### Guidelines for the Study of ASL Etymology

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#### Introduction

In this article Dr. Supalla outlines principles and guidelines for research on etymology in sign languages. *Etymology* is the study of the sources or roots of lexical items – where they come from historically and how they have changed over time. For sign languages, this may also include the iconic sources of signs and potentially the loss of iconicity as signs have changed. Here Dr. Supalla stresses the importance of carefully considering the sources of individual lexical forms found in ASL and LSF texts, showing that the lack of linguistic contexts in which these forms were used and a bias against homonymy (the existence of several different signs with the same meaning) can mislead the researcher. He also sets out guidelines for identifying types of contextual conditions that trigger or prevent formational and semantic changes among LSF and ASL words. Finally, he presents examples of cyclic re-analysis of evolving forms among ASL and LSF signers.

# **Scrutinizing Etymological Sources**

In this field guide, I will focus upon the historical relationships between individual signs in ASL and LSF, consulting historical sources to trace their evolution and their intermediate historical forms. I will also discuss processes of maintenance, divergence and convergence between modern forms in ASL, early ASL forms, and old LSF forms. Documentation may not contain full grammatical and usage description, since the materials were often not developed to support historical research.

Another challenge in using historical sources is the variety of methods used to categorize and list signs. In developing a database for doing historical research, we will want to allow access to original data from a variety of books and other sources. It is therefore important to have a database platform which will facilitate cross-referencing of both the data and the metadata (notes about the nature of the data).

## Sizing up the French Connection

In the recently published text by Yves Delaporte entitled "An Etymological and Historical Dictionary of LSF," a collection of modern LSF signs is included, with 1,200 entries listing etymological roots in earlier LSF forms and descriptions of the regional evolution of these signs in France. At times, these forms are nearly identical, while at other times significant changes in form can be seen. This is a significant research effort and deserves close study as a possible guide to the development of a comparable volume for ASL.

The cover of the Delaporte etymological dictionary depicts a sample etymology for the LSF sign for "father," showing a relationship between the sign for father and a feathered plume on a hat. This conflicts with our research on the etymology of the ASL sign FATHER, so I investigated further to determine if this was a distinct etymology specific to LSF. In the next chapter, I describe the process by which Delaporte established this etymology for "father" in LSF.

# Ruffling FATHER's Feathers

The sign mentioned in the last chapter, FATHER, was observed in south-central France, and a possible link was established between the handshape for FATHER and the individual barbs of a feather. A later article by Shaw and Delaporte, 2010, accounts for the related sign MOTHER by suggesting that it was a later development, arising as a result of analogy with a related sign pair MAN and WOMAN used in modern ASL. In this analysis, the modern form for MOTHER arose in ASL at a later date, which would explain why it is not seen in LSF.

This analysis is difficult to accept in light of additional historical documentation of variation in the form of the signs for "father" and "mother" in early ASL. The early forms are described as contrasting in thumb contact of the closed hand at the forehead versus chin, both followed by a sideways "lifting" movement of two cupped hands. We can easily see how the reduced forms of FATHER and MOTHER could evolve from these contrasting earlier forms by well-known linguistic reduction processes. Thus we have competing research claims for the etymology of FATHER and MOTHER in ASL and for FATHER in LSF.

#### **Alternative Connections**

There are several types of evidence and alternative descriptions of historical circumstances which make it unlikely that the Delaporte etymology for FATHER is correct. Historical documentation exists in an 1856 French volume on sign language by Pelissier. In this volume, he lays out a description of compound signs for expressing gender and relationships. These constructions consisted of an initial sign for "male" or "female", followed by a modifier sign describing a particular kin relation. It is entirely possible that early ASL adopted this already existing paradigm wholesale.

While French deaf signers do not currently use the earlier MALE, FEMALE+LIFT-BABY form for FATHER and MOTHER, Pelissier's description suggests that this compound paradigm was in use at an earlier time in France. As time went on, and ASL and LSF evolved separately and diverged, the use of this paradigm apparently faded in France. Clearly, the form for FATHER can be seen as an isolated lexical relic of this earlier paradigm.

Thus we see that the tracing of etymological connections is difficult and can go astray without full information. Missing critical documentation, Delaporte suggested an etymology for FATHER in LSF and MOTHER in ASL based on analogy. While analogy is a well-known mechanism for historical change in language, it is important to seek out documentation on the earlier forms and their use within deaf communities to construct an accurate etymology.

#### Change across Multiple Contexts

Signs are produced in a syntactic context, with other signs preceding and following them. These adjacent signs exert their influence upon a sign, and its form may change through assimilation. The phenomenon of adjacency can affect a particular form in different ways, so that the form can begin to diverge as well. The phrasal context is thus important to consider in an etymology.

At the same time, a sign's meaning and/or function can shift in one or more of the contexts, possibly diverging from the original meaning of the form in other contexts. During this process, we can see identical forms with meanings which differ from one context to another. As a result, polysemy can develop.

A third phenomenon occurs in which a sign-internal paradigmatic alternation pattern emerges in a particular linguistic context. In this process, a phrasal sequence of signs become reduced. Alternations in some of the signs in the sequence will lead to a set of bound forms cliticized to the adjacent sign. We see such paradigmatic patterns in inflections, where there are alternations in the form of handshape, location and movement. While our goal is to track lexical form changes, we must attend also to this paradigmatic variation of a sign's context as this often provides etymological explanations for the development of morphology.

