Patterns of Informality in Spoken English Interpretation

Meghan K. McCombs

Northeastern University ASL/English Interpreting

Correspondence regarding this article should be sent to Megham McCombs at

mccombs.m@husky.neu.edu

Keywords: informality, representation, interpretation, American Sign Language (ASL), processing time

Abstract: This study is meant to draw attention to the implications within formality of spoken English interpretations. This study looks for patterns of six specific informality markers across interpreters with varying levels of experience. The interpreters involved are five graduates of the American Sign Language (ASL) program at Northeastern University. For this study, seven out of eighteen minutes of each interpreter's work were analyzed to determine the frequency of the informality markers. The study found that the most prevalent informality marker across the sample is the use of conjunctions to begin and/or end a sentence. The study also found that all five interpreters used the most markers in one of two sections, in either the ninth or fifteenth minute. It is possible that this could be explained by processing time, but more research must be

done to claim causation. The results of this study may be helpful in understanding practical ways interpreters can improve, and in doing future research.

In an ever-evolving profession such as ASL Interpreting, it is crucial that interpreters constantly reassess the quality of their work and look for areas in which they can improve. A common pitfall for many interpreters is the use of informal speech when interpreting a more formal ASL text into English. This is a type of misrepresentation of a more formal source text, which hinders the interpretation from encompassing the entire meaning of the source text. Because little research has been conducted on this topic, the goal of this study is to look for specific markers of informality, to explore which ones are used most often, and to consider what might be prompting their use. This research is intended to draw attention to the significance of this issue and to encourage more research to be done in this area.

Literature Review

Representation

Feyne (2015) studied the interpretations of Deaf museum docents and found that, in almost all cases, the docent raters made judgements of the Deaf docents based on the linguistic and contextual choices made by the interpreters. This was true for both positive and negative perceptions of the lexicon, context, and register of the interpretations, meaning these facets within the interpretations were perceived as attributes of the Deaf docents, not the interpreters. In almost all instances, the raters referenced the Deaf docent in their notes, not the interpreter, when making comments on tone and word choice in the interpretation. For example, one rater reported "'The lecturer has, at best, a superficial understanding of the artwork/exhibition'" (Feyne, 2015, p. 8). Feyne indicates that each of the Deaf docents was highly educated and qualified; however, this was not conveyed in the interpretations. In other words, Feyne's data shows that participants in an interpreted interaction understand all facets of the interpretation to be accurately

representative of the source speaker/signer and his or her capabilities. Feyne has given specific examples to the fact that, unfortunately, a flawed English interpretation leads the participants who rely on such interpretations to believe that the flaws are a direct product of the Deaf speaker/signer, therefore distorting their views of the Deaf speaker/signer.

Register

Accuracy in an interpretation is based on more than the information provided. An interpreter also must consider register, which is a part of any language and which allows the speaker/signer to interact in a way that is appropriate for a given setting (Humphrey, 1995). For example, consider the way an adolescent boy may converse with his friends at lunch, and how that contrasts with the way he might address his teacher. If he were to switch registers for these two situations, his language may be considered incongruous with the setting. Feyne (2015) shares an instance of poor register matching by one of the interpreters in her study, resulting in one rater making this comment about a Deaf docent: "'The site is a museum and this person is speaking to museum visitors- s/he is not in a bar chatting with his/her friends'" (p. 10). It is clear the rater is commenting on the Deaf docent by her use of "s/he" and "his/her", because the rater does not see the Deaf docent and therefore does not know the docent's gender. This comment shows that the register of the interpretation reflected poorly on the Deaf docent making him or her appear frivolous and casual in a formal educational setting.

A contributing facet of register is lexicon. The words an interpreter chooses have a great impact on the implications of the interpretation. Generally speaking, there are different word choices that are appropriate in formal and informal settings. Formal language is more appropriate when communicating with people with whom one is unfamiliar, as it is perceived as more polite

(Hallidy, 1979; Quinones, 2014). Some types of informal lexical makers include the use of conjunctions such as *and* or *so* to begin a sentence, vague language such as *sort of* or *whatnot*, and contractions or ellipses such as *gonna* and *wanna* (Halliday, 1979; Quinones, 2014). Also common in informal language are words that hold little to no meaning, such as *ya know*, or *um…*, which are known as fillers, as well as the use of chained clauses (Quinones, 2014). For all intents and purposes, chained clauses are a form of run-on sentences in spoken English (Quinones, 2014). It should be noted that these markers are all indicators of informal English, but not necessarily rules (Quinones, 2014).

