Compression Strategies: ASL to English Interpreting

Lynn Finton, MS, CSC Associate Professor ASL and Interpreting Education NTID/RIT Rochester, NY Richard Smith, CSC Academic Support ASL and Interpreting Education NTID/RIT Rochester, NY

There are a number of differences in the discourse patterns of ASL and English that have significant implications for the sign language interpreter. In addition, the high context nature of American Deaf culture and the low context nature of American English culture (Mindess, 1999) further complicates the interpreting process. When working between two such distinct languages and cultures, linguistic and cultural mediation is necessary to provide source and target message equivalency. One aspect of this linguistic mediation has been identified by Lawrence (1994) as *expansions*; specific applications of language use and language phrasing that are unique to ASL. She noted that these features are commonly used among native users of the language but appear with much less frequency in non-native ASL usage. She emphasized that if interpreters could incorporate more of these features in their English to ASL interpretations, their ASL usage would appear more native-like.

The ASL expansion features identified by Lawrence have significant implications for interpreters working between English and ASL; certain concepts need to be expanded in ASL to create meaning and to be linguistically appropriate. Conversely, when working from ASL to English, certain concepts will need to be compressed to create meaning and maintain linguistic appropriateness. This article will address this phenomenon referred to as *compression*.

Native users of ASL often supply details in ASL discourse that probably would not be found in the same message if it were presented by native speakers of English. In order to be linguistically and culturally appropriate, the interpreter must truncate or compress the information. Humphrey and Alcorn (2001) use the term *reduction* to describe this interpreting phenomenon (p. 8.12). *Reduction* may have a connotation that is misleading to consumers of interpreting services, implying that the interpretation is reduced, or lacking equivalency. Rather than use the term reduction, often defined as a *lessening or diminishing*, it may be preferable to use the term compression. A dictionary definition of compression is *to make compact* or *force into a smaller space*. When interpreters use compression strategies, the meaning of the source message is carried into the target message. The message is not lessened or diminished; rather it is made more compact. How the message is packaged may differ, but the intended meaning remains the same. Napier (2002) in her omission taxonomy, labels this phenomenon as *conscious strategic omissions*. She describes it in this way:

Omissions made consciously by an interpreter, whereby a decision is made

to omit information in order to enhance the effectiveness of the interpretation. The interpreter incorporates his or her linguistic and cultural knowledge to decide what information from the source language makes sense in the target language, what information is culturally relevant, and what is redundant. (p. 84)

A reminder of the goal of interpretation further bolsters the importance of using these compression strategies in interpretation. Interpretation allows people who don't share a common language and culture to communicate. In defining the term *interpretation*, Cokely (2001) and Humphrey and Alcorn (2001) emphasize that interpreting is the expression of meaning and intention. A successful interpretation delivers the intended meaning of the speaker, uses grammatically correct and natural-sounding language and impacts the message recipients in the same way whether they are receiving the message directly or mediated through an interpretation. Although sign language interpreters readily accept that interpretation is about meaning, at a practical level, it is challenging for them to achieve.

Sign language interpreters as well as spoken language interpreters struggle with the *say it all* approach vs. the *synthesis* approach to interpretation. (Sunnari, 1995). Interpreters often feel compelled to 'say what he said' even though they are constantly reminded to 'say what he means'. Interpreters sometimes gloss a signed message; saying an English word for an ASL sign rather than dropping the form of the source message and expressing the meaning in the target language. This delivery not only sounds unnatural but most often skews the meaning of the source message. An additional challenge for letting go of the source message is the fact that the majority of the work of sign language interpreters is done in simultaneous format. Discarding the source language form while it is still "reverberating in your mind's eye" and retaining only the meaning is challenging (Seleskovitch and Lederer, 1995, p. 108).

Determining when to use compression strategies presents a challenge to interpreters. These decisions should be based on linguistic need, cultural need, or differences in experiential frame. Humphrey and Alcorn (2001) define these in the following way:

Linguistic need - One language sometimes demands the overt statement of information that is understood but unstated in another language.

Cultural need — The culture defines certain behavior as acceptable or unacceptable, necessary or unnecessary. Language reflects these cultural norms.

