairs. This would hypothetically date the arrival of FSL in the U.S. between A.D. 584 and A.D. 802 with a 90% level of confidence. This is still 1000 to 1200 years off.

The fourth analysis compared all of the 872 available FSL signs with their counterparts from our informant in his 80s. The results

<sup>&</sup>lt;sup>4</sup>ASL signs were not limited to any one regional, social, or ethnic group.

showed only a .7% difference with younger ASL signers, bringing the total of cognates to 58% out of 872 pairs. This would hypothetically date the arrival of FSL in the United States between A.D. 591 to A.D. 835, still 1000 to 1200 years off.

While we are not claiming that the glottochronological procedures should be completely accurate, they are deviant enough to suggest the strong possibility of massive abrupt change due to creolization. One objection could be raised to this argument, that sign language change occurs at a much faster rate than that of oral languages.

However, the evidence we have on language change within Russian Sign Language (Gejl'man, 1957) and within ASL supplies very nice evidence that sign languages do not change appreciably faster than oral languages. Three comparisons of data should serve to illustrate this fact.

- 1. Gejl'man (1957) made a comparison of 70 pairs of old Russian signs (from 1835) and found a 97.5% rate of cognates with modern Russian signs. Glottochronological analysis would yield a hypothetical time depth of 14 to 130 years, and the actual time separation was 122 years. Thus, the estimated time depth is very close to the actual one.
- 2. A comparison of 423 signs from Long's (1918) dictionary of ASL with modern ASL shows a 99% rate of cognates. Glotto-chronological analysis would show a hypothetical time depth of 5 to 41 years, but the actual time depth is at least 58 years. In reality, the actual time depth may be considerably greater if we can believe Long (1913), who states: "I am also indebted to Rev. Dr. Philip J. Hasenstab, of Chicago, who carefully went over the manuscript, verifying the descriptions, pointing out errors, and offering many suggestions which have added to the value of the completed material. Dr. Hasenstab received his early education in the Indiana school under early masters of the Sign Language who learned it at Hartford. This gives the assurance, therefore, that the descriptions conform to the original manner of making the signs [p. 11]."
- 3. A comparison of the 1913 film of Hotchkiss signing Memories of Old Hartford with modern ASL indicates results similar to the comparison of Long's dictionary with modern ASL. Hotchkiss says in the film that when he was a student at Hartford, he and the other students often talked with Clerc. We thus have data from a signer who talked often with one of the two men who brought FSL to the United States, and yet the percentage of

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cognates of modern ASL with Hotchkiss's ASL is 99.6% for 251 pairs of signs. This would indicate a hypothetical time separation of 9 years, whereas the actual time separation is at least 63 years, and perhaps much older if we consider Hotchkiss's background.

In summary, glottochronological analysis has revealed very interesting results. Comparisons of older Russian and modern Russian and of older ASL and modern ASL yield expected results. The hypothetical time depths are reasonably accurate and, in fact, slightly slower than expected for ASL. However, the comparisons of modern FSL with modern ASL show wildly discrepant time depths, indicating a much more rapid change than what is expected from natural internal language change. This cannot be construed as proof of early creolization, but it certainly is not a bad argument.

In addition, the ASL data of Long and Hotchkiss indicate that the greatest amount of change from FSL came before Hotchkiss's time. This is a stronger argument for creolization, since almost all of the changes occurred before the mid- to late-1800s. The period of greatest change must have occurred in the early to mid-1800s, the time in which the proposed creolization would have occurred.

### Phonological Restructuring

Evidence for phonological restructuring of FSL signs in ASL comes from Woodward's (1976) comparison of 873 FSL signs with their American counterparts. The restructurings discovered involve metathesis of movement and of handshape and maximal differentiation of movement and handshape. Metathesis and maximal differentiation appear to be very closely related, as we shall see, and perhaps may be two variants of one underlying type of restructuring.

#### Movement Metathesis

In movement metathesis there is a change in the hand that moves. That is, if the dominant hand moves in one variant, the nondominant hand moves in another variant, or vice versa. Movement metathesis occurs in the two signs BUY and APPROACH. Both signs in FSL have inward movement of the *nondominant* hand but in ASL have outward movement of the *dominant* hand. This change can be seen as natural since the nondominant hand in ASL very rarely moves unless the dominant hand also moves. In older ASL signs, where the nondominant hand moved in EARTH, the dominant hand now moves. However, the direction of EARTH's movement did not change, as in ASL BUY

and APPROACH. A discussion of this type of movement change follows, under maximal differentiation.

