

University Interpreting: Linguistic Issues for Consideration

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This study describes Auslan/English interpreters' use of translation style when interpreting for a university lecture. Some interpreters switched translation style, between free and literal methods of interpretation, as a linguistic strategy for dealing with the sociolinguistic influences of the discourse environment. In particular, attention was paid to the interpreters' educational background (and therefore their familiarity with academic discourse), the linguistic features and lexical density of the text, and their influences on the interpretation. The key finding of the study was that Auslan/English interpreters predominantly used a free or literal interpretation approach, but switched between translation styles at particular points of the text, leading to the suggestion of the concept of "translational contact." The findings of this study are not only significant in Australia but can also benefit interpreters and interpreter educators internationally.

This article focuses on Australian Sign Language (Auslan)/English¹ interpreters working in university lectures and specifically considers Auslan interpreters' use of translation style as a linguistic strategy while interpreting for a university lecture and the sociolinguistic influences involved. The results of a survey of Auslan interpreters showed that of 125 interpreters surveyed, 48% had a university qualification. Fifty-four of the respondents stated that they interpreted in universities, and of these, 59% had a university qualification (Napier, 2001). In a similar study conducted with British Sign Language (BSL) interpreters, Harrington and Traynor (1999) also found that many interpreters work in higher

education without having completed a university education themselves. This raises the question of what linguistic strategies sign language interpreters might employ to cope with a university lecture if they are not familiar with the linguistic discourse environment.

Discourse Environment: Factors to Consider

The functional grammar approach to linguistics focuses on the purpose and use of language and examines spoken and written languages within the contexts of their usage. The relationship between words used and meanings derived is not regarded as arbitrary. Rather, language is determined as being functional, whereby meaning is created through the choice of words and the syntactic structure through which the words are produced (Gerot & Wignell, 1995). Thus, the study of language from a functional perspective, and therefore the study of interpretation of language, cannot be separated from the situations where language use takes place (Hatim & Mason, 1990).

Many writers have discussed the relationship between language, communicative interaction and context (such as Brown & Fraser, 1979; Crystal, 1984; Halliday, 1978, 1993; Halliday & Hasan, 1985; Hymes, 1967; Ryan & Giles, 1982; Sinclair & Coulthard, 1975), propounding the notion that all languages function within contexts of situations and therefore are relatable to those contexts. With this in mind, Halliday (1978) stated that the purpose of defining the context is not to question idiosyncratic use of vocabulary, grammar, or pronunci-

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ation; but rather to identify “*which* kinds of situational factors determine *which* kinds of selection in the linguistic system” (p. 32).

When considering the context of situation, one must allow for the setting, the participants, the intent and effect of the communication, the key points of the message, the medium and genre, and the norms of interaction within that particular setting (Crystal & Davey, 1969; Halliday, 1978; Hymes, 1967). If the context of situation influences language use and the linguistic choices that interlocutors make, the same context will inevitably influence the linguistic choices made by interpreters in their translations. Interpreters are engaged in a process of constantly assessing the components influencing the interaction participants and the source language they produce, in order to accurately account for these components within the target language production (Cokely, 1992; Roy, 2000a). Cokely (1992) stated that by examining the components affecting communicative behavior, it is possible for interpreters to “identify components that pertain to the context within which the interaction occurs and components that pertain to the nature of the communicative message itself” (p. 19).

By defining the nature of a communicative interaction, and establishing the context of situation, it is possible to predict what should be expected of interpreters when placed in those situations. The language variation that arises as a consequence of contextual and situational diversity is the biggest consideration for working interpreters, as they must be prepared to adapt their language use accordingly.

It is widely recognized among linguists that most spoken languages have a “linguistic repertoire” (Finegan, Besnier, Blair, & Collins, 1992; Wray, Trott, & Bloomer, 1998). Wardhaugh (1992) and Fromkin, Rodman, Collins, and Blair (1990) defined the difference between speaking formally or informally as language “style,” whereas the concept of “register” is described as “sets of vocabulary items associated with discrete occupational or social groups” (Wardhaugh, 1992, p. 49) and a change in grammatical rules (Fromkin et al., 1990). Different subject matters such as legal prose or cooking recipes are examples of different register variation, with the former using longer sentences, more archaic words, longer adverbial elements, and explicit repetition; whereas the latter uses short simple sentences, verbs in

the imperative mood, and prepositional phrases. Finegan et al. (1992) stated that language register is determined by a set of linguistic features, combined with characteristic patterns of how the language is used in different situations, yet with all varieties of the language relying on essentially the same grammatical system.

Joos (1967) devised the original model of register variation and postulated five different styles of communication, ranging through different levels of formality: frozen, formal, consultative, informal, and intimate. However, these registers were presented by Joos as discrete entities, and observation of language use demonstrates that overlap does occur. For example, speakers at formal functions may incorporate consultative or informal register norms into their presentations to create more of a rapport between themselves and their audiences. Similarly, teachers may use a more formal style and discourage interaction, even when they are in the consultative setting of a classroom (Humphrey & Alcorn, 1996). Therefore, the context of situation also needs to be taken into account, adopting more descriptive techniques as suggested by Halliday (1978).