Difference in Experiential frame — The life experience of individuals from different cultures varies vastly. It is sometimes necessary to provide experientially specific information so the recipient can have a schema allowing information to be successfully conveyed and understood. (p. 8.12-8.13)

Although the focus of this article is the use of compression strategies from ASL to

English, it is not meant to imply that information conveyed in an interpretation from ASL to English is always compressed. In fact, interpreters often find themselves with the opposite problem. The number of lexical items signed along with all of the co-occurring grammatical features of ASL (i.e., non-manual markers, use of space, use of classifiers,) often leaves the interpreter with an inadequate amount of time to deliver the message in English. An ASL source message that contains four or five signs may require many more lexical items in English to achieve equivalency. For example, when describing an altercation a Deaf person might sign the following:

<u>painful</u>

ASL: S-A-M INDEXrt PUNCH-in-face INDEXIf FALL-arc-slow

An English interpretation would require many more lexical items to describe this scene. English: Sam *punched another person in the face and the injured person fell back in great pain.*

This article emphasizes the effective use of compression when interpreting ASL texts that contain the following ASL language features: contrasting, faceting, reiteration, utilizing three- dimensional space, explaining by examples, couching or nesting, and describe, then do. Each feature is described in the following way:

- (a) Lawrence's definition of each expansion feature
- (b) A sample ASL sentence (glossed)

 The bold portion of the sample sentence contains the expansion feature.
- (c) An inadequate English interpretation

 The inadequate interpretation will reflect the common types of errors one might hear in an ASL to English interpretation.
- (d) A sample of an effective English interpretation of the source message
- (e) A description of how to effectively use compression strategies in the target language of English

When reading the samples below, keep in mind the limitations of writing when attempting to describe what is intended as a signed or spoken utterance. It is difficult to capture the nuances of spoken and signed discourse in print form; vocal and non-manual nuances are often lost. In addition, the lack of context surrounding the utterance can lead to various interpretations of the same sentence. Finally, at the sentence level, it is difficult to ascertain the function of the message, the register of the speaker, the affect of the message, and the speaker's style; all important considerations in interpretation. (Isham, 1986). With these limitations in mind, the expansion features and accompanying compression strategies are presented below.

#1: Contrasting

"This feature highlights one idea by juxtaposing two opposite ideas in order to emphasize the one. This can be accomplished by stating the positive and then the negative: in other words, by stating what **is** and contrasting it with what **isn't**. When the contrasting feature takes this form, what **is** often will be reiterated at the end of the sentence, effectively sandwiching what **isn't** between a repetition of what **is**.

Depending on context and the speaker's point, the reverse may also be seen: stating what **isn't**, followed by what **is"** (Lawrence, 2003).

ASL:

_____topic
MY DAUGHTER, SHE RECENT JOIN BASKETBALL, **SHE SKILL**____neg
AWKWARD NOT

<u>Inadequate English interpretation:</u>

My daughter recently joined basketball. She is pretty skilled, not awkward at all.

Effective English Interpretation:

For a beginner, my daughter is quite good at basketball.

Compression Strategies:

Although two ideas are presented in ASL, they are used to emphasize one idea. When interpreting from ASL to English, often the original idea can be emphasized by using an adverb and/or through vocal intonation rather than stating the contrasting idea. For example, in the sentence above, the adverb *quite* is used and would most likely be accompanied by appropriate vocal inflection. It is sometimes acceptable to provide both ideas in English to emphasize one of them. The choice of whether to voice one or both ideas is determined by evaluating which delivers the same emphasis of the original while maintaining a natural sounding delivery in English.

#2: Faceting

"Faceting describes a feature whereby several different signs are signed sequentially to more clearly express one idea. Although several signs are used, this feature actually narrows a concept to a more exact or specific image or is an attempt to find the right nuance" (Lawrence, 2003).

ASL:

<u>topic</u> MY NIECE, PAST FAT, NOW, **SLIM-DOWN THIN SKINNY**

<u>Inadequate English Interpretation</u>:

My niece used to be fat, but she has really reduced; she's thin now, really skinny.

Effective English Interpretation:

My niece used to be overweight, but she has really slimmed down.

Compression Strategies:

The number of descriptive adjectives in ASL can often be reduced in the target language of English; they can be replaced with adverbs, vocal intonation, and idiomatic English. Use of idiomatic English, in this case, "really slimmed down", often narrows a concept in the same way faceting narrows a concept in ASL.

#3: Reiteration

"Reiteration refers to signs that are repeated in a text the same way as they were

initially stated, sometimes occurring one after another, repeating verbatim a sign or signs consecutively. Other times, reiteration occurs as 'bookends', sandwiching text between the repeated signs. It appears that reiteration implies emphasis: that something is important to the storyline, has cultural significance, or has high emotional impact to the signer" (Lawrence, 2003). ASL:

<u>topic</u> **ME SHOCK**, PAPER, A-on-paper, **SHOCK ME**

Inadequate English Interpretation:

I was shocked when I found I got an 'A' on my paper. I was shocked! Effective English Interpretation:

I was quite shocked to find I'd gotten an 'A'.