Processing Time

Processing time, formerly known as lag time, can be defined as the time an interpreter takes to process the message in the source language (SL) before presenting the same information in the target language (TL); this time varies by interpreter and can range from two to ten seconds (Cokely, 1986). In his study, Cokely (1986) found that the number of miscues in an interpretation is indirectly associated with a particular interpreter's processing time; for example, the more time an interpreter takes to process the message, the more accurate the interpretation will be. Cokely (1986) reports that this may be due to a longer processing time increasing the interpreter's comprehension, the lack of which makes interpreting impossible.

Discourse of American Sign Language

Like any other language, ASL takes different forms depending on the environment in which it is being used. As one can imagine, there are cases in which more formal ASL is appropriate, but the language can be also adapted to be used in casual situations, for example, a group of good friends chatting. A strong marker for informal ASL is producing signs that are properly

articulated with two hands with only one hand (Valli & Lucas, 2002). Valli and Lucas (2002), the signs commonly translated for the following English words as examples: *coffee*, *vote*, and *people* (p. 178). In casual settings, it is acceptable for these signs to be articulated using one hand instead of two. The location of a sign can also be an indicator of the level of discourse (Valli & Lucas, 2002). Valli and Lucas (2002) give an example of the sign usually translated into English as *know* (p. 180), which is properly articulated on the forehead, but in an informal settings is understood and accepted if signed lower on the side of the face (Valli & Lucas, 2002).

Oppression of the Deaf Community

Members of the Deaf community have faced a form of discrimination called *audism*. This is a term that was coined by Tom Humphries in 1975 (as cited in Bauman, 2004, p. 239), and while it has become more commonly recognized within the Deaf community, it is still considered "in-speak" in that it is not understood by most people who are not educated in the ways of Deaf culture (Bauman, 2004). Audism refers to prejudice and discrimination of people based on their hearing status, which has been perpetuated throughout history by the mentality that speech and hearing is the only avenue for language and that humanity is measured by one's ability to use language. Due to this reasoning, Deaf people have been wrongly perceived as less than human because American Sign Language (ASL) is not a spoken language (Bauman, 2004). As a result of audism, Deaf people have been underestimated in terms of intellect, independence, and general ability. If interpreters misrepresent Deaf people like the interpreters misrepresented the Deaf docents in Feyne's (2015) study, then they contribute to this problem and do nothing to educate the non-Deaf people involved.

Method

The data used for this study were collected in the winter of 2010/2011 by the American Sign Language department at Northeastern University. Northeastern University alumni from almost every graduating class between 1997 and 2009 interpreted the same series of texts, and these interpretations were recorded and stored for research purposes. Demographic information was also collected for each interpreter, and each interpreter was assigned a number by which to be identified for this set of data. The interpretations used for this study were of an ASL source text in which the presenter is explaining the Academic Bowl, which takes place annually throughout the United States, with the finals held at Gallaudet University. Based on what we know about ASL discourse, this video would be considered a formal text. The signer is using two hands and properly articulating signs. It should also be noted that she is standing, when sitting would be more appropriate in a conversational setting. Also, because the signer was knowingly being recorded for a video, it is possible that she did not know who her audience would be. Because of this, she could have wanted to be more formal with this text. Each interpretation selected for this study was transcribed and analyzed for six specific informality markers, which are explained in the following sections.

