<1> INTRODUCTION

This paper presents some preliminary findings from a comparison of interpreted and transliterated texts. It focuses primarily on the prosodic features used for indicating major topic segments in a source spoken English text. For this paper, we discuss the similarities and differences between the segment boundaries as they are produced by 3 interpreters.¹ These interpreters produced signed target interpretations and transliterations of the same source text, providing an opportunity for a comparison of prosodic and linguistic features used in each type of target. The interpreters were qualified, internationally recognized experts in interpretation and transliteration. Although we have many long-term goals for this overall research, we narrowed the focus of this report to a very few features and strategies. This narrowing resulted from our experience as interpreter educators, from frequent questions from interpreting and transliterating students, and from the texts themselves.

<2> RESEARCH GOALS: BACKGROUND AND RATIONALE

As interpreter educators, we have found it difficult to provide students with adequate information and research-based guidance about the differences in interpreting and transliteration.
While there is a growing body of research about interpreting, prosody, and ASL available to interpreting educators, only a small amount of research exists about transliteration. Some of this research is demographic: how or where interpreting is taught, who uses it, etc. (Stauffer and Viera, 2000). One study investigates the effectiveness of interpreting versus transliterating (Livingston, Singer, and Abramson, 1995). Early research focusing primarily on lexical choice, sentence structure, and mouthing, and some specific strategies used in transliteration was done by Winston (1989); Siple provided more research and expanded the description of these strategies, providing more in-depth information in the area of additions (1995) and in the reflection of source language pausing in signed transliterations (1993).

A recent study by Sofinski, Yesbeck, Gerhold, and Bach-Hansen (2001) focused on language features used by educational interpreters in transliteration. Nine features were identified as common to the transliterations in the study, including use of space for listing, and mouthing, syntax choices, and lexical choices. The features were further identified as being English-based or ASL-based. McIntire (1993) analyzed the potential and real use of space in signed transliterations.

Studies about prosody and teaching prosody are also rare. In an early study, Winston (1990) investigated the possibility of improving prosody (referred to as “gestalt” in that study) through teaching. The features of the overall signed gestalt were not identified, but she found that focused teaching through selective watching and shadowing (based on techniques described by Nida, 1953) could be effective in improving the gestalt of interpreting students.

Mather and Winston (1995) investigated prosodic patterns in ASL story re-tellings, illustrating patterns of spatial use that were prosodic in nature. Another discussion of ASL prosody by Mather also provided research about the uses of eye gaze in ASL for teaching
preschool children (1989) and Bahan and Supalla presented research demonstrating that eye gaze serves as a segment boundary marker in ASL (1995). Winston (2000) presented a preliminary discussion of prosodic features found in ASL discourse. She listed and described several features that comprise ASL prosody, including configurations of the head, eyes, face, torso, and hands within the signing space. These configurations result in patterns of intonation or prosody that are essential parts of ASL discourse.

Wilbur (1994) discussed the use of eye blink as a marker of ASL phrase structure. Brentari (1998), in her in-depth study of ASL phonology, provided information and insight into the prosodic structures of ASL at the phonological level. She detailed features such as syllable length and structure. Nespor and Sandler (1999) investigated the interaction of phonology and syntax in Israeli Sign Language, describing features such as hand dominance and phonological prosody.

There are more studies of other ASL features that are helpful to interpreters and transliterators. Some of these studies address different uses of space. For example, Locker McGee (1992) investigated the eye-gaze and body-posture cues in constructed dialogue, asides, and quotations in ASL. Winston (1995), Metzger (1995), Metzger and Bahan (2001), have reported on performatives, constructed dialogue, and constructed action (commonly referred to as role-shifting). There also exist descriptions and papers, most especially in publications like the CIT Proceedings, that discuss ASL features found in transliteration. These provide some excellent pointers but are not clearly grounded in research. In fact, common belief is that transliteration, to be effective, requires a pre-requisite knowledge of ASL and of interpreting (Colonomos 1992). Again, these commonly accepted beliefs among some in the field are not adequately substantiated by research. Unfortunately, those who do not know either ASL or
interpreting find it easy to ignore these claims because of the lack of adequate research. One of our on-going goals for this study is to investigate these commonly accepted claims.

A frequent question from students and working interpreters is related to the relationship of ASL to transliteration. Hence, a long-term goal of this area of research is to analyze the ASL features that are required in transliteration. In this narrowed paper, we look specifically at pausing in both interpretations and transliterations. We compare the same person interpreting and transliterating a single spoken English source, and analyze the pausing features used at major topic boundaries. We often hear from those who transliterate only, especially when they have learned English signs without a foundation in ASL, that they see no need for knowing ASL. A study of transliterated texts produced by skilled, qualified interpreters provides one perspective on the need for ASL as a foundation for any transliteration. The Sofinski et al (2001) study mentioned above is another source of information on this issue. The pausing features analyzed in this preliminary study demonstrates that ASL prosodic features occur throughout the transliterations. ASL pausing and phrasing features such as use of space for sentence boundaries, lengthened final holds for signs, and head and torso shifting are essential to clear segmenting of ideas and topics within a text. There are no English features used to segment these texts because the signs are not English words. It is possible to argue that pausing is a prosodic feature used by all languages. However, the nature and form of the pauses in signed and spoken languages are different. In spoken languages, pauses are defined by the length of the silence between words. In signed languages and systems, silence is irrelevant.

Both the source text and the interpretations and transliterations produced helped us to further narrow the scope of this first report. As we began analyzing the target texts, one specific type of discourse strategy quickly became our focus--the way that the major topic boundaries
were marked, and not marked, in the targets. Other topics that were immediately salient were the ways that space was used, the strategies used to reflect the involvement strategies of constructed dialogue and action, and the cohesive use of repetition in the source. While we do not discuss these in detail in this paper, we will mention a few striking examples as they co-occur in some of our other examples. These will be fascinating areas of future research that require in-depth analysis.

<2> Defining our terms

For the purposes of identifying and discussing the boundary-marking strategies in this research, we first want to present some working definitions that we used.

**Topic Boundary**: the place in a source language text or in a target interpretation or transliteration where the signer or speaker indicates, through the use of a variety of discourse strategies and features, that a topic is ending, changing, shifting, expanding, etc. This topic segment would usually include more than one utterance.