Compression Strategies:

Reiteration in ASL serves to emphasize. English has a number of ways of accomplishing this same goal. The reiterated word can be voiced twice for emphasis (I was shocked when I found I'd gotten an 'A' on my paper, just shocked!) Two different lexical items can be chosen to show emphasis. (I was so surprised to find I got an 'A' on my paper, just shocked!). The reiterated word can be said once with the use of a qualifier such as really or very. (I was really shocked to find I got an 'A' on my paper.) A stronger word can be chosen to convey the concept once. (I was stunned to find I got an 'A'.) Most of these strategies would also be accompanied with a change in vocal inflection as a form of emphasis.

#4: Utilizing 3D Space

"The use of space is a salient feature of ASL. ASL takes advantage of the three-dimensional physical space around the signer's body. This space can be used to represent people, places, and things; to represent how objects appear in the real world and present them from different perspectives; to create cohesion in ASL discourse; and to set a visual scene" (Lawrence, 2003). This use of space can be accomplished in ASL through the use of or combination of some of the following: pointing, placed signs, fingerspelling, directional verbs, classifiers, role assumption, reported or constructed dialogue, prosody, body shifting, and eye gaze. ASL:

topic

MY GARAGE HAVE **THREE CL:3+++**, **MINE PARKIF MY HUSBAND PARKetr. R-V PARKrt**

Inadequate English Interpretation:

My garage has three parking slots. I park my car in the left space, my husband parks in the middle space, and we park our RV in the right space.

Effective English Interpretation:

We have a three-car garage that fits my car, my husband's car and our RV. Compression Strategies:

When working between the languages of English and ASL, the interpreter often finds herself struggling with the amount of detail that is contained in ASL compared to that

of English. While this amount of detail is linguistically appropriate for ASL, it is often linguistically inappropriate for English. This is especially true when an ASL text contains significant use of space.

In the above example, to include the left, middle, and right orientation of where the cars are parked results in an interpretation that sounds unnatural in English. The level of detail included in the ineffective interpretation results in a stilted delivery. Often including this level of detail (left, right, middle) may imply that this information is important to the text. If the relevance of this information never becomes clear, the native English listener would be left puzzled as to why it would have been mentioned in the first place. If it has no import in English, then it should not be included. However, if the storyteller continues to explain that a bad windstorm brought down a huge tree which landed right in the middle of her garage, damaging her husband's car, then this spatial information would be appropriate to include and the interpreter will need to pull those details back into the interpreted message.

"ASL uses space for a variety of functions; one such use of space is as an involvement strategy" (Winston, 1992, p. 95). "Involvement strategies are used by speakers of a language to arouse the interest and, as the term implies, the involvement of the listener" (Winston, 1992, p. 93.) When voice interpreting an ASL text which contains much use of space, the level of detail and specificity in the source message often needs to be compressed in the target message. The challenge of the sign language interpreter is determining how much detail is appropriate or linguistically necessary in English. Additionally, recognizing when the use of space functions as an involvement strategy and preserving that engaging and sometimes humorous style of the signer is often difficult. Obviously, as with any interpretation, the goal of the speaker may influence how little or how much of the source message detail is retained.

A particular challenge to the ASL/English interpreter is in the interpretation of referential space. When using referential pronouns in ASL, the gender of the noun can often go unstated; for example, terms such as *neighbor*, *teacher*, *friend*, imply no particular gender in ASL or English. In ASL, they can be kept gender neutral through the use of referential pronouns (pointing in a specific location to represent the noun). English would typically replace the noun with the pronoun *he* or *she* after it has been introduced. Interpreters must predict whether the gender of the person will have relevance to the story and ask the signer for the gender if deemed necessary or take a stand regarding the gender and hope it doesn't have relevance later in the discourse.

Finally, under the use of space category, ASL and English also differ in how they establish a scene. "Setting the scene is an essential part of Deaf discourse" (Smith, 1996, p. 211). The ASL to English interpreter faces two distinct challenges when interpreting setting the scene discourse. The first challenge comes about when dealing with the significant variation in the amount of information supplied to set the scene between ASL and English. ASL tends to rely heavily on creating visual meaning through use of various language features including eye gaze, non-manual markers, classifiers and directional verbs; often incorporating more details than would be

necessary or appropriate for English.