Sample

The sample for this study included five interpreters, chosen from a pool of interpreters who graduated within a range of ten years: 2000 to 2009. Of this group, one interpreter was chosen for every other graduating year; for example, one interpreter from the graduating classes of 2000, 2002, 2004, 2006, and 2008. For cases in which data from multiple interpreters was available for the same year, the researcher chose alternating interpreters. Interpreters selected for this study

were numbers 2, 6, 8, 13, and 16 in the original alumni data pool, but have been relabeled with numbers 1, 2, 3, 4, and 5 respectively for this article. All participants hold a bachelor's degree from Northeastern University and were locally, if not nationally, credentialed interpreters at the time of data collection. The sample had an age range of 11 years and consists of four female interpreters and one male interpreter. Table 1 presents the demographic information for the participants:

Table 1

Demographic Information of Study Participants

					Year credentials received	
Interpreter	Gender	Ethnicity	Age	Graduating class	Locally	Nationally
1	Female	White	35	2000	2002	2005
2	Male	White	30	2002	2004	2007
3	Female	White	36	2004	2005	2007
4	Female	White	30	2006	2007	2009
5	Female	White	25	2008	2009	

After selecting the interpreters for this study, the videos, each approximately 18.5 minutes long, were sampled according to selected time segments. Included in this sample are segments that are each approximately 1 minute long, beginning at or around 0:00, 3:00, 6:00, 9:00, 12:00, 15:00, and 17:30. This provided a total of about 7 to 8 minutes worth of transcripts for each interpreter. Variation in length was due to the differences in each interpretation and allowing each segment of the transcription to begin and end with a complete thought according to the prosody used by each interpreter. The transcripts for all eight interpreters can be found by following the link provided in Appendix A.

Processing time for each interpreter was also identified in selected minutes of the interpretation. This was done in several steps. First, the researcher located the beginning of a signed sentence in the start of the selected minute in the source text and noted the time code for when it occurred in the video. Then, the time code for when the interpreter's production of the meaning of this sentence began was noted. The difference between these time codes was calculated to determine the lag time. This was then repeated for a sentence in the middle of that minute, and again for a sentence at the end of the minute. A mean was taken for these three processing times to determine the interpreter's average processing time for that minute.

Informality Measures

Conjunctions.

The first informality marker analyzed in this study is the use of the conjunctions *so*, *and*, or *but* as the first or last word in a sentence. Also included in this category were the words *well* and *now*. These markers are commonly recognized as informal, and are acceptable in casual conversation. An example of this can be found in the transcript for interpreter 3, between time stamps 6:10 and 7:03:

> It gets passed down and the moderating assistants will show, I'm sorry, will show the answer for each team. So they have this electronic overhead that will scan the answer and it will appear on the screen for both teams. So there's not any sort of discussion or anything else from the audience.

One can see from reading these three sentences, two of which begin with the word *so*, that the conjunction is not grammatically or contextually significant in either sentence. That is, the

sentences would be accurate without the conjunctions at the beginning. The use of conjunctions in this way sounds very conversational.

Vague Language.

The second informality marker identified in the transcripts was the use of vague language, specifically the words and phrases, *thing*, *stuff*, *all that*, *sort of/kind of*, and *whatnot*. This type of language in a spoken English interpretation may discredit signers, making them seem less knowledgeable about the subject on which they are lecturing (Quinones, 2014). The nature of a formal text such as the Academic Bowl video is that the speakers/signers is assumed to have prepared the presentation and would be quite certain of what they have to say (Halliday, 1979). Vague language results in different implications for the listeners, influencing their impression of the presenter.

Chained Clauses.

Chained clauses, equivalent to run-on sentences, are often not found in formal speech because, like the use of vague language, they sound as if the speaker is unprepared and is therefore chaining together multiple clauses as one "sentence" as a result. It should be noted that, while transcribing the interpretations, the researcher had a difficult time identifying sentence breaks, which might attest to the prevalence of chained clauses in the data.

Ellipses.

The fourth informality marker considered in this study is the use of ellipses, such as *gonna* or *wanna*. These are considered informal because they are used to replace the phrases "going to" and "want to." These words are acceptable in casual situations, such as two friends chatting, but lower the standard of formality when used in a more formal setting.

Contractions.

Contractions, such as *can't* or *you're* are similar to ellipses. These examples are informal adaptations of the phrases *can not* and *you are* (Halliday, 1979). Although contractions are more common in spoken English, they are considered informal because they are a shortened version of a phrase.

Fillers.

The sixth and final formality marker analyzed in this study is the use of filler words, which have no semantic or grammatical function, but have clear implications for the speaker using them. Examples of fillers include, *ya know*, *um*, *uh*, *like* (as a transition or in place of the word *said*), and *I mean*. For ASL to English interpreting situations, these fillers are often used when the interpreter may need more time to formulate a sentence or does not understand the signer fully. The use of these words implies that the speaker is unsure of what to say next, which may be acceptable in day-to-day speech, but not in a formal setting.

