## The great ASL compound hoax

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ABSTRACT. In many descriptions of ASL, signs like SISTER and TOMATO are analyzed as compounds. These are signs which were once created through the concatenation of two separate signs, but whose constituent parts have since fused together to form a single, opaque sign. I suggest that many of these well-known examples are not compounds at all, in a synchronic sense. Because the earliest analyses of compounding defined compounds according to primarily phonological and diachronic criteria, subsequent studies of compounding have been unnecessarily restricted. Presenting examples collected primarily from ASL videos on public YouTube channels, I argue that true examples of compounding in ASL are constructions like NAME SIGN and DEAF COMMUNITY, which contain two identifiable signs.

Keywords: compounding, lexicalization, reduction, ASL, morphology

1. THE HOAX. This paper's title is inspired by the eponymous essay in Geoff Pullum's book, *The Great Eskimo Vocabulary Hoax and Other Irreverent Essays on the Study of Language* (Pullum 1989, 1991). In the essay, Pullum provides a characteristically glib assessment of Laura Martin's (1986) efforts to track the provenance and implications of the widespread, patently false myth regarding the prodigious number of 'Eskimo words for snow'. Hoax is a loaded term; however, the hoax Pullum describes is not intentionally deceptive or fraudulent. Instead, it refers to a resilient misconception which, having been subject to "the processes of folklorization that can remove scholarly statements from their rightful context and cause misinterpretation," serves "to remind us of the intellectual protection to be found in the careful use of sources, the clear presentation of evidence, and, above all, the constant evaluation of our assumptions" (Martin 1986:421). The 'Eskimo vocabulary hoax', then, is a linguistic misconception that has become disassociated from its original context and incorrectly disseminated as common knowledge.

In this paper, I challenge the 'ASL compound hoax', a misconception that has, for the most part, been uncritically circulated within sign language linguistics (although Perlmutter 1996 is a notable exception). In its strongest formulation, the hoax suggests that compounds in ASL (American Sign Language) are all and only those signs that have been created by fusing parts of two other signs together to create a single sign. These fused constructions include examples like SISTER and TOMATO, which are single signs, but within which we can identify phonological remnants of the signs GIRL#ALIKE and the signs RED#SLICE, respectively. However, this is a mistaken view of compounding, stemming from the way that LEXICALIZED COMPOUNDS were analyzed in early generative treatments of ASL phonology, and in particular from the way that not only generalizations about compounds, but also specific compound examples, have been preserved and recycled within sign linguistics.

Interestingly, the ASL compound hoax also has an English counterpart: Giegerich demonstrates that many analyses of compounding in English associate leftward stress with compounds, and rightward stress with phrases, a generalization that has similarly "been handed down from author to author, from theory to theory, from the research literature to textbook treatments" (2004:2). As a result, leftward stress is often considered a diagnostic for identifying English compounds. However, while the stress criterion distinguishes *bláckboard*, a compound, from *black bóard*, a phrase, there are also numerous counterexamples. Two-word units like *apple píe*, *aluminum fóil*, and *Pennsylvania státion* all have rightward stress (see Plag 2006 for discussion of phonetic measurements of compound stress and for additional examples), and so demonstrate that stress patterns cannot reliably distinguish compounds from phrases in a non-circular way: either they are compounds, and invalidate the generalization that all compounds are left-stressed, or they are to be considered phrases, by virtue of being right-stressed, thus rendering the stress criterion unfalsifiable.

In this paper, looking at novel examples of ASL compounds, we will see that just as leftward stress is not a sufficient criterion for identifying all and only English compounds, neither is phonological fusion a sufficient criterion for identifying all and only ASL compounds. However, compounding and reduction are not independent, either. Recognizing that lexicalized compounds are overrepresented in the literature leads to the realization that compounding, lexicalization, and reduction are separate yet interrelated processes. Rather than diagnostics of compounding, lexicalization and reduction can be viewed as general processes that affect any frequently occurring constructions.