**Utterance boundary**: the places where a single idea unit is begun and ended.

**Discourse strategy**: the decision by the signer/speaker to use a set of specific linguistic, prosodic, and extralinguistic features common to a language in order to communicate an underlying message. This definition is based on Gumperz’ discussion (1982). For example, pausing in a text is a strategy that enables the audience to chunk the discourse structure of a presentation and to interpret the underlying meaning of the presenter.
Features: the physical productions that combine to produce a message. For example, eyebrow raise, torso shift, head nod were considered individual features that may be combined within a discourse strategy.

Photo 1. (I2 @ 4.51.00 on 30-36 mins)

In this picture, the discourse strategy is “Constructed Dialogue” with the features of head and eyes gazing to the right and down, torso leaning back and left, index to right.

Pauses: We make no claim that the definitions we use in this study are exhaustive or definitive. Other studies such as that by Siple (1993) discussed the nature of pausing in transliterated texts: “…sign language interpreters do rely on source message pauses when creating by transliteration the target message, and tend to show a pause at the same location at which pauses are present in the source message” (p. 171). For the purpose of this study, we used the definitions of pauses defined in Winston (2000, p. 109):

“For spoken languages, the pause may simply be the cessation of sound. But for ASL the pause can be more complex. While it is similar to spoken languages in that there is a cessation (of movement rather than sound), it is different in that the signer can continue
to hold the signs in space, keeping the watcher’s attention on the sign rather than in the absence of it.”

Winston (2000) tentatively identified 3 types of pauses used by signers in ASL: the filled pause, the prosodic pause, and the extralinguistic pause. These are somewhat different than those of Siple. Siple’s “empty” pause is our “extralinguistic” pause. Our prosodic pause includes any type of feature shift between clauses. Siple’s two categories of “held” and “filled” pauses are our “filled” pause.

**Filled pause**: a sign is held in space while all other movement stops. This type of pause occurs at the end of a segment, topic, or important idea. It focuses attention on the idea or topic that has just ended and is a cue to the importance of that segment or idea in the overall meaning of the text.
Prosodic pause: a pause that marks boundaries at the phrase or sentence level. These pauses help the watcher identify the beginnings and ends of sentences, the subject and object of a single idea, and/or the beginning and ends of phrases in discourse structures like listing and conditional clauses. In the photos below, the utterance in line 97 ends in the first photo and a new utterance in line 98 begins in the second. The torso and head are slightly forward and to the right at the end of the utterance; as the next utterance begins in line 98, the torso and head have shifted to the center.

97. …experience fear.  
98. Therefore…..

Photo X3A and B: Example of utterance boundary between lines 97 and 98, marked by torso and head shift from forward right to center.

T-1 @ 3.29.04, then 3.29.19 on Trans 30-36 mins
Extralinguistic pause: a pause that is used to show that the signer is thinking, re-grouping, checking notes, etc.

Photo 4: Example of Extralinguistic Pause during interpretation

(11....5"16.24-5.17.02, on 12-18)

These preliminary types of pausing were developed from studies of ASL source texts. In our study of target texts, we have found that these kinds of pauses also occur in both the interpreted and transliterated texts. There are interesting differences between the transliterations and interpretations in the types of pauses that are used to reflect segment or topic shifts, and in the frequency of extralinguistic pauses in the source and target texts. However these types of pauses occur throughout the targets and are an essential feature. Because our data suggested our primary focus in this first research, an analysis of pauses at topic boundaries, we will describe our data and approach to analysis next.
<3> DATA CHOICE AND APPROACH TO ANALYSIS

<3> Data Choice

We chose to use a set of commercially available videotapes, *Living Fully with Interpreting Models* (1994), and *Living Fully with Transliterating Models* (1994). In selecting this material for our initial research, we considered several factors:

1. These materials are commonly available. This means that others reading our comments, analysis, and conclusions are able to review the data and draw their own conclusions about the observations and conclusions drawn from this research.

2. This set of videos provides a series of three nationally recognized, skilled interpreters. Each has an individual style, yet each provides (and is recognized to provide) a “dynamically equivalent” target message (Nida, 1953).

3. This set of videos provides a rare opportunity to compare the interpretation and transliteration of the same text by the same interpreter. We believe that comparisons of this type can provide valuable information about the processes and to see how these skilled, accomplished interpreters produced a variety of discourse features, especially prosodic features, in two different target forms.

4. The source text provides a complex discourse structure. From one perspective, it is a simple exhortative text with an intent to inspire the audience to positive rather than
negative perspectives. However, a mapping of discourse structures and actual presentation of the text reveals a spiraling and recurring use of prosody and linguistic features to build eloquence and to inspire the audience. These features are the result of careful planning that can be especially difficult when interpreting or transliterating. An analysis of the target interpretations and transliterations of this text should reveal a similar level of complexity.

5. The source text, as a prepared presentation, tends to have a denser cognitive/idea load per thought unit (Ochs, 1979). It includes features of both spontaneous speech, and prepared, written-like materials. These are much more difficult to interpret. Yet, when interpreted effectively, (when a dynamic equivalent is achieved) the interpreter uses discourse features of ASL, and primarily ASL, in both the interpretation and transliteration. Understanding of the quantity of ASL prosodic features necessary in the most “English-like” transliteration (when dynamically equivalent) can lead interpreters and interpreter educators to a clearer understanding of the need to first be skilled and knowledgeable about ASL before rendering an effective transliteration. This research will point out whether or not there is a vital necessity for all transliterators, including those working in school systems using English signing, to first know ASL and the ways to show prosody.

As with any choice of data, there are also some drawbacks and disadvantages. These include:

1. The source text presentation was a “constructed” presentation. It was a presentation made specifically for the production of the target texts, rather than being a completely
“naturally produced” presentation. This adds some sense of unreality to the source. Two results we noted from this were that the source contained almost no speaker repairs and that the rate of presentation is slower than might normally be expected in a live presentation. It is much more similar to an inspirational speech at a graduation, a sermon in a religious setting, or a well-prepared and often-presented informational workshop.