Procedure

After sampling and transcribing the interpretations, the researcher analyzed each transcription for each of the informality markers described above. This included tallying the occurrences of each marker for all five interpreters, then entering the totals on the spreadsheet designated for each interpreter. In addition to the tallies for each marker, the total number of sentences in the transcriptions was entered in the sheets as well. The spreadsheets allowed the researcher to track the total number of markers in each minute, the total for each marker over the entire transcript, and the grand total for all six markers overall. This layout was helpful when looking for patterns for each informality marker in terms of each interpreter's experience level.

After determining which minute contained the greatest number of markers and which minute contained the lowest number of markers for each interpreter, the researcher calculated the average processing time for each of these minutes and entered them into the spreadsheets for comparison. This was done to find out if there was a pattern in the number of informality markers an interpreter used during a period of time based on the interpreter's average processing time for that minute. If an interpreter had his/her lowest number of informality markers occur in different minutes, the processing time was calculated for each minute. The results for all interpreters involved in this study can be found in more detail in Appendix B.

Results

Interpreter 1

Interpreter 1 had the most experience of the five, with approximately 9.5 years of experience at the time of data collection. This interpreter produced 58 total sentences over all 7 sampled minutes. Throughout the entire transcript, the researcher counted 28 sentences beginning and/or ending with conjunctions, 0 instances of vague language, 5 chained clauses, 1 ellipsis, 27 contractions, and 30 fillers. This yields a total of 91 informality markers in the sampled minutes. This interpreter's most and least frequently used markers were fillers and vague language, respectively. The interpreter had the most informality markers in minute 9 and the least in minute 1, both minutes with an average processing time of 2.3 seconds.

Interpreter 2

Interpreter 2 had approximately 7.5 years of experience at the time of data collection. This interpreter produced 65 total sentences over all 7 sampled minutes. Throughout the entire transcript, the researcher counted 37 sentences beginning and/or ending with conjunctions, 12

instances of vague language, 6 chained clauses, 2 ellipses, 21 contractions, and 23 fillers. This yields a total of 101 informality markers in the sampled minutes. This interpreter's most and least frequently used markers were conjunctions and ellipses, respectively. The interpreter had the most markers counted in minute 9, with a processing time of 2.7 seconds and the least in minutes 12 and 15, with processing times of 2 seconds and 1.7 seconds, respectively.

Interpreter 3

Interpreter had approximately 5.5 years of experience at the time of data collection. This interpreter produced 56 total sentences over all 7 sampled minutes. Throughout the entire transcript, the researcher counted 17 sentences beginning and/or ending with conjunctions, 0 instances of vague language, 7 chained clauses, 1 ellipsis, 31 contractions, and 3 fillers. This yields a total of 59 informality markers in the sampled minutes. This interpreter's most and least frequently used markers were contractions and vague language, respectively. The interpreter had the most informality markers in minute 15 with a processing time of 2 seconds and the least in minute 1 with a processing time time of 4 seconds.

Interpreter 4

Interpreter 4 had approximately 3.5 years of experience at the time of data collection. This interpreter produced 43 total sentences over all 7 sampled minutes. Throughout the entire transcript, the researcher counted 24 sentences beginning and/or ending with conjunctions, 2 instances of vague language, 6 chained clauses, 1 ellipsis, 10 contractions, and 24 fillers. This yields a total of 67 informality markers in the sampled minutes. This interpreter's most frequently used markers were conjunctions and fillers, both with a total of 24, and the least frequently used marker was the use of ellipses. The interpreter had the most informality markers

in minute 15 with a processing time of 4.7 seconds, and the least in minute 1 with a processing time of 5.7 seconds.

Interpreter 5

Interpreter 5 had approximately 1.5 years of experience at the time of data collection. This interpreter produced 47 total sentences over 7 sampled minutes. Throughout the entire transcript, the researcher counted 25 sentences beginning and/or ending with conjunctions, 0 instances of vague language, 17 chained clauses, 1 ellipsis, 9 contractions, and 2 fillers. This yields a total of 54 markers counted in the sampled minutes. This interpreter's most and least frequently used markers were conjunctions and vague language, respectively. The interpreter had the most informality markers in minute 9 with a processing time of 1.7 seconds and the least in minutes 1 and 12. The interpreter had a processing time of 2.7 seconds in the first minute and 2.3 seconds in minute 12. Table 2 indicates the number of each informality marker by interpreter, and bar graphs depicting these results for all five interpreters can be found in Appendix C.