2. IDENTIFYING COMPOUNDS. Here we will define COMPOUNDS as lexical constructions which contain two (or more) identifiable content words, and whose meanings can typically be understood or paraphrased in terms of a relationship between their constituent words (see Bauer et al. 2013:431). Many languages combine words to create phrases and compounds alike, and accordingly, many studies of compounding begin by defining compounds in opposition to phrases. Indeed, in some languages, phrases and compounds are discriminable through overt morphosyntactic markers; German *schwarze Drossel* 'black thrush', a phrase, and *Schwarzdrossel* 'blackbird', a compound, differ in that the first element of the phrase is inflectionally marked, while the corresponding first element of the compound is not (Giegerich 2009). Other languages also use an overt linking element to mark compounds, as in Greek *kuklóspito* 'doll house', a compound of *kúkla* 'doll' and *spíti* 'house' (Ralli 2013).

In yet other languages, however, compounds and phrases are not canonically marked in these ways, and so are not as easily distinguished. The criteria that have traditionally been proposed for separating compounds and phrases in English, for example semantic idiosyncrasy or differing intonation patterns, can often account for a range of examples, but also sometimes conflict with one another or encounter exceptions (see Bauer 1998, Giegerich 2004, Plag 2006). Moreover, the division between compounds and phrases often aligns with a theoretical perspective which insists on a strict division between morphology and syntax, such that compounds are made in 'the lexicon', and phrases are made by 'the grammar'. Here we will not assume such a strict divide *a priori*, and so will not be primarily concerned with whether or how compounds can be distinguished from phrases. Instead, we will seek to understand the nature of the structure that can be observed in compounds as sign-sign constructions in ASL.

**2.1.** CANONICAL COMPOUNDS. If asked for an example of a compound in English, a typical linguist might provide something similar to the words in 1. These constructions can be considered compounds because they can all be analyzed as words that have been created through the combination of two other English words:

## (1) Examples of English compounds

Compound	Word 1	Word 2
chalkboard	chalk	board
textbook	text	book
football	foot	ball
silk tie	silk	tie
term paper	term	paper

In contrast, fewer linguists would offer the words in 2 as canonical examples of English compounds. Though they too can be seen as having once been created through the combination of two independent words, these 'compounds', many of them originating in Old English, have reduced and fused together to the point that their original meaningful structure can only be analyzed etymologically.

(2) Less canonical examples of English compounds (cf. Oxford English Dictionary online)

Compound	Word 1		Word 2	
cupboard	сир	'cup'	borde	'board'
holiday	hálig	'holy'	$d\alpha g$	'day'
gospel	god	'good'	spel	'spell'
nostril	nos	'nose'	thirl	'hole'
lord	hláf	'loaf'	weard	'ward'

One way that the English examples in 1 and 2 can be distinguished is by the degree to which the

sub-lexical structure of a given construction can be considered transparent. For example, the relationship between the words *chalk*, *board*, and *chalkboard* is quite transparent: both *chalk* and *board* are identifiable within the form of the word *chalkboard*, and the compound *chalkboard* can be said to denote 'a board which can be written on with chalk'.

However, the relationship between the words *cup*, *board*, and *cupboard* is not transparent, but rather translucent: the pronunciation /kʌbərd/ obscures the *cup* in *cupboard*, and moreover, a *cupboard* is not merely a 'board on which cups are stored', but is a kind of cabinet with shelves that can accommodate a wide variety of objects. In still other cases, the relationship between a compound and its former constituents is actually quite opaque: though speakers may accept the explanation that a *lord* once meant 'the warden of those who eat his bread', these etymological facts are not available to naïve speakers of English, nor are the words *loaf* and *ward* recoverable within the word *lord*.

**2.2.** LEXICALIZED COMPOUNDS. Curiously, within sign language linguistics, this pattern is reversed. If asked for an example of a compound in ASL, a typical sign linguist would likely provide something like the following lexicalized compound signs in 3, taken from *The Signs of Language* (Klima & Bellugi 1979).<sup>2</sup> Though none of these examples are anywhere near as old as the English compounds in 2, they are similar in that the relationship between a given compound and its constituent signs is actually somewhat opaque, and the phonological form of these compounds obscures their relationship to their former constituent signs:

### (3) Examples of ASL compounds (Klima & Bellugi 1979:205)

Meaning in ASL	Sign 1	Sign 2
'lunch'	EAT	NOON
'to resemble'	<b>FACE</b>	STRONG
'to oversleep'	SLEEP	SUNRISE
'at the same time'	TIME	SAME
'to agree'	THINK	ALIKE

The signs in 3 were once created through the concatenation of two separate signs, but, as has been well-documented, their parts have since fused together to varying degrees to form a single sign (e.g. Brentari 1993, 1998, Frishberg 1975, Liddell & Johnson 1986, Sandler 1989). Indeed, this reduction and fusion has come to serve as one of the primary means for identifying compounds in ASL. As a consequence, very few sign linguists would offer the constructions in 4 as examples of ASL compounds. This is precisely because, unlike the signs in 3, in each of the constructions in 4, two signs are produced, and the relationship between the independent signs and the whole compound remains relatively transparent.