2. The interpreters had more preparation than might be expected in many situations. In many live presentations, a text is not available until the last minute or, more commonly, not at all. However, formal presentations are often written or presented; in such cases, the interpreter may have the opportunity to prepare. We decided that the amount of preparation for the interpreters was not unduly more than for an interpreter who has when working with a presenter they know well and regularly interpret for on the same topic.

3. The interpreters presented one target after the other. In other words, each person first produced the interpretation, and then the transliteration, or vice versa. Depending on whether the transliteration or the interpretation was done first, the production of the second target text might be influenced.

With these benefits and limitations in mind, we began the analysis of the source text first, then proceeded to the target texts.

<4> Approach to Analysis
Using steps from a discourse mapping process outlined in Winston and Monikowski, (2000), we approached this research as a comparison of linguistic and discourse features used by a presenter to reflect her intended meaning. This extended to the linguistic and discourse strategies and features subsequently used by interpreters and transliterators in their efforts to produce dynamically equivalent target texts.

<4> Analysis of the Source Text

<4> Text Summary

The source text is a presentation that seeks to inspire the audience to accept responsibility for the positive or negative beliefs that motivate their lives and actions. These positive and negative beliefs are caused by fear and stem from expectations; each person has the opportunity to choose the perspective which will motivate his/her future choices and decisions. The presenter uses stories to illustrate her points. A transcription of the spoken English text is found in Appendix A.

<4> Discourse Map

In an earlier publication, we analyzed the source text in a discussion of discourse mapping (Winston and Monikowski, 2000, pg. 54). As we revisited the original map for this analysis, we added two elements: 1) Speaker’s Goals and Sources and 2) the concept of expectations was added to the concept of fear. The revised map is provided here.
The “abstract” of the text is a simple one, and indicates what we perceive to be the presenter’s goal: to inspire the audience to believe her point and that each person makes the difference for her/himself.
We began with this map because it provides a visual representation of the structural complexity of the source text. The external map reminds us that the goal of the presenter is inspirational rather than informational, that the topics are not presented in a chronological order, and that the presentation is formal and presented to what we perceived to be an adult audience. The internal map provides a visual representation of the major concepts and ideas that are presented. The complexity of the presentation is indicated by the arrows that point to and from the concepts of positive and negative, to and from the reactions (either positive or negative), and to and from each story. This is not a straightforward recounting of cause and effect, nor of chronological events, nor of a logical process. Rather, the presenter intertwines the ideas of positive and negative thoughts with their causes, and with each person’s approach to the thoughts and the causes. Throughout the presentation, she includes stories to expand on the inter-connections of all these ideas. (Although not the topic of this report, one fascinating study would be to analyze the discourse strategies used by the interpreters and transliterators to reflect this inter-connected weaving of ideas.)

<4> Sequential Map

From this map, we prepared a sequential map of the source text (pg.36, Steps 2 and 3) in the discourse mapping process. Then we began a listing of the salient linguistic and prosodic strategies and features of the English in the source text. This list provided some initial direction for our analysis of the target texts. For this chapter, we narrowed the analysis to the strategies and features used to indicate major topic boundaries. These are discussed in the Discussion of Choice section.
<4> Analysis of Target Texts

Following this analysis of the source text, we identified the sections of each interpretation and transliteration that corresponded dynamically with the source; we identified where the interpreter did or did not indicate the major topic boundaries that we identified in the source text. We analyzed for similar discourse function and not for similar discourse feature. As with any text comprehension exercise, we do not claim that the boundaries we identified are the only, or the “right” boundaries. They are boundaries that we identified as places where we understood a shift to occur in the source, and where we predicted some type of boundary marking in the targets.

We noted whether each interpreter and transliterator produced major boundary markings at these predicted places, and if so, which discourse strategies and features they used. We also noted whether and where they employed these same strategies in places that we had not identified. We further analyzed whether these additional strategies were at other possible boundaries or were used for other purposes.

From this groundwork, we compared the 3 target interpretations for inter-interpreter similarities and differences; we compared the 3 target transliterations for the same purpose. We also compared the interpretation and the transliteration of each person, to see the similarities and differences that occurred. In the next section we report the specific information from the analysis. The implications of these comparisons are presented in the final section of this paper.

<5> FINDINGS

In this section, we describe the findings for each person, first from the interpretation produced, and then from the transliteration produced.
<5> TARGET TEXTS I-1 and T-1

<5> Interpretation 1 (I-1)

Interpretation 1 produced work that was, with regard to our limited analysis, more similar to interpreter 3 than interpreter 2. Interpretation 1 showed a definite pattern of the extralinguistic pause HANDCLASP at 15 of the 20 identified topic boundaries, the same amount as interpreter 3. For 2 others, she held the last sign, producing a filled pause. For one, she seemed to produce the “got it?” feature (see below), which is a specific type of a filled pause. For the remaining 2, we were unable to identify either a HANDCLASP or a hold or any other boundary marker. However, as stated elsewhere, we did not analyze the data for other possible representations of topic boundaries; this needs to be explored more completely in future research.

A clear example of interpreter 1’s HAND CLASP strategy occurs at the end of Line 45, which we identified as a boundary. “…that what you tell yourself is very likely to become your reality”.

| 45. that what you tell your self is very likely to become your reality. |
46. Well, if this is true,

It is interesting to note that interpretation 1 also has the HANDCLASP at 9 places in the text that we had not originally identified. Some of these were quite brief, but still clearly produced. The presenter is offering specific examples of comfort zones in lines 104 to 109. The HANDCLASP after line 106 is very brief. This type of briefer handclasp appears to mark sub-topics for this interpreter.

| 104. This is known as our comfort zone. |
| 105. We each have our very unique comfort zone |
| 106. Based on our own past experiences, our perceptions of our capabilities, and our willingness to be out in the world. |
Some people are only comfortable in the confines of their own home.

Others venture out into the world into the workplace,

and others still seem to make the whole world their home.

One interesting feature in Interpretation-1 was the “got it?” feature (this same strategy is described and used also in Interpretation 2.). This interpreting strategy functions quite clearly as a topic boundary. Lines 37 to 39 conclude the moral of three bricklayers’ story and line 40 presents an explanation. At the end of line 39, an identified topic boundary is marked with the “got it?” strategy. Marking the boundary is the filled pause, consisting of the sign, OPEN
HANDS with eye gaze straight ahead and brows up. Following this the interpreter moves on to the next sign.