Table 2

Number of Informality Markers by Each Interpreter

Interpreter	Sentences	Initial/final conjunction	Vague language	Chained clauses	Ellipsis	Contractions	Fillers
1	58	28	0	5	1	27	30
2	65	37	12	6	2	21	23
3	56	17	0	7	1	31	3
4	43	24	2	6	1	10	24
5	47	25	0	17	1	9	2

Discussion

After totaling the results from all five interpreters, the most frequently cited informality marker in these interpretations was the use of conjunctions to begin and finish a sentence, with a

total of 131 occurrences. This means that, of the total 269 sentences transcribed for all five interpreters, 48.7% of them began with, *well*, *now*, *so*, *and*, or *but*. That marker alone has significant implications for how an audience will perceive the presenter. Feyne's study (2015) provides evidence to support that this could cause any member of the audience who depends on the interpreter to perceive the signer as less professional and serious than he or she is. In addition, the two most frequent markers after conjunctions are the use of contractions, with a total of 98 instances, and the use of fillers, with a total of 82 instances.

Also, interpreters 2, 3, 4, and 5 had a shorter processing time during the minute in which they each used the most informality markers than they did in the minute with the least informality markers. Interpreter 2, the only interpreter whose processing time did not follow this trend, had the same calculated processing time for both minutes. A graph displaying all average processing times for each interpreter can be found in Appendix C. The greatest difference in these two processing times was 2 seconds, calculated for interpreter 8. Because processing time was not calculated for all 8 minutes, it cannot be determined as the cause for the increase in formality markers. Despite this, it is still worth noting as a pattern and as a possibility for causation.

The researcher also looked for patterns between the number of years' experience and the total number of markers found for each interpreter. With interpreter 1, who had the most experience, showing 91 total markers, interpreter 2 showing 101 total markers, interpreter 3 showing 59 total markers, interpreter 4 showing 67 total markers, and interpreter 5, who had the least experience, showing 67 total markers, it is hard to find a trend between these two variables. One cannot completely rule it out however, as there might a correlation in a larger sample. A chart in Appendix C provides each interpreter's average number of markers per sentence. While each

interpreter had an average greater than one, it again can be seen that there is no pattern in this sample to correlate the number of markers with experience.

Interpreters represent all parties participating in the communication in any given situation for which they are hired. Because they are privy to the norms and expectations of ASL and Deaf culture, they are more aware than most of the oppression Deaf people have faced. Interpreters hear about it in stories from their Deaf friends, see it first hand, and read about it in essays such as the written by Bauman (2004).

Interpreters are also aware, either because of formal classes they have taken or by knowing members of the Deaf community or both, that this oppression is based on prejudices that are not true. Interpreters are entrusted with this information, and are given opportunities to reverse the attitudes that elicit oppression every time they enter a job. This is why it is so important that interpreters constantly be looking for areas in which to improve their work. Being aware of these indicators of informality and the implications of informal speech, interpreters can monitor their own work and be intentional to speak more appropriately in more formal settings.

Limitations

One limitation is that interpretations of only one source text were analyzed. The data would be much stronger had it been derived from interpretations of multiple texts. In the same vein, all interpreters in the data pool are graduates of the same interpreting program; for the most part, they went through all the same courses, and some had the same professors. Including graduates of a variety of interpreting programs, as well as those who did not attend an interpreting program would also make the data stronger. This data pool also provided a small sample size; had the sample been larger than 5 participants, it would have provided more representative results.

Future Directions

There are many possibilities for future research similar to this study. In relation to the limitations discussed above, one could gather a wider range of interpreters with a greater variety of backgrounds and conduct a similar study to yield stronger data. One might also consider taking the research one step further, and adopting the model used in Cokely's (1983) study, which would involve gathering two groups of raters: those with native fluency in ASL and those with native fluency in English. Using a survey, the researcher might ask both groups of raters about their perceptions of the presenter, based on either the source text or the interpretation. This would provide more research for interpreters' representation of Deaf people.