#### (4) Less canonical examples of ASL compounds

Meaning in ASL	Sign 1	Sign 2
'name sign'	NAME	SIGN
'living room'	FORMAL	ROOM
'ASL class'	#ASL	CLASS
'number story'	NUMBER	STORY
'Deaf culture'	DEAF	CULTURE

This mismatch between canonical English compounds and canonical ASL compounds can be seen, for example, in treatments of ASL compounds in structural overviews, handbooks, and edited volumes of sign linguistics, in which discussions of individual lexicalized compounds routinely overshadow discussions of more transparent compounds, and of the lexical mechanism

of compounding (e.g. Emmorey 2001, Meir et al. 2010, Meir 2012, Sandler & Lillo-Martin 2006). The compounding data and generalizations these sources discuss typically come from early phonological treatments of lexicalized compounds, particularly Klima and Bellugi (1979) and Liddell and Johnson (1986). Even studies that seek to go beyond Klima and Bellugi's original compounding dataset are often biased toward lexicalized compounds in some way: for example, a recent study endeavors to present "a complete survey" of compound types in ASL (Vercellotti & Mortensen 2012:547). However, Vercellotti and Mortensen's survey draws exclusively on compounds collected from an ASL dictionary. By definition, the dictionary compounds they study are conventional pairings of form and meaning, and thus, are also already lexicalized to some degree (see Hohenhaus 2005, Johnston & Schembri 1999 for discussions of the term lexicalization). In order to complement these previous studies then, and to examine the nature of the structure in a fuller range of ASL compounds, we must turn to other sources of data, from which examples of novel and conventional compounds alike can be extracted (cf. Downing 1977).

3. ASL COMPOUND DATABASE. Putting aside the well-known examples of lexicalized compounds that dominate the ASL compound literature, this section focuses on three compounding subtypes in which the structure of the compound is quite transparent. There are no large, annotated, publicly available corpora of ASL, and so in order to examine ASL as it is used, sign linguists must first make their own, smaller corpora (cf. Lucas et al. 2001, Morford & MacFarlane 2003). For the current study, I collected examples of compounds from ASL videos posted to public YouTube channels. With any methodology, there are drawbacks; here, given the way in which the data was collected, no demographic data was collected beyond what could be inferred from

the videos themselves. Accordingly, though many of the examples discussed in this section are taken from videos discussing Deafness and ASL, and some signers self-identified as native ASL signers in their videos, no strong claims are made about individual signers' backgrounds here. These drawbacks are offset, however, by the fact that these videos can provide a realistic picture of ASL as it is actually used, by a variety of people and in a variety of contexts.

**3.1.** DATA CODING. In total, 87 minutes and 45 seconds of video data were analyzed, from 15 public channels. Though many signers used lexicalized compound signs like INFORM (from KNOW#OFFER) and LOOK-LIKE (from LOOK#SAME), these signs were not counted as compounds of interest for the purposes of the current study. Instead, broadly defined, the criteria for identifying compounds were that the construction must involve two distinct signs which together act as a single lexical constituent in the larger signed utterance. Three compound types were coded, according to their formal and functional properties:

The first type, FINGERSPELLED COMPOUNDS, are two-sign loan translations, or calques, of English compounds, such that one element of the calque is an ASL sign, and the other element is a fingerspelled word. Padden (1998) presents the first analysis of fingerspelled compounds, arguing that they are part of ASL, despite the fact that they are borrowed from English. Padden identifies fingerspelled compounds in which a sign is followed by a fingerspelled word, as in 5, as well as compounds in which a fingerspelled word is followed by a sign, as in 6.