37. How we experience our life’s work,

38. and indeed our lives,

39. is to a great degree a function of what we tell ourselves.

Photo 7:

I1, 4.46.18-28 on 12-18 mins I1, 4.47, 12-18

40. You see, the man laying bricks performs the very same task as the man who was building a beautiful cathedral.

<5> Transliteration 1 (T-1)

This work showed a marked pattern of producing the HANDCLASP at 16 of the 20 identified topic boundaries, more than either of the other two transliterations. In addition, 26
additional HANDCLASPS occurred at places throughout the text that we had not originally identified as topic boundaries. These occurrences will require further analysis, but one hypothesis is that they mark an emphatic boundary in this transliteration. An example of this occurs from lines 51 to 77, where the presenter offers numerous examples of negative questions and then offers examples of positive questions that could replace the negative ones.

Photo 8

T-1: HANDCLASP at predicted boundary

(T1 @5.45.03-06 on Trans 12-18)
51. For example, when you first wake up in the morning,

Photo 9A and 9B

T-1: signing GIVE  EXAMPLE.

Photo 9C

T-1: Example of second HANDCLASP at unpredicted but potential boundary

(T-1 @5.46.18-22 on Trans1, 12-18 mins)
52. do you ask yourself questions like this?

53. What do I have to do today?

Photo 10
T-1 @ 5.52.02, after signing TODAY,
HANDCLASP at unpredicted but potential boundary

54. What problems am I gonna have ta face? (voice inflection)

17’55” handclasp at unpredicted but potential boundary

Photo 11
T-1 @ 5.55.01
What’s gonna happen if I fail at the challenges facing me?

In those 5 lines, the interpreter produces a HANDCLASP five times. She produces a brief HANDCLASP at the end of 50 (identified topic boundary), a slight HANDCLASP in the middle of line 51 (“for example”) and then at the end of lines 53, 54, and 55 (not identified).

This pattern appears again later in the text when another series of possible questions is presented. The transliterator again produces five HANDCLASPS in ten lines. This definitely requires further analysis. One hypothesis is that this HAND CLASP strategy, which is very marked, is used to mark the rhetorical emphasis created by the presenter through the use of repeated “what” questions to emphasize her point.

<5> TARGET TEXTS I-2 and T-2

<5> Interpretation 2 (I-2)

Of the 20 major topic boundaries that we identified, interpretation 2 shows HAND CLASP at 11 of them. In addition, at 3 other boundaries, the strategy we have labeled "got it?"
occurs. (see below). At 3 other boundaries, a final longer hold occurs on the last sign. These are filled pauses. For the remaining 3 boundaries, we were unable to identify the HANDCLASP as an indication of the topic boundary. However, it is important to remember that this initial research did not address other possibilities such as sign choices or word order, which could, indeed, represent the boundary.

One example of HANDCLASP in this interpretation occurs after the filled pause "got it?" feature between lines 35 and 36, where the moral of the bricklayer story is presented. This occurs at one of our predicted boundaries, between lines 35 and 36. "Our minds are very powerful tools" (line 36). The interpreter signs the OPEN HANDS with eye gaze straight ahead and brows up, and then moves to the HANDCLASP.

<table>
<thead>
<tr>
<th>35. or do you always keep in the forefront of your mind (point to head) a vision of your beautiful cathedral?</th>
</tr>
</thead>
</table>

Photo 13A and 13B

12 @ 5.53.11-22 on 24-30 mins  12 @ 5.54.06-20 on 24-30 mins
36. Our minds are very powerful tools.

An example of a filled pause occurring at one of our predicted boundaries happens between lines 115 and 116 in the transcript where the question of "what to do about fear" is re-introduced. Interpreter 2 holds the last sign, OPEN HANDS, with eye gaze straight ahead.

115. and to stop us from living fully or realizing our dreams.

Photo 14

I2 @ 4.46.14-47.02 on Int 30-36 mins

116. Well, what’s the alternative?

The “got it?” feature-form of a filled pause, appears at 3 identified topic boundaries. The last sign tends to be held (some holds a bit longer than others), the head is tilted forward and up, and the brows are raised with eye gaze straight ahead. It appears to be a strategy of the
interpreter, making the implicit meaning from the speaker more explicit rather than a question directly from the interpreter to the watcher. It functions as a marked topic boundary in this interpretation. The “got it?” also occurs in 3 other places in his work, places where we did not anticipate topic boundaries. Although in-depth analysis of these is beyond the scope of this paper, these 3 additional productions do appear to mark other, perhaps sub-topic, boundaries.

<5> Transliteration 2 (T-2)

Of the 20 major topic boundaries we identified, only 2 were clearly marked by extralinguistic handclasps. Eight boundaries were marked with a short filled pause, showing a slightly longer final hold on either the last sign or fingerspelled letter of the chunk. Ten identified boundaries were not marked. However, it is important to remember that we did not analyze for co-occurring sign choices, word order, or numerous other possibilities for marking a boundary. Therefore, it is not prudent to assume the boundaries were not marked. Further investigation is needed.

One example of the eight filled holds, this one with the last letter of a fingerspelled word held, that mark our predicted boundaries occurs at the end of line 128. The presenter said, “We could make progressive approximations towards expanding our comfort zone”. Transliterator 2 signed COMFORT and then fingerspelled #ZONES and clearly held the final S. The S was held for approximately 12 frames, in comparison to the hold on “Z” which was held for approximately 4 frames, and to the holds on “O”, “N”, and “E” that lasted for approximately 1 frame each.

128. We could make progressive approximations towards expanding our comfort zone.
Another example of a filled pause, occurs at the end of line 168, regarding the moral-of the story about the college student and his grades. Line 169 is the beginning of the three teachers story. A two-hand, OPEN PALMS sign is used to indicate the boundary; this sign is held for 19 frames.

168. The only thing that had changed were his expectations.
Another example of how powerful expectations are in determining events

The “got it?” feature described above for I-2 appears in T-2 but not at our identified boundaries; it does appear in 4 other places which, as in the interpretation, mark possible boundaries, even though we did not initially identify them as such. This feature needs further investigation.