The second challenge relates to the establishment of *figure/ground* relationships. "In any language, the object that is given focus is called the *figure*. It is usually expressed in terms of its relationship to an already referenced object called the *ground*. In English, the figure usually occurs first in a sentence...English primarily uses prepositions to express this relationship...In ASL, the order for expressing figure and ground is reversed...the mechanism for expressing the relationship between figure and ground in ASL is the placement of classifier handshapes in the signing space" (Lessard, 2002. p. 138).

For example, in the ASL sentence below, the figure (the object of focus) is the box. This is stated *after* the establishment of the ground (OFFICE, COMPUTER-If, DESK-rt) In the English interpretation, the figure is stated before the ground, and the amount of information that is supplied in describing the ground is limited. ASL:

MY O-F-F-I-C-E **YOU ENTER COMPUTER INDEX**(lf) **D-E-S-K**topic

INDEX(rt) BOXES UNDER THAT-ONE BRING

ENGLISH: Could you get me the boxes under my desk?

When interpreting an ASL text that sets a visual scene, interpreters must be able to: (1) recognize the figure/ground relationship and switch the order between ASL and English and (2) recognize when the use of compression is necessary to truncate the amount of detail supplied to achieve linguistically appropriate English.

#5: Explaining by example

"A list of examples is sometimes used in ASL to define or explain a term. This *explaining by example* feature may result from the fact that ASL does not have a specific lexical item for the term being explained" (Lawrence, 2003). A variant or subset of this feature is the noun classification. This term, identified as superordinate compounding (Klima & Bellugi, 1979) consists of three to four signs strung together, often followed by the ETC. sign to express a specific English noun. Examples of this include the terms *tools* (HAMMER, SAW, SCREWDRIVER, ETC) or *fruit* (APPLE, ORANGE, BANANA, ETC.)

<u>rh-q</u>
ALL-DAY SATURDAY MY HUSBAND DO DO **MOW PULL**

W-E-E-D-S TRIM-WITH-CLIPPERS, YARD CLEAN, LOOK NICE Inadequate English Interpretation:

All day on Saturday my husband was busy mowing the lawn, pulling

weeds, and trimming the bushes. The yard looks really cleaned up now. It's very nice.

Effective English Interpretation:

My husband spent all day Saturday sprucing up the yard. It looks great. Compression Strategies:

Whereas ASL uses a listing of examples to convey a concept or idea, English may have a specific lexical item to convey the same idea. As a result, a stilted interpretation may occur if the specific English lexical item is not included in the interpretation. In the above example, *sprucing up the yard* is an equivalent interpretation of the various tasks done to make the yard look nice. Obviously, if an interpreter retained the specific examples, the interpretation would be acceptable in English. (*My husband spent all day Saturday mowing and weeding the yard and trimming the bushes. It looks great.*) However, the specific examples are nicely summed up in the English idiomatic expression of *sprucing up the yard*.

#6: Couching or Nesting

"Perhaps due to the lack of a single specific lexical item in ASL, several signs are grouped together to form a concept. This series of signs, defined as couching, adds background or contextual information to a concept to make it clear. Smith's (1996) interpretation of couching is 'defining an object or phenomenon by description, analogy or function instead of by label' "(Lawrence, 2003).

ASL:

topic

LAST NIGHT MY FRIENDS GROUP PLAN go-to-in-a-group BAR A-L-L DRINK+++ ME (raise hand) **ME WILLING DRINK NONE, ME SOBER, YOU-ALL DRINK+++ HAVEFUN, ME DRIVE**

Inadequate English Interpretation:

Last night my friends and I planned to go to a bar. I willingly agreed not to drink and remain sober and let my friends have fun. That way I could drive them home.

Effective English Interpretation:

I agreed to be the designated driver when my friends and I went out on the town last night.

Compression Strategies:

The point of the above example is that English has a specific term *designated driver* to describe the person who chooses to remain sober and deliver his friends home after a night of drinking. ASL doesn't have a specific lexical item to convey this concept but rather uses a combination of signs to convey this meaning. A stilted interpretation often results if the specific English lexical item is not included in the interpretation since English often *labels* whereas ASL often *describes*; when interpreting a concept that is couched in ASL, it is important in the English interpretation to include the label.