(5) SUN B-U-R-N 'sunburn' PAY R-O-L-L 'payroll'

(6) P-R-O-O-F READ 'proofread' S-T-O-C-K MARKET 'stock market' Padden suggests that the determining factor for whether an English word will be fingerspelled within a borrowed compound has to do with lexical semantics and polysemy: the meaning of the borrowed English word must not conflict with the meaning of the ASL sign that is typically used to translate that word. For example, the *roll* in *payroll*, when borrowed to ASL from English, is fingerspelled. This is likely because the ASL sign most commonly glossed as ROLL refers to circular movement, and not to a list, as *roll* does in English. Similarly, the *proof* in *proofread* is fingerspelled because the ASL sign most commonly glossed as PROOF refers to evidence, but not a printed document to be examined for errors, as *proof* does in English.

The second compound type, also resulting from ASL's extensive contact with English, is what I will call CHAIN COMPOUNDING. Humphries & MacDougall (1999) identify CHAINING as a pedagogical tool that links English and ASL vocabulary; they demonstrate that chaining is used in educational settings where Deaf, ASL-fluent students are learning English. In these environments, skilled teachers tend to chain English and ASL vocabulary together by alternatingly writing the English word on the chalkboard, indicating to the word, fingerspelling the word, and denoting the concept with a synonymous ASL sign.

In conversational rather than pedagogical contexts, I have observed chain compounds which involve borrowing a word from English, and then producing an ASL sign with a similar meaning, 7, or first producing an ASL sign, and then fingerspelling a related English word, 8.

(7) P-R-O-S-O-D-Y WAVE-FROM-MOUTH 'prosody' A-B-S-T-R-A-C-T CONDENSE 'an abstract'

(8) CUTE Q-U-A-I-N-T 'quaint' PUSH-MOP M-O-P 'a mop' To my knowledge this type of construction has not been discussed in the literature on ASL structure, and certainly not in the literature on compounding in ASL. Chain compounds seem to serve the discourse function of establishing either the sign or the fingerspelled word as the intended label for the referent concept within a particular discourse setting, especially if the ASL sign is not a widely recognized sign with an established, conventional meaning.

Finally, to complement the two fingerspelling-sign compounding constructions discussed above, the third type of compounding we will discuss is SIGN-SIGN COMPOUNDING. Sign-sign compounds are constructions which juxtapose two ASL signs to denote a concept, just as canonical compounds in English juxtapose two words. By virtue of the fact both of the signs are recognizable within a sign-sign compound, and the meaning of the whole construction can be described in terms of the construction's constituent signs, sign-sign compounds are relatively transparent, as in 9. Some sign-sign compounds appear quite frequently in signed discourse, as the conventional labels for common concepts; the examples in 10 are routinely expressed as two-sign constructions, and they have not fused to a single opaque form. The constituent signs in these particular compounds, NAME, SIGN, SCHOOL, and DEAF, are among the most frequent ASL signs (Morford & MacFarlane 2003), and we might hypothesize that some of these sign tokens are actually instances of compounds.

(9) MATH CLASS 'math class' SUGAR COOKIE 'sugar cookie'

(10) DEAF SCHOOL 'Deaf school'<sup>3</sup>
NAME SIGN 'name sign'

Regarding sign-sign compounds, one coding challenge involved strings of signs which together create a list, for example as in FAMILY FRIENDS (AND-SO-ON), where the distinct signs FAMILY and FRIENDS are indeed juxtaposed content signs which form a larger coordinate construction. Because they can also be analyzed as elements of a list, these constructions were not analyzed as compounds (contra Klima & Bellugi's 1979 analysis of this sort of construction as a *dvandva* compound).

3.2. RESULTS. One hundred and four compound examples and their sentential context were coded by the author in an Excel spreadsheet database. The database consists of compound tokens collected according to type frequency, such that individual tokens were counted as instances of a single compound type. In other words, some compounds which may have had high token frequency in the video data are represented as one type for the purposes of the current study. In Table 1, the 104 compound constructions are broken down into the three subtypes of interest; aside from one meta-class of examples which will be discussed shortly, RECURSIVE COMPOUNDS, no other compound subtypes emerged from analysis of the data. Of the 104 transparent compound tokens, 42 are fingerspelling-sign compounds, and 62 are sign-sign compounds. Within the formal group of fingerspelling-sign compounds, 19 are fingerspelled compounds, which serve the function of calquing an English compound, and 23 are chain compounds, which borrow and ground a single English word in ASL. Though I do not further analyze of which of the two elements of a fingerspelling-sign compound will be fingerspelled, this information is also reported in Table 1.