<5> TARGET TEXTS I-3 and T-3

<5> Interpretation 3 (I-3)

Interpretation 3 showed a pattern very similar to the first 2 interpretations. Of the 20 major topic boundaries that we identified, the extralinguistic pause HANDCLASP occurred at 15 of them. The features that typically comprised this strategy included:

- Hand clasp at chest
• Head has a single nod down preceding the pause
• Torso returns to pause in center space
• Shoulders and torso have a single downward movement preceding the pause.
• Eyes down in “thought”

In the conclusion section, we briefly address the question of interpreter individual style. Each used the same HANDCLASP strategy, but for each, the specific features that made it up were slightly different.

An example of the HAND CLASP occurs between lines 12 and 13 of the transcript, where the text shifts from a listing of resources for the presentation to the telling of a story.

12. and finally, Peace, Love and Feeling, by Dr. Bernie S. Seagal.

13. I’d like to begin by telling you a story.
At four of the other boundaries we identified, some other form of marking strategy, usually a filled pause, occurred. But, at one boundary, only a shift in space marked the boundary; this is a prosodic pause. Between lines 45 and 46, the presenter finishes defining self-talk and begins to describe how to change perspective. At the end of line 45 the signing is directed to the front and center; at the beginning of line 46, the direction is shifted toward the right, where the discussion of the Negative self-talk is presented. Although this is not a clear shift, it becomes more salient by line 47, when the signing direction shifts to the left, to present the discussion about shifting to positive self-talk.
45. that what you tell your self is very likely to become your reality.

Photo 18

I3 @ 1.47.00 on 42-48 mins

46. Well, if this is true,

Photo 19A and 19B

I3 @ 1.52.28 on Int 42-48  I3 @ 1.57.20 on Int 42-48

47. how do we turn our negative self-chatter into powerful “I can” messages?
This use of space occurs in a few more places in the interpretation. It will be an interesting avenue of future research.

The third of our identified boundaries is marked by a multiple head nod which draws attention to the idea just stated. Depending on whether you identify the multiple head nod as a meaningful sign or a prosodic feature, this would be either a filled pause or a prosodic pause. We have categorized it as a filled pause. And at the fourth boundary, a filled pause, with the holding of the final sign and a look at the audience, occurs. This is very similar to some of the filled pauses used in interpretations 1 and 2.

82. as most negative emotions are.

Photo 20
I3 @ 3.52.22-53.24 on Int 42-
83. Fear is the biggest inhibitor of us acting upon our dreams and living our lives fully.

There was only one of our boundaries that was unmarked in this interpretation 3. Between lines 50 and 51, we identified a boundary before the example introduced in line 51. Although a major boundary between these two lines was not indicated in the target, there is a marker immediately following the introduction of an example. She signs WAIT-HOLD-ON using her non-dominant left hand, then she pauses using the hand clasp strategy.

50. you have a head start on seeing the world in a positive way.
51. For example,

when you first wake up in the morning,
This sign strategy is interesting to note because she has shifted dominance, another prosodic marker in ASL (Winston 2000). Interpreter 2 also used dominance shift as a discourse marker, emphasizing specific signs within a topic.

The HANDCLASP strategy also appeared at 8 other places in the text. In order to determine if this clasping was random or patterned, we also looked at where in the texts these clasps occurred. Although we had not identified the places as major topic boundaries, each occurred at identifiable boundaries. What was more interesting was that not a single one occurred at a non-boundary, such as in the middle of an utterance or the middle of a topic.

<5> Transliteration 3 (T-3)

In the transliteration of this text, the extralinguistic HANDCLASP strategy occurred at 10 of our identified major boundaries. At eight of the others, other boundary marking strategies occurred, such as filled and prosodic pauses. These strategies were described above in the description of her interpretation. Two of the boundaries we identified were not marked with pausing or any other major strategy. The HAND CLASP also occurred nine times at places we did not predict. However, as in the interpretation, each occurred only at identifiable boundaries, and none occurred in the middle of utterances or idea segments.

The major difference between the handclasps in the transliteration and the interpretation was that they tended to be held for a shorter period. For example, the clasp between lines 12 and 13 in the interpretation lasted for approximately 16 frames.

<table>
<thead>
<tr>
<th>TIME: 5.53.08 on Int 36-42</th>
<th>10</th>
<th>12</th>
<th>14</th>
<th>16</th>
<th>18</th>
<th>20</th>
<th>24</th>
</tr>
</thead>
</table>
But the hand clasp that she used at this same boundary in the transliteration only continued for approximately 4 frames.
Similarly, the main difference at other boundaries was the length of time that many of the behaviors lasted. For example, at the boundary between lines 82 and 83, she used a final hold in both versions. However, the final hold and length of the pause was shorter in the transliteration than in the interpretation. The hold in the interpretation lasted for 32 frames, while at the same boundary in the transliteration it was held for 3 frames. This length is illustrated in the two photos below.

<table>
<thead>
<tr>
<th>TIME: I-3 @ 3.52.22</th>
<th>.26</th>
<th>.30</th>
<th>.04</th>
<th>.08</th>
<th>.12</th>
<th>.16</th>
<th>.18</th>
<th>.20</th>
<th>.22</th>
<th>.24</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image.png" alt="Photo 24A" /></td>
<td><img src="image.png" alt="Frame 0.26" /></td>
<td><img src="image.png" alt="Frame 0.30" /></td>
<td><img src="image.png" alt="Frame 0.04" /></td>
<td><img src="image.png" alt="Frame 0.08" /></td>
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<td><img src="image.png" alt="Frame 0.22" /></td>
<td><img src="image.png" alt="Frame 0.24" /></td>
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<tr>
<td>I3 @ 3.52.22-53.24 on Int 42-48</td>
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<td>TIME: T-3: 3.49.20-23 (Trans 42-48 mins)</td>
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</tbody>
</table>

Photo 24A

I3 @ 3.52.22-53.24 on Int 42-48
The length of boundary markers, and their internal structures, is one more area that will provide interesting research opportunities.