### FACE Hidden in Plain Sight

Forms which diverge in meaning in one or more contexts while retaining the same form are termed "polysemous." Often a term for a specific concept can continue to exist and be used in a language concurrently with the same form being used for a newer, more general concept. Metaphorical extension has played a large role in expansion of the lexicon, capitalizing on the use of existing signs to represent additional concepts with functions and meanings distinct from the original signs. In the case of the evolution of "who", we find a great variety of signs for the concept. One of these is a reduced form of an earlier sign FACE, with the circular motion only at the mouth. Today we see a number of additional forms for "who", so one question we had was the time-frame for the evolution of this variation in ASL. In early 20<sup>th</sup> century films, we see a variety of signs for the concept "who" in signers from different regions. This tells us that historical variation, change and reduction in the sign were in progress at this stage of ASL history.

This leads to the question of why and how signers maintained the original full form and meaning for the sign FACE. I suggest that the maintenance of the full form and meaning for FACE is tied to its status as a SASS (Size and Shape Specifier), a category of classifier in ASL. Tied as it is to depicting the size of a human face, it resisted reduction over time

In their turn, the particular forms of the variants of "who" in modern ASL are not random changes. The forms can be shown to be a result of the forces of phonological assimilation from adjacent forms interacting. From this example, we see that it is not possible to construct an etymology by studying single signs out of context.

# The Gift of Knowledge

I would now like to turn to a case of language change in ASL which was the result of a re-analysis among ASL signers. In this example, we rely on the careful description and documentation of INFORM by J. Schuyler Long in his 1918 dictionary of ASL. He states that the form begins with the sign KNOW and then moves outward "as if

carrying away information". This form and meaning likely underwent reanalysis, with a change in handshape of the sign from the flat, open handshape to the form used in the ASL sign GIVE – that is, a reanalysis of the form for INFORM as related to GIVE.- Ultimately, the original form fell into disuse and the historical relationship between KNOW and INFORM was obscured.

In examining cases of historical change for specific lexical items in ASL, the complexity of etymological development becomes clear. A modern-day entry for the sign INFORM would be likely to refer to the contemporary reanalysis in relation to the sign GIVE, reflecting our unfamiliarity with the sign's history. While this perception may be viewed as "wrong" by those familiar with the Long dictionary, such folk etymologies do reflect the reanalysis of specific ASL signs and the introduction of a new morphological element to the sign. While both views of the etymology of INFORM are correct for their time period, there do also exist false etymologies based on the perception of some similarity among signs without additional historical information.

# Lexicography and Homonymy

Lexicography is the field specializing in the documentation of the lexical form and meaning of words in a signed or spoken language. Many different levels of decision making accompany this task, such as determining the order of entries and the semantic scope and array of items to be included. Often, the number of items in the dictionary will be limited in order to control costs, necessitating the exclusion of many forms.

Once such decisions are made, the particular forms in the language can be researched and documented. In researching forms, lexicographers may come across an identical form for two different meanings. Often an effort is made to minimize such listing of identical forms, as there is a sense that such homonyms will be confusing to readers. Another strategy for minimizing homonymy is listing the two forms in a distinct way, choosing the least-similar forms for the two meanings. This practice has consequences, however, in that future etymological researchers may assume that the data represents a context-free form of the sign.

In a final question, we need to examine what affects the language users' tolerance for homonymy. In the case of INFORM and OBEY, the homonymy is tolerated, as seen by the continuing use of both signs with their distinct meanings. One may speculate that it is the differing linguistic context of these forms which allows such a stable homonymy. However, lexicographers do not include such distributional information in the entries for these forms, but rather record the uninflected forms of a limited number of signs.

## Flaws in Lexicography

When we examine examples of homonymous forms listed in ASL dictionaries, we often see the alternate or variant signs which are listed in preference to homonymous ones. The enforced contrast between INFORM and OBEY involves the depiction of a downward head tilt for OBEY. Another homonymous pair in ASL is GOOD and THANK-YOU. In at least one ASL text, these homonymous forms are distinguished as 1-vs 2-handed signs. As researchers studying the etymology of sign, we need to be aware of this practice and bias. It is possible that the tradition of suppressing homonymy is long-standing and has influenced historical texts as well.

### Contextual Restraints on Reduction

Ongoing reduction in the form of signs is a common process of language change, but it may be surprising to discover that it is not an inevitable one. Many factors influence the potential reduction of a sign, or the choice between a reduced and full variant of a given sign. In a group of early LSF 2-handed animal signs, we see that reduction to a one-handed form is common, except in cases where ambiguity with another sign would result, such as the contrast in modern ASL between DEER and DADDY.

### **Etymological Development in Context**

In tracing etymological development, we are examining the contextual forces on the process of lexicalization of proto-lexical forms in the language. As I have mentioned, these changes in form and meaning often render the origin of modern-day lexical items opaque. In turn, the process of re-analysis of opaque forms by metaphorical analogy with seemingly related modern forms (e.g. GIVE for INFORM) causes further change. This is a cyclic process which has likely been in operation for the life of the language, and it both alters and expands the lexicon. It is important to keep such cyclic re-analysis in mind during our etymological research. Merely comparing proto-forms and modern forms will not illuminate the natural processes of language change which have occurred throughout the intervening time periods.

#### Summary of Guidelines

In summary, the guidelines suggested in this article make one fact clear: We must carefully evaluate our etymological sources, both historical and modern, as they will not all faithfully represent the actual language behavior of indigenous signers. The quality of etymological work will be enhanced by accepting the limitations of our sources and by thoughtfully utilizing these resources. In addition, we must seek out additional sources documenting the linguistic context of signs during historical time periods and the modern era in order to make valid comparisons and conclusions about cognate forms in sign languages.

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