Transparent Compounds				
	104			
Fingerspelling-Sign Compounds			Sign-Sign Compounds	
42		62		
Fingerspelled Compounds		Chain Compounds		
19	)	23		
FS-initial	FS-final	FS-initial	FS-final	
12	7	6	17	

TABLE 1. Breakdown of the internet compound data

The compound database provides an opportunity to examine instances of fingerspelling-sign and sign-sign compounding more closely. For example, we have already seen that fingerspelled compounds are those in which a sign and a fingerspelled word function as a single constituent. Consistent with Padden's (1998) description, many of the fingerspelled compounds in the database are compounds which can be seen as matching the structure of either an existing or a possible English compound. Additional examples of fingerspelled compounds can be seen in 11, and two examples in context can be seen in 12.

(11) V-I-D-E-O EDITOR 'video editor'

AGREE F-O-R-M 'consent form'

PRIVACY S-E-T-T-I-N-G 'privacy setting'

C-O-N-T-E-N-T QUESTION 'content question'

- (12) a. ...WHENEVER ONE PERSON GO-AHEAD INVOLVED-IN **S-E-X-U-A-L ACTIVITY** FIRST TIME IN LIFE...
  - '...whenever a person engages in **sexual activity** for the first time...' (sexpositiveasl)
  - b. ...UNIVERSITY COLLEGE NOTICE THEY WHAT POST #ASL UNDER WHAT, H-E-R-I-T-A-G-E Language...
  - '...universities and colleges, I've noticed, post ASL under "heritage language"...' (northtrue)

Chain compounds, in contrast, cannot be analyzed as corresponding to an English compound. Instead, the fingerspelled English word is paired with a synonymous ASL sign. Examples of chain compounds from the database can be seen in 13.

(13) V-I-D-E-O FILM 'video' F-I-L-T-E-R FILTER 'filter' VIRGIN V-I-R-G-I-N-I-T-Y 'virginity' NAÏVE I-G-N-O-R-A-N-T 'ignorant'

Some chain compounds seem to pair a sign with a fingerspelled word in order to resolve lexical ambiguity, as in 14a, where the sign THOUGHTS could also potentially mean MIND, THINK, or even FOREHEAD. In other cases, however, this ambiguity is very slight, as in 14b, where the sign RECEPTIONIST could also be glossed as SECRETARY in English.

a. ...MEANS MIND CAN ABSORB++ A-LOT-OF INFORMATION COMING-IN++++++, YOUR THOUGHTS T-H-O-U-G-H-T-S AND-SO-ON...
 '...that means your mind can take in a lot of information coming in, as well as your thoughts, and many other things...' (brianherneky)

b. ...#SO INTERPRETER TWO-OF-US-GO TO **RECEPTIONIST R-E-C-E-P-T-I-O-N-I-S-T**, HEY, WHAT DRAWN-OUT WHAT...

'...so the interpreter and I went up to the **receptionist** and I was like hey, what's taking so long?...' (streetleverage)

These examples therefore support the view that fingerspelling-sign compounds are conditioned by polysemy and synonomy between English words and ASL signs. However, it is not clear at this point to what extent the fingerspelled elements in fingerspelled and chain compounds have distinct discourse functions; a more fine-grained semantic analysis of these two compound types is necessarily left for future work. Turning now to sign-sign compounds, additional examples

collected from among the internet data can be seen in 15.

(15) CALL CENTER 'call center'
EXAMPLE SENTENCE 'example sentence'
THEATER CLASS 'theater class'
SCHOOL SYSTEM 'school system'

Like many English compounds, the ASL sign-sign compounds in the database seem to be typically right-headed, meaning the relationship between the elements of the compound is a 'kind of' relationship, where the left element modifies the right one (e.g. Williams 1981). Thus, a CALL CENTER is a kind of CENTER, a THEATER CLASS is a kind of CLASS, and so on. Additional examples of sign-sign compounds in context can be seen 16, as well.

- a. ...WOW CAPTIONS CHAMP ALL WORKOUT PROGRAM, ALL AND-SO-ON MATERIALS, TRAINING MATERIALS...
   '... their captions are great for all of their workout programs, for everything, for their training materials...' (pearlyjo)
  - b. ...NOW LOOK WOW, FOLLOW **ENGLISH RHYTHM** FOLLOW... '...now if you look at it, you're struck by how it follows **English rhythm**...' (aslella)

All of the examples of transparent compounds discussed thus far have contained two elements, pairing a sign with either a fingerspelled word or another sign. However, another common characteristic of compounding, cross-linguistically, is that it is recursive. This means that compounds of more than two elements can also be seen as having internal structure (cf. Sandler & Lillo-Martin 2006). In the database we also find examples of recursive compounds. An example of a three-constituent sign-sign compound can be seen in 17; the #ASL COMMUNITY is a kind of COMMUNITY, and #ASL COMMUNITY MEMBERS are kinds of MEMBERS.