<6> Discussion

<6> Pausing in the Source Text: The presenter, in chunking her utterances and topics, generally relied less on pausing and more on intonation and lengthening of final syllables for stress and chunking. There were no extralinguistic pauses within the source text, due to its formal and rehearsed nature.

<6> Pausing in the Target Texts: There is a significant difference in the pausing that occurs in the interpreted texts and the transliterated texts. This study makes no claims about the appropriateness of these differences. Because these texts were produced by qualified interpreters and transliterators, we make the assumption that these are common practices for interpreters and transliterators. Future research must include the study of consumers’ perspectives, as well as
studies of many more interpreters and transliterators. This is only a preliminary study in which we have found some interesting tendencies that bear further investigation.

<6> Pauses in the Target Interpretations

We investigated in detail one striking type of pause that occurred frequently and regularly in all three interpretations—the extralinguistic pause. While no extralinguistic pauses occurred in the source, each of the three interpretations had clear patterns of extralinguistic pausing. Each interpreter used a form of hand clasping at the chest/abdomen area, with a stopping of movement, some type of head nod preceding the pause, and often a type of eye gaze we have labeled “thinking.”

These pauses occurred at many major segment or topic boundaries throughout the target texts. They less frequently occurred elsewhere, but with one possible exception, they never occurred at non-boundaries. In other words, the interpreters were reliably and regularly recognizing that these were segments of meaning, or chunks. They appear to be using these boundaries to think or process the incoming message. Thus, they are using extralinguistic pausing to show where the presenter is changing or shifting topic. Extralinguistic pausing is a very clear and impactful means of indicating chunks. The watcher (receiver of the message) receives information that should allow them to understand that one idea or topic is closing and that another is opening. These pauses seem to be long enough to notice without intense concentration, thus making them more easily accessible to the watcher. These extralinguistic pauses are an interesting intrusion of the interpreting process. They are not part of the presenter’s source strategy for marking topic boundaries; rather, they seem to reflect the thinking of the interpreter. Yet, they provide a visual break that only occurs at topic boundaries, providing the
watcher with a road map of the topics throughout the text. Our emphasis here is that the extralinguistic pauses are additions to the message, but that these additions occur in, and only in, places where major topic boundaries occur in the source text.

It is important to note that we did not look for nor did we expect any type of utterance-by-utterance representation of the source. Rather, we looked at the ideas and topics in each chunk, and noted when, where and how the source text shifted, and when where and how the texts reflected these shifts. Ours was not the definitive and only boundary marking shift; we hypothesized that a large majority of our identified boundaries would be reflected in the targets in some way. We also expected some variation, depending on the person’s own chunking styles.

<6> Pauses in the Transliterated texts

The major difference in pausing behaviors between the interpreted and transliterated texts was the type of pauses used. It was at the major topic boundaries that a major difference was seen. Where the interpretations uniformly show extralinguistic pausing at most major boundaries, the transliterations show noticeably fewer extralinguistic pauses. And, in contrast to the interpretations, the transliterations were not as uniform. The differences ranged from adequate and expected patterns of pausing and pausing features within and between utterances (two of the three), to almost none (one of the three).

The major boundaries were generally reflected with less marked pausing: instead of the frequent use of the extralinguistic pause (HANDCLASP), the boundaries were frequently marked by less noticeable strategies, such as filled pauses that took the form of holds on final signs in the segment, prosodic pauses that took the form of torso and/or head shifting in space, and head nodding. The length of the stop between segments was perceptibly shorter in the
transliterations, at times almost imperceptible. Another question to investigate is whether this lack of a major visual break, and the similarity of the filled pausing and prosodic pausing between boundaries and within utterances is salient enough to help watchers follow the larger text structures in transliterated texts. In other words, do all the pauses seem so similar that the watcher cannot tell when a major boundary occurs? Of course there are other strategies used that we have not yet investigated, linguistic choice being one example. If the source text presents a series of facts, the transliterator may add a sign indicating LIST at the beginning, number each item, and then sign FINISH at the end of the series. This would indicate to the watcher that the topic or list segment was completed and there would be no need for the addition of a major pause. But the question still to be answered is, how many chunking and prosodic features are needed in a target in order to make it easily perceptible rather than subtle and more easily missed? Another is how does “ease of understanding” compare where source and targets are compared?

<6> Signing styles

Signing styles appear to spread across interpretations and transliterations. In those places where the HANDCLASP pause did occur in both forms for each interpreter, the HANDCLASP was similar. The CLASP STANCE of #3 in both the interpretation and transliteration showed the same torso, head, and hand positions. This was true of each of the three. Yet each person was slightly different from the others.
This observation begins to get at the question of signer style. This is another topic that many interpreting students ask about. The ability to identify specific features incorporated in a "style" could lead students to an understanding of their own style, and therefore, an understanding of what may be missing. Each of the signers used the extralinguistic pause frequently as a discourse strategy, and each included several of the same features. But each configuration is slightly different. This can be seen in the photos above, where the eye gaze direction, the height of the clasped hands, the tilt of the torso and head are all unique to each signer.

<7> DIRECTIONS FOR FUTURE RESEARCH

Although primary focus of this initial research was the pausing at major segment boundaries, we also noted some interesting patterns in other areas. Again, these are observations
of patterns that have provided us with an even longer list of new research questions. Our comments are not intended to present any final description of these patterns. Additional areas of interest include: openings and closings of topics; utterance boundary markings; repetition and reiteration; and involvement strategies such as use of space for comparisons, constructed dialogue, and action. We will briefly describe some of our initial observations in two areas-use of space and lexical choice for repetition.

<7> Uses of space

We have discussed the prosodic use of space as it occurred in the pausing behaviors above. But, another use of space that occurred was linguistic. There are patterns of both performatives (constructed action and constructed dialogue) and of comparisons in all of the targets, both interpretations and transliterations.

<7> Performatives

The story of the bricklayers in the source text generated the use of performatives in both the interpreted and transliterated texts. All used constructed action to represent the boy approaching the brickmasons and the interactions that occurred. All used constructed dialogue to show some part of the boy’s questions and the brickmasons’ responses. This same strategy was used when presenting the story of the college student and the dean. Constructed action was used to represent the meeting between the student and the dean to discuss his poor grades.