Stauffer (2002) identified several grammatical markers, both signs and non-manual behaviors, which may signal the last two expansion strategies: the explaining by example and couching features. These grammatical markers may appear at the end of

the utterance, at the beginning and end of an utterance, or less commonly, just at the beginning of the utterance. They may include the signs KNOW, YOU-KNOW, THAT as well as non-manual markers such as *affirmative head nod* and a *head tilt*. Recognizing these visual descriptor markers as signaling the possible use of the explaining by example and couching features may assist the ASL to English interpreter in rendering a more effective interpretation.

#7 Describe, then do

One of the most salient features of ASL is its narrative nature. In using the *Describe, then do* feature of ASL, signers enact or report the action of an utterance. *Describe, then do* usually involves a short description followed by an action or enactment of the description (Lawrence, 2003). This can happen in two ways. It may take the form of the "verb sandwich" (Fisher & Janis, 1989) where the verb in a sentence occurs twice, once in its simple form and then again acting-out the verb, or in the use of reported dialogue or reported action in which the signer assumes the posture and actions of the character. A second modification of the *describe, then do* feature involves only the acting out of the action itself, without the initial *describe* feature. The following example includes reported dialogue.

ASL:

<u>topic</u>

YESTERDAY MEETING MY DEPARTMENT VOTE NEW POLICY ESTABLISH, ME (raise hand) "DISAGREE ME", CHAIRPERSON, "WE PROCEED, VOTE NOW", ME "BUT ME DISAGREE, ME WANT DISCUSS", CHAIRPERSON, "LAST WEEK DISCUSS, SORRY", GROUP PROCEED VOTE, ME DISGUST

Inadequate English Interpretation:

At my department meeting yesterday we voted on establishing a new policy. I told my chairperson 'I disagree.' He said, 'We are going to vote now.' I told him again, 'I disagree, I would like further discussion.' He said, 'Sorry, we are going ahead with the vote, we discussed it last week.' They went ahead and voted and I was really disgusted.

Effective English Interpretation:

At yesterday's department meeting we voted on a new policy. I was opposed to it and voiced that to the chair but I was told that given the discussion last week that the vote would proceed. I was quite annoyed.

Compression Strategies:

The reported or first person dialogue (sometimes called constructed dialogue) is frequently used in ASL. Rather than just reporting about an event, a Deaf person may provide the dialogue (actual or perceived) to make his/her point. In English, the use of first person dialogue is reserved for specific purposes. We often find the use of first person address in fairy tales and storytelling. Jokes are another common genre in which we find constructed dialogue in English (Marron, 1997, p. 3). Sometimes, in order to add humor to the retelling of an event, speakers of English reuse the speaker's exact words.

The use of constructed dialogue in ASL "adds 'voices' and actions to the message, using details and visual imagery to interest the watcher in the signer's message" (Winston, 1992, p. 98). This use of constructed dialogue is one form of involvement strategy. When changing from first person address to third person narrative in an interpretation, the involvement strategy used to engage the audience might be lost in the interpretation. However, consistently retaining the constructed dialogue of ASL would sound awkward to a hearing audience and would likely result in a mismatch of register. One's decision then to retain first person address or change to a narrative form will be influenced by the speaker's goal, the register, and the ability to deliver the text in natural sounding English. In addition, many errors in interpretation result when trying to assign *who* said *what* to *whom* from ASL to English. If the interpreter changes first person dialogue to third person narrative some of the burden of assigning exactly *who* said *what* to *whom* is relieved.

As mentioned above, the *describe then do* can also take the form of the verb sandwich with reported action. Reported action in ASL explains an action and then shows an action, often with an accompanying shift in perspective. The following ASL example sentence illustrates this.

ASL: MAN, HE WALK, CL:1 weave++. LOOK-LIKE DRUNK. We are first told that the man walks, and then more explicit information of *how* he walks is included in the use of the classifier for walk, completing the verb sandwich. The change in perspective occurs while signing the classifier. In addition, the non-manual signals of the signer will likely take on the features of a person who appears drunk. In an English interpretation of this type of sentence, the verb repetition will not appear, nor will the change in perspective. An effective English interpretation might be, *"The man walked as if he were drunk."*

As can be seen in the inadequate English interpretation samples for each feature, when ASL to English interpretations lack effective compression strategies, common target language weaknesses result. These weaknesses may include one or more of the following:

- (a) Intrusion of source message features
- (b) Wordiness
- (c) Redundancies
- (d) Stilted sentence structures
- (e) Stilted vocabulary selection
- (f) Unnatural sounding delivery
- (g) Register mismatch
- (h) Inappropriate use of first person dialogue
- (i) Loss of engaging speaker style

There are some unique challenges when incorporating compression strategies in an ASL to English interpretation. Interpreters are sometimes left with too much time on their hands. When the number of lexical items signed is significantly larger than the number of spoken lexical items in an interpretation there is always potential for awkward and unnatural periods of silence. Interpreters must balance the need for

effective, natural sounding interpretations with potential awkward pauses.