There has been much debate within the field of sign linguistics research as to whether a linguistic repertoire exists in sign languages and whether in fact situational language variation exists. There is general agreement within the literature, however, that it does exist (Davis, 1989; Deuchar, 1979, 1984; Fontana, 1999; Lee, 1982; Llewellyn Jones, 1981; Llewellyn Jones, Kyle, & Woll, 1979; Lucas & Valli, 1989, 1990; Stokoe, 1969; Woodward, 1973; Zimmer, 1989). It is widely accepted that sign language variation exists across age, social class, educational background, and geographical location in the form of accents and dialects (Deuchar, 1984; Kyle & Woll, 1985); yet one key issue for researchers has been the “continuum” of sign language varieties that can exist simultaneously within one Deaf community, influenced by the notion of language contact.

Lucas and Valli (1989) stated that “one of the major sociolinguistic issues in the deaf community concerns the outcome of language contact” (p. 11), in the fact that a specific kind of signing exists as a result of contact between signed and spoken languages.

Woodward (1973) claimed that this contact variety is a pidgin, which results from interaction between deaf and hearing people. Cokely (1983), Lucas and Valli

(1989, 1990), and Davis (1989), however, refuted this claim. Cokely referred to criteria normally required as preconditions for the development of a pidgin language (asymmetrical spread of the dominant language, relatively closed network of interaction, and attitude of a significant number of users that the emerging variety is a separate entity), to illustrate that language contact between American Sign Language (ASL) and English has not necessarily led to the emergence of a pidgin. Instead, Cokely argued that the interaction of “foreigner talk,”² judgments of proficiency, and learners’ attempts to master the target language results in a continuum of language varieties within ASL.

Lucas and Valli (1989, 1990) described the characteristics of language contact between ASL and English as code-switching and code-mixing, whereby English words are mouthed on the lips or manually coded (fingerspelled) while the signer is still using linguistic features of ASL. Lucas and Valli and Fontana (1999) suggested a variety of sociolinguistic factors that influence the use of code-switching and mixing between a signed and a spoken language, including lack of familiarity between participants, and, more important for the purposes of this article, associated with the formality of a situation. According to Lucas and Valli, more English “interference” occurs in more formal situations (such as lectures), when technical or specialized terms are used, and thus are incorporated into ASL in the form of mouth patterns or fingerspelling.

Use of contact language in the interpretation of a university lecture may occur for very specific reasons, especially in relation to fingerspelling, due to the fact that it is a formal learning environment. Rather than an English word being fingerspelled due to lack of an Auslan equivalent, English words can be fingerspelled for emphasis of terminology or specialized vocabulary. Therefore, even if no lexicalized sign exists, an interpreter might choose to borrow the English word into Auslan and fingerspell the lexical item, as well as paraphrasing with explanation, to ensure that his or her target audience is accessing the subject-specific vocabulary and its meaning.

Lectures have been defined as situations whereby one participant in the interactive discourse is in control, selects the subject matter, and decides when the discourse should start and finish (Goffman, 1981). Lec-

tures can therefore be characterized as nonreciprocal monologues, or “expository monologues” (Cokely, 1992, p. 27). A typical expository monologue relies on topical or logical linkage, as opposed to the inherent chronological nexus often observed in narratives (Longacre, 1983). The focus of expository monologues tends to be a theme or set of related themes, rather than participants, such as in narratives. Longacre noted that effective expository discourse should inherently incorporate an effort to ensure clarity of information, especially when people receiving the discourse may not have the necessary background knowledge (such as in a university lecture).

In focusing on characteristics of a lecture, and the language production within this discourse genre, Goffman (1981) highlighted three different modes of speech production that establish presenters on a different “footing”³ with their audience. These modes are memorization, reading aloud, and fresh talk. He stated that lecturers often choose to read aloud from prepared texts, which influences the reception and responsiveness of an audience. According to Goffman, people may choose to read out printed text, rather than spontaneously provide fresh talk, due to different dynamics of written and spoken texts, which imply that written language has more status.

Goffman (1981) asserted that the register of language used in a lecture is important in defining the relationship between speaker and audience. Therefore, although perceptions of “good writing” and “good speaking” are systematically different, people will often choose to read aloud previously prepared texts when delivering a lecture, as printed text tends to be more coherent than spontaneously produced spoken text.

This finding has implications for interpreters who are working in university lectures, as Halliday (1978) suggested that academics often deliver lectures using a written language structure of speech production (even if they are not reading aloud from previously prepared text). Halliday argued that academics are so influenced by their environment and the assumption of literate intelligence of university students that they produce lexically dense spoken text when lecturing. Lexically dense spoken text is characterized by its conformity to typical written language structure, with a higher number of lexical words than grammatical words.