One interesting use of constructed dialogue was in interpretation 2. The presenter talks about how everyone experiences fear in his/her life and offers some positive strategies to control that fear. Interpreter 2 actually places "fear" to his right and interacts with it, as if this abstract
concept were an interlocutor in a conversation. For example, the presenter says, "If we could shift our perspective and see fear instead as an ally that is telling us, proceed with caution, but proceed" (line 117-118). Interpreter 2, having previously established FEAR down and to his right, now interacts, if you will, with this established entity. This is a fascinating approach to an abstract concept. Is this a matter of style on the part of the interpreter, or a common practice in ASL? If the latter, how can this be analyzed so that students can master the skill?

Photo 26

LF Interpreting @ 7'41"
Rhetorical Repetition

This source text provides an unusual opportunity to study the use of formulaic repetition. The presenter uses a formal, repetitive style that emphasizes her points in various sections. Unfortunately, many interpreting students report that they have been taught to avoid repetition, to use it as a “resting spot” or a thinking time, and therefore do not produce a dynamically equivalent target. In the 6 texts that we are studying, each target demonstrates the inclusion of the repetition, and provides an excellent opportunity to analyze how this rhetorical discourse strategy can be dynamically reflected in both interpretations and transliterations.

One example of this formulaic repetition is the presenter’s repeated use of rhetorical questions as she discusses negative and positive self-talk. Another is in the story about three bricklayers, where she represents the boy’s question to each bricklayer using exactly the same words. This use of repetition is a rhetorical strategy that involves the listener in the story itself (Mather and Winston 1995, Tannen 1989, Metzger 1995, Roy 1989).

This repetition also appears in the interpretations. One example can be seen in interpretation 3; it can be seen in transliteration 3 as well. Although the number of signs, the sign choice, etc. for the boy’s question are different overall, each iteration of the question in the interpretation is “WHAT’s-UP, #DO?” in the form of constructed dialogue. Additional repetition is in the form of the space used—each question from the boy is directed in the same direction, and each answer is directed back toward the boy. This use of space in repeated utterances reflects the rhetorical repetitions of the source.

Interpreter 2 employed this same strategy. In the interpretation, he established the boy and the bricklayers in the same location and repeated the same question every time: WHAT
(open hands), ASK-TO, #DO-DO 2h. In addition, when the source message finished that brief story and addressed the audience, "Now, if this little boy approached you and asked you, 'What are you doing?' how would you respond?" Interpreter #2, shifting from right to center, signed: WHAT (open hands), ASK-TO, #DO-DO 2h. In transliteration 2, the sign choices more closely represent English, as we would expect. But, the symmetry and the repetition remain.

<8> SUMMARY

The analysis presented above represents a beginning look at ASL prosody in interpreted and transliterated texts. Prosody has been viewed as an elusive skill, hard to explain, difficult to teach second language learners (in ASL-English interpreter education programs). It is our hope that others will see the benefit in this analysis and continue to examine these complex features. Perhaps one day, interpreter educators can help our students better understand prosody and teach them to produce dynamically equivalent texts that "look like" the ASL of the Deaf community. In this initial report, we have narrowed the focus to a very specific pausing strategy. We have observed significant similarities and differences within and across interpretations and transliterations, as well as within the same person performing those two different tasks.

These observations have just begun to address the questions we started with—how do we teach this, and how do we explain to students what the differences between interpreting and transliterating actually are. We look forward to future research that uses these initial findings to take us where no one has gone before.
REFERENCES


APPENDIX A

Transcription- Living Fully

Transcription was made from the spoken text recorded on Living Fully: with Interpreting Models. 1994. Sign Enhancers, Inc. Salem, OR: #INT-LF)

1) Welcome, to what I hope will be an opportunity for personal growth to all who join me today.
2) My name is Jenna Cassell
3) and in my life I’ve assumed several different titles and numerous roles,
4) but, today, I simply wish to share with you some exciting ideas in order to help us all to grow.
5) For when we open ourselves to growth at a personal level we enhance our ability to more fully experience our lives.
6) These ideas come from many rich sources,
7) however the main resources used to formulate this presentation,
8) which I highly recommend,
9) include an audio program entitled, Freedom from Fear, by Reverend Mary Boggs of the Living Enrichment Institute,
10) A book entitled, Feel the Fear and Do It Anyway, by Susan Jeffers,
11) Life is an Attitude, by Elwood N. Chapman.
12) and finally, Peace, Love and Feeling, by Dr. Bernie S. Seagal.
13) I’d like to begin by telling you a story.
14) There once were three brick masons working together on a building.
15) A little boy happened by
16) and asked the first brick mason, what are you doing?
17) Without even looking up, he responded,
18) I’m laying bricks!
19) The little boy approached the second (index front right) brick mason,
20) and asked him,
what are you doing?
The second brick mason looked kindly at the boy, and said,
I’m building a wall.
The little boy approached the third brick mason
and asked the same question.
What are you doing?
The brick mason faced him squarely and replied with enthusiasm, (body shifting during role play) and obvious pride,
I am building a beautiful cathedral.
Now, if this little boy approached you and asked you,
What are you doing?
How would you respond?
Do you feel as though you simply lay bricks
or do you retain the original joy and enthusiasm of your life choices?
Do you simply go through your routine in an unconscious manner
or do you always keep in the forefront of your mind (point to head)a vision of your beautiful cathedral?
Our minds are very powerful tools.
How we experience our life’s work,
and indeed our lives,
is to a great degree a function of what we tell ourselves.
You see, the man laying bricks performs the very same task as the man who was building a beautiful cathedral.
but his inner experience was quite different.
We do have the power to affect our own perspective,
and therefore our internal experience of external events.
We’ve all heard about positive self-talk,
that what you tell your self is very likely to become your reality.
Well, if this is true,
how do we turn our negative self-chatter into powerful “I can” messages?
Well, one thing to understand is that the brain tries to find answers to the questions posed to it.

So, if you could ask yourself questions that will elicit a positive response, you have a head start on seeing the world in a positive way.

For example, when you first wake up in the morning, do you ask yourself questions like this?

What do I have to do today?

What problems am I gonna have ta face? (voice inflection)

What’s gonna happen if I fail at the challenges facing me?