The expansion features identified by Lawrence (1994) have significant implications for interpreting. Recognizing the differences in discourse features between ASL and English will greatly assist the sign language interpreter in effectively incorporating compression features in ASL to English interpreting. Recognizing their use in the source message, avoiding the common interpretation weaknesses associated with them, and delivering an appropriate, natural sounding English interpretation leads to a an effective, linguistically appropriate and equivalent interpretation. A focus on compression features can assist the sign language interpreter in interpreting meaning while dropping form. Linguistic and cultural competence will assist the interpreter in determining when to appropriately use these strategies.

Many thanks to our colleagues who shared their expertise and provided feedback and support in the writing of this paper including: Dr. Christine Monikowski, Dr. Bill Newell, Dr. Rico Peterson, Jean Rodman, Dr. Cynthia Roy, Dr. Linda Siple, and Jeanne Wells.

Bibliography

- Cokely, D. (2001). Interpreting culturally rich realities: Research implications for successful interpretations. In D. Watson (Ed.), *Journal of Interpretation*, (p. 1-45.) Silver Spring, MD: RID Publications.
- Fischer, S. & Janis, D. (1990). Verb sandwiches in American Sign Language. In Prillwitz, Siegmund/Vollhaber, Tomas (Eds.), *Proceedings of the 3rd European Congress on Sign Language Research.* (p. 279-293). Hamburg: Signum.
- Humphrey, J. & Alcorn, B. (2001). So you want to be an interpreter? An introduction to sign language interpreting. Amarillo, TX: H & H Publishers.
- Isham, W. (1986). The role of message analysis in interpretation. In M. McIntire (Ed.), *Interpreting: The art of cross-cultural mediation*. Proceedings of the Ninth National Convention of the Registry of Interpreters for the Deaf. (p. 151-165). Silver Spring, MD: RID Publications.
- Klima, E. & Bellugi, U. (1979). *The signs of language*. Cambridge, MA: Harvard University Press.
- Lawrence, S. (1994). Interpreter Discourse: English to ASL expansion. In E.A. Winston (Ed.), *Mapping our course: A collaborative venture.*Proceedings of the Tenth National Convention of the Conference of Interpreter Trainers. (p. 205-216). Conference of Interpreter Trainers.

- Lawrence, S. (2003). Interpreter Discourse: English to ASL expansion. [CD-ROM]. Interpreter Discourse: English to ASL expansion/ASL to English Compression. National Technical Institute for the Deaf/Rochester Institute of Technology.
- Lessard, P. (2002). *Classifiers: A closer look: Volume I.* San Francisco: Treehouse Video.
- Marron, S. (1997). Comparing ASL and English Features: Implications for voice interpreting, videotape and guidelines (Videocassette). RSA Region IX Interpreter Training Consortium at El Camino College.
- Mindess, A. (1999). Reading between the signs: Intercultural communication for sign language interpreters. Yarmouth, MA: Intercultural Press.
- Napier, J. (2002). Sign *language interpreting: Linguistic coping strategies.* Coleford, England: Douglas McLean.
- Seleskovith, D. & Lederer, M. (translated by Harmer, J.) (1995). *A systematic approach to teaching interpretation*. Silver Spring, MD: RID Publications.
- Smith, T. B. (1996). *Deaf people in context.* Unpublished doctoral dissertation, University of Washington.
- Stauffer, L. (2002). Visual descriptor markers in ASL. In L. Swabey (Ed.), New designs in interpreter education. Proceedings of the Fourteenth National Convention of the Conference of Interpreter Trainers. (p. 107-120). Conference of Interpreter Trainers.
- Sunnari, M. (1995). Processing strategies in simultaneous interpreting: Saying it all vs. synthesis. In J. Tommola (Ed.,) *Topics in interpreting research* (p. 109-119). Centre for Translation and Interpreting, University of Turku.
- Winston, E. (1992). Space involvement in an American Sign Language lecture, In J. Plant-Moeller (Ed.), *Expanding horizons: Proceedings of the Twelfth National Convention of the Registry of Interpreters for the Deaf.* (p. 93-106). Silver Spring, MD: RID Publications.