# (17) YOU-GUYS [[**#ASL COMMUNITY] MEMBERS**] YOU-GUYS CHAT++ WITH FRIENDS, FAMILY, WHATEVER

'...as you, **ASL community members**, engage in discussions with or friends, family, or whoever...' (sexpositiveasl)

Another example of a recursive compound involves a chain compound within a sign-sign compound. In 18, the elements of the chain compound HANDSHAPE H-A-N-D-S-H-A-P-E appear to have equal status, in the sense that it is difficult to determine whether the sign or the fingerspelled word can be viewed as the head of the compound. However, the sign and the fingerspelled word together form a unit that in turn modifies the head sign STORY: like an #ABC STORY and a NUMBER STORY, a 'handshape story' is a kind of STORY.

# (18) ...#ABC STORY, NUMBER STORY, THEY ALL PART GROUP CALLED [[HANDSHAPE H-A-N-D-S-H-A-P-E] STORY]...

'...alphabet stories and number stories are part of a group called **handshape stories**...' (drdongcsus)

Finally, it is worth noting, consistent with Bayley et al.'s (2000) previous observations that DEAF often functions as a modifying noun in many ASL compounds. Some evidence from the database to support this position can be seen in 19, where the signer produces two such compounds, and then immediately uses the sign DEAF as a referential noun, as well. This single sign can be rendered in English as 'Deaf person' or 'Deafie', as in 19, because it refers to an individual Deaf person:

- (19) ...BECAUSE KNOW I STRONG [**DEAF WORLD**] [**DEAF COMMUNITY**] I YEAH! PROUD SEE **DEAF** ON #TV YEAH!...
  - '...because you know I'm way into the **Deaf world** and the **Deaf community** and I'm proud to see a **Deafie** on TV...' (letsgofly08)
- **3.3.** DISCUSSION. This small database study set out to collect examples of compounds in ASL that contain two identifiable signs and thus can be considered to have transparent morphological structure. The fact that such constructions could easily be collected from ASL videos posted to the internet suggests, as has long been assumed, that compounding is productive in ASL. Few of the compounds discussed here are likely to be listed in a dictionary of ASL, but signers nevertheless produce and understand them, presumably because they follow productive principles of ASL morphology.

These findings therefore motivate a shift in how we view ASL compounds: like canonical compounds in English, compounds in ASL are lexical constructions in which it is possible to identify two independent words, and whose meanings can be described in terms of their constituent words. Compounds like DEAF COMMUNITY and NUMBER STORY, which frequently appear together as a unit in signed discourse and have transparent morphological structure, are to be considered true examples of compounds in ASL.

**4.** A DIFFERENT PERSPECTIVE ON LEXICALIZATION. The transparent compounds discussed in this paper have been categorized primarily by their formal characteristics, to illustrate the argument that the lexicalized compound constructions that sign linguists are accustomed to calling compounds do not actually function as compounds in synchronic ASL. At this point then, by way of a conclusion, it is worthwhile to revisit lexicalized compounds; if not compounds, then what are they? The answer is that many lexicalized compounds are in fact simple signs,

constructions which were once transparent collocations but have since reduced to the point that their relationship to their original source words has now been obscured.

It is not the case, however, that the ASL compound hoax is the result of early studies misrepresenting the phenomena they were studying (see e.g. Bellugi & Newkirk 1981:29-30, which distinguishes between compounds and lexicalized compounds). Instead, it is the way that the specific lexicalized compound examples these early studies discuss came to be handed down in the phonological literature that is problematic. In particular, the phonological literature has typically treated lexicalized as a synonym for reduced, and has treated reduction as a diagnostic for identifying compounds in ASL, when in fact these are distinct and interrelated phenomena.<sup>4</sup>