#### Maximal Differentiation of Movement

Maximal differentiation of movement involves a reversal in the direction of movement of a sign.

FSL HISTORY (ASL TRADITION), which moves inward in FSL, moves outward in ASL. FSL signs with downward movement, such as GLAD, DIFFERENT, and SHAME, change to upward movement in ASL. FIGHT, PREVENT, NIGHT (ASL DARK), which are made with uncrossed arms in FSL, become crossed in ASL. FSL DO, which has the left hand moving left and the right hand moving right, corresponds to an ASL form with both hands first moving left and then right. The FSL sign for FRENCH is done with no movement in the Oléron dictionary, but with outward twisting movement (palm faces outward) by younger French signers. ASL FRENCH is done with an inward twisting movement (palm faces body).

## Handshape Metathesis

In the metathesis of handshape, the nondominant hand takes on the handshape of the dominant, and vice versa. This change has been found to occur rarely in ASL (Woodward & Erting, 1975). Metathesis is found in three signs in the data: START (GV  $\rightarrow$  VG), SHOW (GB  $\rightarrow$  BG), REPRESENTATIVE (GB  $\rightarrow$  BG).

#### Maximal Differentiation of Handshape

Maximal differentiation of handshape, like maximal differentiation of movement, involves a reversal of perceptible features. Handshapes in sign languages can be distinguished by relative openness (extension of fingers) or closure (nonextension of fingers). For example, looking at "A," "S," "G," "C," "B," "5" handshapes, we see that, with the exception of "G," all of these handshapes maximally contrast in openness or closure. "A" and "S" are maximally closed, with no fingers extended. "B" and "5" are maximally open, with all fingers extended. "C" is medially open, all fingers are extended but all are also bent.

It should be pointed out that these handshapes appear to be the most unmarked in sign languages. There are several reasons for this:

- 1. They occur in most, if not all, the world's sign languages.
- 2. They are among those acquired earliest by children learning ASL (Boyes, 1973; McIntire, 1974).

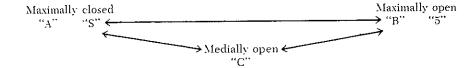
3. They are least restricted in occurrence in ASL (Battison, 1974), since they are the only handshapes that can be used as passive (nonmoving) hands in signs which have two different handshapes.

Characteristics 2 and 3 may be true of other sign languages as well. Some signs that have maximally closed handshapes in FSL are related to signs that are open or maximally open in ASL. Maximally closed FSL "A" becomes medially open ASL C in DRINK and COMB-ONESELF and maximally open "B" in PAY-ATTENTION and PRINT. Maximally closed FSL S changes to maximally open ASL "5" in ACCLAMATION and DRESS and to maximally open ASL "B" in FALL (verb) and KISS.

Some maximally open handshapes in FSL are medially open or maximally closed in ASL. Maximally open FSL "B" changes to medially open ASL "C" in CONGRATULATE and to medially closed ASL bent "B" or very closed ASL "Y" in NOW. Maximally open FSL "5" changes to medially open ASL "C" in TIRED and HOW and to maximally closed "S" in PROTECT and maximally closed "A" in UNDER

Medially open FSL "C" can become maximally open or closed. FSL "C" becomes maximally open ASL "5" in SAD and maximally closed "A" in AVOID. Medially open FSL "C" has also closed in ASL "O" in TEACH.

These variations are schematically demonstrated in the following diagram. C may be an intermediate stage in the process of maximal differentiation.



Maximal differentiation within ASL is only found in a few nonassimilated nondominant or passive handshapes, such as HARD (passive "B" or "S"). The number of signs that are definitely related by maximal differentiation across FSL and ASL is substantial in comparison.

## Summary of Phonological Differences

Fifty-five percent of the signs with movement variations differed because of variations in metathesis and maximal differentiation.