The transcripts could also be analyzed to look for patterns to explain why the informality markers appear where they do. This could also be done with the source text, so see if there are any linguistic consistencies in the source text with when the informality markers occur in the interpretation. One might also consider researching other markers of informality, repeating the process performed in this study, and possibly combining them with any of the suggestions above.

References

Bauman, H. (2004). Audism: Exploring the metaphysics of oppression. *Journal of Deaf Studies and Deaf Education*, *9*, 239-346. Retrieved from http://jdsde.oxfordjournals.org/content/9/2/239.short.

Cokely, D. (1983). Metanotative qualities: How accurately are they conveyed by interpreters?. *The Reflector*, 5, 16-22.

Cokely, D. (1986). *The effects of lag time on interpreter errors. Sign Language Studies*, 53, 341-375.

Feyne, S., Nicodemus, B., & Nagle, K. (Eds.). (2015). Typology of interpreter-mediated discourse that affects perceptions of the identity of deaf professionals. In *Selected Papers from the International Symposium on Signed Language Interpretation and Translation Research.*, 49-70. Washington, DC: Gallaudet University Press.

Halliday, M. & Hassan, R. (1979) *Cohesion in English*, London: Longman Group Limited.

Humphrey, J. H., & Alcorn, B. J. (1995). *So you want to be an interpreter?: An introduction to sign language interpreting*. Seattle, WA: H&H Publishers.

Quinones, C. (2014, April 2). Formality vs. Informality. [Video file] Retrieved from www.slideshare.net/cjq11983/formality-vs-informality-in-english.

Valli, C. & Lucas, C. (1992). *Linguistics of American Sign Language: An introduction* (3rd ed.). Washington, DC: Gallaudet University Press.

Appendix A

This appendix originally consisted of the transcripts analyzed in this study, which are now presented in a separate document. The transcripts can be accessed through Google Docs through the following link:

https://docs.google.com/document/d/14NSC93Rm9mjlwWIkr9okn7tu41jr4IfIEpbRF5fcFLg/edit?usp=sharing

Appendix B

Data Spreadsheets

Interpreter 1

	A	B	C	D	E	F	G	H	I	J
1		sentences	marker 1	marker 2	marker 3	marker 4	marker 5	marker 6	total (markers)	avg lagtime
2	first minute	8	4			1		2	7	2.3 sec
3	minute 3	7	5		2			4	11	
4	minute 6	9	7				2		9	
5	minute 9	9	3		1		7	9	20	2.3 sec
6	minute 12	8	4		1		4	2	11	
7	minute 15	7	2				8	8	18	
8	last minute	10	3		1		6	5	15	
9	total	58	28		5	1	27	30	91	

Interpreter 2

	A	B	C	D	E	F	G	H	I	J
1		sentences	marker 1	marker 2	marker 3	marker 4	marker 5	marker 6	total	avg lag time
2	first minute	9	3	2	1	1	5	2	14	
3	minute 3	10	3	5	1		1	4	14	
4	minute 6	9	6		1		5	4	16	
5	minute 9	7	6	1	2	1	2	5	17	2.7 sec
6	minute 12	10	6	1			1	4	12	2 sec
7	minute 15	11	6	1	1		2	2	12	1.7 sec
8	last minute	9	7	2			5	2	16	
9	total	65	37	12	6	2	21	23	101	

Interpreter 3

	A	B	C	D	E	F	G	H	I	J
1		sentence	marker 1	marker 2	marker 3	marker 4	marker 5	marker 6	total	avg lag time
2	first minute	8				1	3	1	5	4 sec
3	minute 3	7	2		2		1	1	6	
4	minute 6	7	4				5		9	
5	minute 9	7	2		2		5		9	
6	minute 12	9	4				3		7	
7	minute 15	9	2		2		7	1	12	2 sec
8	last minute	9	3		1		7		11	
9	total	56	17		7	1	31	3	59	