Conflating compounding, reduction, and lexicalization not only leads us to overlook compounds which are not reduced, as we have seen, but also to wrongly count all reduced constructions as compounds. For example, in a widely-cited study, Liddell and Johnson (1986) analyze UP-TO-YOU (from THINK#SELF<sup>5</sup>) and GOODNIGHT (from GOOD#NIGHT), as compounds, on the basis of their formal reduction alone. Similarly, Fischer (2006:182,190) describes fused constructions like DON'T-HAVE-TO (from NOT#MUST) and WHY-NOT (from WHY#NOT) as compounds. However, Bybee (2001:61) has demonstrated that, at least in spoken languages, reduction regularly affects a variety of high-frequency words and phrases. Among the construction types Bybee discusses in this context are greetings and salutations (how do you do > howdy), negation (can not > can't), and compounds (cup board > cupboard). To call GOODNIGHT and WHY-NOT compounds on the basis of their phonological reduction alone, then, is like calling howdy and can't compounds in English. These construction types all have in common that they can become reduced with frequent use, but nevertheless, it is misleading to group them all under the label of compound.

Having examined transparent compounds in ASL, then, we can now adjust our view of the relationship between compounding, lexicalization, and reduction (cf. Bybee 2001, Downing 1977, Hohenhaus 2005). First, context-dependent and low-frequency compounds, like ENGLISH RHYTHM, are most likely produced and processed according to productive processes in ASL, rather than retrieved from a stored lexical representation. Some of these compounds, like DEAF COMMUNITY, by virtue of their frequent use, can become lexicalized, or represented as part of a language user's linguistic knowledge, as conventional pairings of meaning and form. These conventional constructions can then undergo phonological reduction and semantic demotivation; with continued use, they may even reduce to the point that the relationship between the fused construction and its original source words becomes obscured entirely. This view recasts lexicalized compounds as reduced constructions in ASL; though all reduced constructions are necessarily lexicalized, not all lexicalized compounds are necessarily reduced, nor are all reduced constructions necessarily compounds.

This revised view of lexicalization in ASL research also opens up further avenues of inquiry regarding the processes of compounding and reduction, both on their own and as they interact with one another. Not only can we begin to reassess the phonological generalizations about reduced constructions in the literature in terms of more general synchronic and diachronic reduction, but it is also incumbent on ASL researchers to investigate properties of conventional compounds and characteristics of compounding constructions in ASL, as well. Though this paper represents a first step in this direction, having documented examples of three synchronically productive compounding processes in ASL, future work on ASL compounds will necessarily examine the various functions of different compounding constructions in ASL, moving beyond phonological reduction alone.

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- <sup>1</sup> Following standard practice, here I represent ASL signs using English 'glosses'. A single word or a group of words separated by hyphens represents a single sign (SISTER, UP-TO-YOU); letters separated by hyphens represent fingerspelled words (V-I-R-G-I-N-I-T-Y); at the end of a word, the + symbol indicates repetition (ABSORB++); at the beginning of a word, the # symbol indicates an etymological analysis of a lexical sign derived from fingerspelling (#SO); between words, the # symbol indicates an etymological analysis of a lexical sign derived from a multisign construction (RED#SLICE). I acknowledge that English-based transcription of ASL is not ideal, for a number of reasons; fortunately, many of the signs discussed in this paper can be viewed via online resources like <a href="https://www.signingsavvy.com">www.signingsavvy.com</a>, <a href="https://www.handspeak.com">www.handspeak.com</a>, and <a href="https://www.handspeak.com">www.lifeprint.com</a>.
- <sup>2</sup> This is consistent with Vercellotti and Mortensen's observation that "ASL researchers seem to have relied on the early work of Klima and Bellugi for their list of compounds, bothering neither to expand this empirical database, nor to verify Klima and Bellugi's claims" (Vercellotti & Mortensen 2012:547).
- <sup>3</sup> Compounds beginning with DEAF have been mentioned by Bayley et al., who note that constructions like DEAF CULTURE and DEAF WORLD are "particularly salient in the Deaf community, [and] have come to be regarded by ASL natives as single lexical items" even though they are made from two signs (2000:104).
- <sup>4</sup> Though a more thorough discussion of this point exceeds the scope of the present paper, lexicalized is also used as a synonym for reduced in treatments of so-called locally lexicalized constructions, in which a given construction becomes reduced as it is repeated in a single conversation (see Brentari 1998, Johnston & Schembri 1999).
- <sup>5</sup> See Wilkinson's (2013:480) clear description of THINK#SELF as a fused construction resulting from a formulaic sequence, rather than a compound.