Or try some of these questions instead?

What am I excited about today?

What challenges can I look forward to learning from today?

What new opportunities can I create today?

When facing a new challenge, or what some people call a problem, what kind of questions do you ask yourself?

Do you ask,

What could I lose if I try and fail?

Or, how about this?

What could I lose if I don’t try?

What could I gain by trying, whether I succeed or not?

Often, we’re stuck in negativity or negative emotions, such as anger, depression, anxiety, to name a few.

It’s important to recognize that these negative emotions that we’re experiencing are actually based in fear.

Fear of failure,

fear of being hurt,

fear of being humiliated,

fear of not having enough money,

fear of being alone.

I’m sure you could add to the list.
78) For example, if you get angry because someone cuts you off when you’re driving
79) the first thing that actually occurred was that
80) you experienced a fear of having a collision.
81) The anger was actually based in fear,
82) as most negative emotions are.
83) Fear is the biggest inhibitor of us acting upon our dreams and living our lives fully.
84) We hold back from participating in life fully
85) because we are afraid.
86) We’re afraid to speak our truth,
87) we’re afraid to show up in the world as we are
88) and we’re holding back in some way because of our fears.
89) Well, sad to say, it’s not possible to do away with fear completely.
90) Every person on this planet experiences fear.
91) We all have fear in our lives.
92) Think about it.
93) Where is fear controlling you right now?
94) We all have fear in our lives.
95) Even the people who are very successful and self-confident,
96) who are out there making their dreams a reality,
97) experience fear.
98) Therefore, fear is not the problem.
99) What we do with the fear is what determines how we live our lives.
100) Although we can’t eliminate fear,
101) we can view it differently.
102) and deal with it in healthy and productive ways.
103) You see, we each have places, events, situations with which we’re comfortable.
104) This is known as our comfort zone.
105) We each have our very unique comfort zone
106) based on our own past experiences, our perceptions of our capabilities, and our willingness
107) to be out in the world.
108) Some people are only comfortable in the confines of their own home.
Others venture out into the world into the workplace, and others still seem to make the whole world their home. But when a challenge is presented that is outside our personal comfort zone, fear appears.

Sometimes our fear induces enough self-doubt that it actually prevents us from moving ahead. We allow the fear to immobilize us, and to stop us from living fully or realizing our dreams.

Well, what’s the alternative? If we could shift our perspective and see fear instead as an ally that is telling us, proceed with caution, but proceed. A warning, if you will, that says clearly and boldly, “Growth opportunity ahead.” So, when you felt the fear, you would know that you are actually moving in the right direction.

Towards growth, towards expanding your comfort zone, towards living fully. If we can face our fears squarely and imagine in the safety of our minds, which after all is where fear exists, how we might deal with the challenge, we could take steps towards experiencing the fear and moving forward. We could make progressive approximations towards expanding our comfort zone.

You can begin by imagining the worst possible consequences. What if the worst happened? And imagine yourself handling it.

Every experience we’ve had began in thought and was projected into the world of being. Thoughts with feeling become reality. We must create what we do in this world twice. Once in our minds, and then again out in the world to make it so.

So facing the fear and imagining,
“how would you handle that situation?” (overlap of constructed dialogue and indirect)
makes it easier to proceed with optimism.
And, as Oscar Wilde said,
the basis of optimism is sheer terror.
But how can we get past our fears?
As Susan Jeffers says in her book of the same title,
feel the fear and do it anyway.
Each time we venture beyond the confines of our comfort zone
we discover new ways of being.
we discover inner strength and abilities.
We learn to expect bigger and better things from ourselves.
Expectation is another very powerful determiner of events.
I’d like to share a story with you about a young man who took the scholastic aptitude test, the SAT, as part of the college entrance procedures.
When he received his test scores back, he saw the number 98 on the paper.
Well, he was quite distressed, and concerned about his ability to succeed in college with an IQ as low as 98.
But he did go to college.
His first term he received D’s and F’s.
His second term was no better.
and the dean called him in for a conference.
The dean warned him, that if his performance continued at this poor level, he would be asked to leave the school.
“Well, whaddo you expect?” replied the young man?
“I only have an IQ of 98.”
The dean took out the file and explained to the young man,
“You don’t have an IQ of 98, you scored in the 98th percentile.
That means that your score was equal to or better than 98 percent of the students in all of North America.”
Well, the next term, that student pulled a 4.0 grade point average.
The only thing that had changed were his expectations.
Another example of how powerful expectations are in determining events
was shown in a research project conducted in San Francisco.
Three teachers had been brought into the principal’s office and told,
“You three teachers are the best teachers in this whole school.
We have decided to reward your performance by giving you each thirty of the best students.”
These teachers were asked,
“Don’t tell any of the students or the parents about this.”
At the end of the year, it was found that these students tested significantly higher than all of the students,
not only in the school,
but in the entire district.
The teachers were brought in again.
They were informed that this had been an experiment.
And that the students had actually been selected at random.
Well, the teachers were amazed.
and they could explain the high scores only by the fact that, they were, after all, the best teachers.
Well, then the researchers informed them,
“Actually, we put all the teachers names in a hat
and yours were the three that were pulled.
This was a double blind study
with the only factor not being controlled for being, expectation.
In summary, if we learn to live with fear as an ally
which navigates our path in the direction of growth,
use our minds and strength of spirit to expand our personal comfort zone,
and learn to expect bigger and better things of ourselves,
we will enhance our ability to live more fully with a constant focus on our beautiful cathedrals.
194) I’d like to leave you with a poem that says,
195) Come to the edge, he said,
196) No, they replied, we will fall.
197) Come to the edge, he said.
198) No, we will fall.
199) Come to the edge.
200) They went to the edge
201) He pushed them, and they ..flew.
202) I wish you all a good flight.
203) Thank you.

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1 We gratefully acknowledge the permission we received from Sign Enhancers, Inc. to include the still photos we used to illustrate our examples.
2 Prosodic features were implied in this process; we have made it a much more explicit step in this research.
3 Prosodic and filled pauses also occurred throughout all three interpretations. We have not yet analyzed these in detail, but they appear to be the expected ASL pausings that occur within and between utterances.