Interpreter 4

	A	B	C	D	E	F	G	H	I	J
1		sentences	marker 1 (only)	marker 2	erroor 3	marker 4	marker 5	marker 6	total (markers)	avg lag time
2	first minute	5	2			1			3	5.7 sec
3	minute 3	5	3		1			3	7	
4	minute 6	7	5		2		1	1	9	
5	minute 9	8	7	1			1	4	13	
6	minute 12	6	4		1		1	4	10	
7	minute 15	7	2		1		3	9	15	4.7 sec
8	last minute	5	1	1	1		4	3	10	
9	total	43	24	2	6	1	10	24	67	

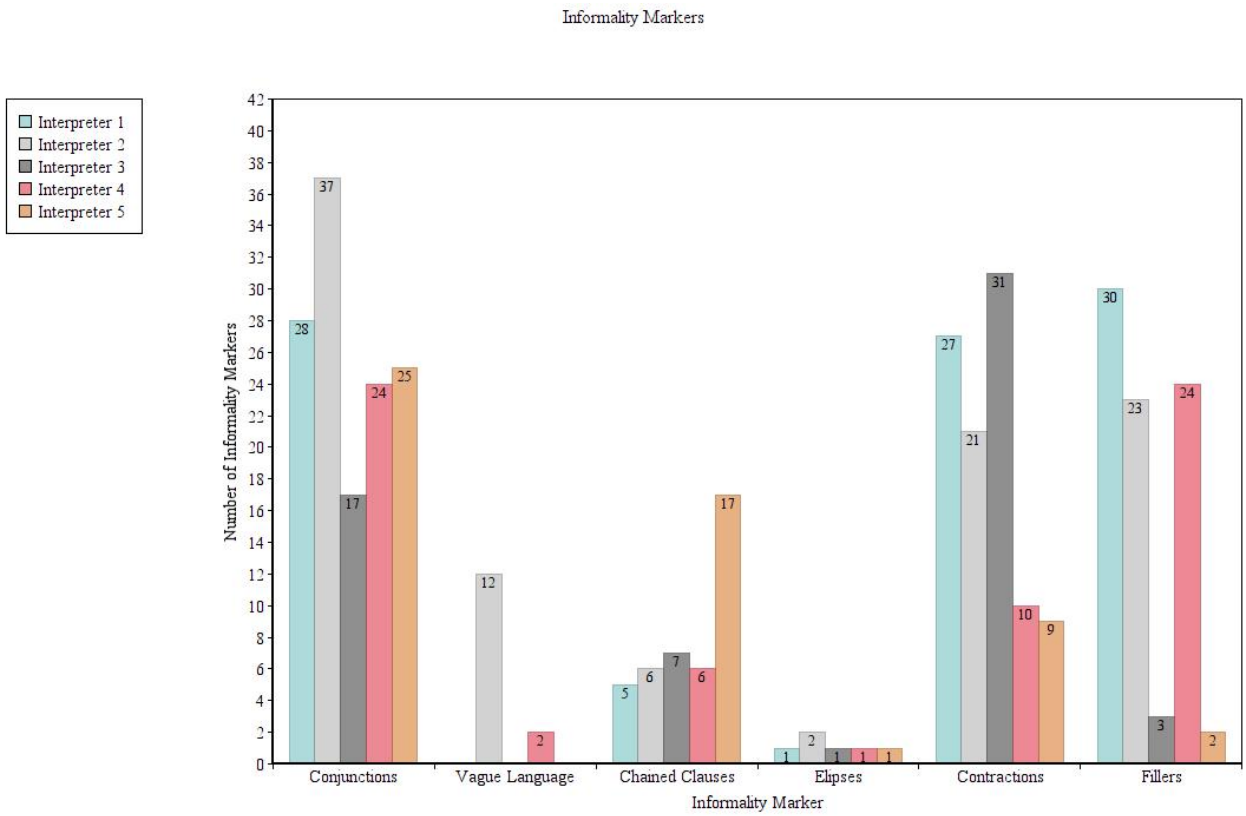
Interpreter 5

	A	B	C	D	E	F	G	H	I	J
1		sentences	marker 1 (only)	marker 2	marker 3	marker 4	marker 5	marker 6	total (markers)	avg lag time
2	first minute	8	5			1			6	2.7 sec
3	minute 3	4	3		4				7	
4	minute 6	8	5		2				7	
5	minute 9	6	4		3		4		11	1.7 sec
6	minute 12	6	1		2		2	1	6	2.3 sec
7	minute 15	7	5		4			1	10	
8	last minute	8	2		2		3		7	
9	total	47	25		17	1	9	2	54	