Excluding initialized signs, 26.9% of the signs with handshape differences varied because of variations in metathesis and maximal differentiation. The fact that over one-half of the signs differing in movement and over one-fourth of the signs differing in handshape would differ in such radical ways suggests the possibility of some heavy earlier restructuring that would seem to be more related to creolization than to internal language change. This possibility becomes stronger when one looks at the paucity of metathesis and maximal differentiation within ASL (cf. Woodward & Erting, 1975).

## Grammatical Restructuring

In addition to phonological differences, there are also grammatical differences between FSL and ASL. These differences appear in such area as word order in FSL and ASL grammar. However, word order change (cf. Fischer 1975) and a number of other differences apparently have happened over a fairly long period of time because of contact with English. Thus, a number of these changes do not appear to be sufficiently "brusque" to have occurred as a result of creolization.

However, there is one example of grammatical restructuring that is not due to contact with English and that apparently happened quite abruptly: negative incorporation. Negative incorporation in both FSL and ASL involves negating a small class of verb signs by a bound outward twisting movement of the hand(s) from the place where the sign is made. Woodward (1974) discusses the variability of the negative incorporation rule in ASL with five ASL verbs and has found an implicational pattern of the order HAVE implies LIKE implies WANT implies KNOW implies GOOD. Scalability was 97% for 108 northeastern deaf informants and 95% for 36 northwestern deaf informants. There was categorial negative incorporation with GOOD for American informants.

In the summer of 1975, Woodward and De Santis collected information from 60 French deaf informants from Paris, Toulouse, Albi, and Marseilles to determine if negative incorporation occurred in FSL. Woodward and De Santis (1976) found that variable negative incorporation did occur in FSL for the verbs HAVE, LIKE, WANT, and KNOW and that the ordering of the variability was identical to the American implication, with a 94.2% rate of scalability.

The surprising part of the data was that no French signer ever used negative incorporation with GOOD. In fact, the FSL sign BAD is not formationally related to FSL or ASL GOOD; it is a completely sepa-

rate lexical item. FSL BAD is cognate with ASL WORSE, the only difference being that most French signers do not have assimilated handshapes for the sign, whereas American signers do.

Woodward and De Santis (1976) present evidence that negative incorporation began in FSL before 1816 as a process of phonological assimilation affecting in particular the signs KNOW, WANT, LIKE, and HAVE, in that order. When FSL was brought to America and creolized with existing varieties of sign language already there, negative incorporation was restructured as a grammatical process affecting the same four verbs and later GOOD in ASL.

Negative incorporation is a phonological process in FSL. Word order in old and modern FSL is Verb + NOT. FSL NOT is produced in neutral space in front of the body with a "G" handshape (index finger extended from the fist). The index finger points upward and the palm is outward from the body. The "G" hand moves repeatedly from side to side. In negative incorporation, FSL NOT assimilates location and handshape to that of the preceding verb sign and loses its movement. This results in an outward twisting movement (to obtain the outward orientation of FSL NOT) from the place where the verb sign is made. Thus these negated signs have the same phonological structure in FSL and ASL. However, assimilation adequately describes the process of negative incorporation in FSL but not in ASL.

This assimilation began affecting FSL verbs KNOW, WANT, LIKE, HAVE, in that order before 1816. Otherwise, there could be no negative incorporation in ASL, since ASL NOT has no formational relationship to FSL NOT. ASL NOT probably came from some sign variety in America, since old and modern FSL do not have cognates for ASL NOT. ASL NOT may have been in competition for a time with FSL NOT in America, however, ASL NOT appears to have won fairly quickly. The assimilated negative forms of KNOW, WANT, LIKE, and HAVE remained as single units in ASL.

These lexical units became generalized into a rule in ASL with the negative incorporation of ASL GOOD into ASL BAD during the creolization of FSL and existing varieties of signing in the United States. FSL and ASL GOOD are cognates. FSL BAD became ASL WORSE. Creolized ASL then had no single lexical unit for BAD, or this unit lost in competition with BAD as a negative incorporation of GOOD. GOOD then gradually moved to its appropriate place in the implicational pattern because of its phonological characteristics. Finally, negative incorporation of ASL GOOD has become categorical.