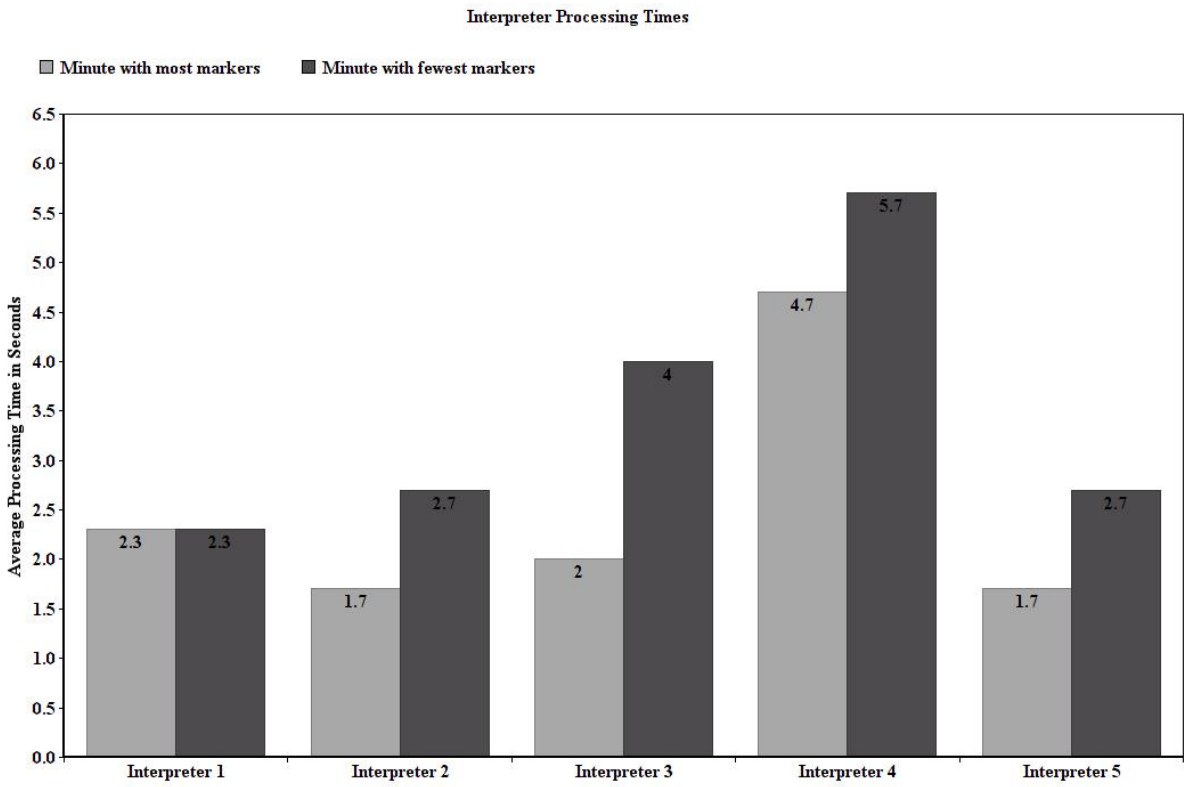
Appendix C

Bar Graphs

The following graph is a visual representation of each interpreter's use of each informality marker. Each interpreter is represented by a different color bar, and each marker is shown on the x-axis. Each bar is labeled with its numerical value, representing each interpreter's total use of each marker.



The following graph is a visual representation of each interpreter's average processing time when he or she each used the most and fewest markers. Each interpreter's minute in which he or she used the greatest number of informality markers is represented by the light grey bars, and each interpreters minute in which he or she used the fewest informality markers is represented by the dark grey bars. Each interpreter is represented on the x-axis, and the height of each bar represents the length of processing time.



The following chart shows the average number of markers per minute for each interpreter.

	Interpreter 1	Interpreter 2	Interpreter 3	Interpreter 4	Interpreter 5
Total Sentences	58	65	56	43	47
Total Markers	91	101	59	67	54
Average Markers per sentence	1.57	1.55	1.05	1.56	1.15