Further support for the salience of the negative incorporation grammatical rule in ASL comes from observations of children's sign-

ing in which it is overgeneralized. There have been reported overgeneralizations by a child who already had the full implication. This child used the overgeneralized form \*DON'T-LOVE. It is also interesting to note that hearing signers, once they realize that negative incorporation can apply to several verbs in ASL, begin making overgeneralizations—for example, \*DON'T-THINK.

The restructuring of negative incorporation from phonological assimilation in FSL to a grammatical rule in ASL is extremely important. The restructuring of a grammatical variation to a phonological variation occurs in natural internal language change in oral languages—for example, is-deletion in Black English (Fasold, 1976). This situation is reasonable, and, in fact, expected, since phonology is more subject to change than is grammar. However, the restructuring of a phonological variation to a grammatical change is a very different situation. The restructuring in negative incorporation is much more likely to have been caused by the disruptive force of creolization than by natural internal language change.

#### SUMMARY AND IMPLICATIONS

This chapter has attempted to present sociological and linguistic arguments for possible earlier creolization in ASL. Evidence from the sociolinguistic situation in France before L'Épée and synchronic evidence from such isolated sign languages as PISL demonstrate the fact that sign languages have existed in extremely isolated situations where there have been no educational facilities. Thus, there is the possibility that sign languages could have existed in the United States prior to 1816. Furthermore, sign languages in isolated signing communities such as Providence Island have shown great variations. Finally, the introduction of FSL in an educational situation in the United States could have offered the necessary "colonial" setting for the creolization of FSL and existing sign language varieties in the United States.

The linguistic evidence for possible earlier creolization in ASL is much stronger than the sociological evidence. There is evidence of restructuring at the lexical, phonological, and syntactic levels. Glottochronological analysis show expected time depths between older

<sup>&</sup>lt;sup>5</sup>It is not unreasonable to assume that wherever there have been deaf people associating with each other, there has been sign language variety. These varieties developed through normal patterns of interaction, not through the invention of hearing people.

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Russian Sign Language and modern Russian Sign Language and between older ASL and modern ASL. However the time depth for the separation of FSL and ASL would indicate a far longer separation than what actually occurred. This discrepancy may be due to the abrupt changes in the process of creolization.

Such radical changes in sign language phonology as metathesis and maximal differentiation account for a large percentage of the changes in handshape and movement noted between modern FSL and modern ASL signs. Finally, the restructuring of negative incorporation as a phonological process of assimilation in FSL to a grammatical change in ASL indicates an abrupt radical grammatical restructuring.

Although we are still far from knowing exactly the history of ASL between 1816 and the mid-1800s, a hypothesis of creolization seems quite feasible. Such a hypothesis has two important implications: one theoretical and the other applied. The theoretical implication is that sign languages are capable of undergoing not only sociolinguistic processes of internal variation and change (e.g., Frishberg, 1975; Woodward & De Santis, 1975) but also those massive but elusive shifts that have been grouped under the heading of creolization. Comparisons with oral language creolizations will be extremely valuable for sociolinguistic theory.

The applied implication may be somewhat deflating to those who still like their heroes untarnished. T. H. Gallaudet and L. Clerc performed an admirable service by bringing FSL to the United States. However, the fact is that FSL in the United States changed very rapidly and dramatically (before the time of Hotchkiss) to meet the needs of deaf individuals in the United States. On some introspection, it seems more than a little ethnocentric of us hearies to maintain the myth that two men—Gallaudet, a hearing man, and Clerc, a foreign deaf man who apparently advocated assimilation into the hearing community.—founded ASL as we know it. It seems time to give just a

<sup>6</sup>I would like to thank Harry Markowicz for pointing out the following quote. Clerc (June 16, 1816) in his journal records a conversation with Mr. Wilder, another passenger on the ship travelling to America.

He asked me if I should like to marry a deaf and dumb lady handsome, young, virtuous, pious and amiable. I answered him that it would give me much pleasure but that a deaf and dumb gentleman and a lady suffering the same misfortune could not be companions for each other, and that consequently a lady endowed with the sense of hearing and the gift of speech was thought to be preferable and indispensable to a deaf and dumb person. Mr. Wilder replied nothing, but I am sure that he found my argument just.

Contrast the above statement with the findings by Fay (1898) that 85% of marriages

little credit to the American deaf people, who drastically modified (if not creolized) FSL to satisfy their needs.

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