Lexical density typically determines the difficulty of a piece of text, especially of written language, by counting the number of orthographical words in a text, then dividing by the number of words with lexical, rather than grammatical, properties to arrive at a percentage (Crystal, 1995; Halliday, 1985; O'Loughlin, 1995; Richards, Platt, & Platt, 1992; Ure, 1971). Typically, spoken text has complex sentences with simple words, whereas written text has complex words in simple sentences, which Halliday (1985) suggested is because writing is static, compared with speech, which is dynamic. As a consequence, spoken language tends to be less lexically dense than written language (Halliday, 1985).

In reporting lexical density of text, calculations can be presented in the following way. If a piece of text has a ratio of 12 lexical words to 8 grammatical words, the proportion of lexical words can be seen to be 12 out of 20; therefore, the lexical density of that particular piece of text would be 60%. Ure (1971) used the above application to analyze alternate spoken and written texts and developed a list of typical density percentages. The various spoken texts (including informal dyadic conversation, storytelling, radio interview, and sports commentary) were found to have a range of lexical density from 23.9% to 43.2%, with an average lexical density of 33%. The written texts (including school essays, children's stories, manuals, and newspaper reports), in contrast, had a range from 35.8% to 56.8%, with an average lexical density of 46%. In relation to the spoken texts, he found that all the texts with a density of 36% or more were monologues, whereas all those under 36% involved some form of interaction. Ure found that a typical spoken lecture had a lexical density of 39.6%.

Translation Style

It is widely accepted among interpreters, interpreter educators, and researchers that in order for interpreters to provide discourse participants with a sociocultural framework in which to effectively interact, interpreters must be bilingual and bicultural. Being bicultural and bilingual is not enough, however, as interpreters need to have the tools to determine what something means to their target audience and the best way for a message to be interpreted in a meaningful way, in order for it to

make sense according to the audience's cultural norms and values. Therefore, not only do interpreters need to understand sociolinguistic and sociocultural contexts of their audiences' world view but they also need to utilize appropriate translation styles to ensure that they have the facility to convey the meaning of a message within a sociocultural framework.

Several writers have drawn on "frame theory" to explain the inferences made by interpreters about what is meaningful to interlocutors for whom they are interpreting (Hatim & Mason, 1990; Metzger, 1995, 1999; Wilcox & Wilcox, 1985). Frame theory provides an explanation for how people categorize their knowledge, based on their experiences with similar situations, and thus may use lexical, grammatical, and experiential knowledge to make judgments about a discourse situation and its participants. By using their contextual knowledge of both communities, their languages and cultures, and subsequently making assumptions and judgments about what their audiences mutually understand, interpreters can ensure they make any interpretation linguistically and culturally effective for all participants. Interpreters will make specific language choices according to their frames of reference, what certain concepts mean to them, and inferences they make about what concepts will mean to their source and target language audiences from a cultural perspective (Napier, 1998a, 1998b, 2000). To ensure that their audiences are making the same inferences about the message they are receiving, interpreters need to search for linguistic and cultural equivalents. It is not sufficient to search for directly translatable words in each language, as sociocultural contexts may alter the way certain expressions are understood. The most appropriate and dynamic translation style to use, in order to apply the fundamentals of frame theory and perform effectively as a linguistic and cultural mediator, is "free interpretation."

The key to free interpretation is in the assumptions brought to, and the inferences made during, any interpreting assignment. By making assumptions about members of the audience, the interpreter can make considered choices throughout the translation, by making inferences about their cultural and linguistic understanding of the topic being discussed, and can transpose cultural meaning appropriately (Hatim & Mason,

1990). Too often interpreters focus too closely on a syntactical, lexical interpretation, relying on the form of the language. The ability to paraphrase the meaning of an utterance, and therefore impart cultural significance, can be more important than the ability to translate “word for word” by concentrating on the form of the message. Free interpretation, therefore, can be regarded as “the process by which concepts and meanings are translated from one language into another, by incorporating cultural norms and values; assumed knowledge about these values; and the search for linguistic and cultural equivalents” (Napier, 1998a, 1998b, 2001), as opposed to a “literal interpretation,” which means that “the linguistic structure of the source text is followed, but is normalised according to the rules of the target language” (Crystal, 1987, p. 344). Much of sign language interpreting literature refers to literal interpretation as “transliteration” (Cerney, 2000).

Some writers have suggested that literal interpretation is the most appropriate translation style to be used in higher education (Pollitt, 2000a; Siple, 1995), for example, in order to provide access to academic English. Looking ahead, however, this study indicates that in order to give consideration to the linguistic influences of the university discourse environment, interpreters switch between translation styles as a linguistic strategy to provide effective and accurate access to university lecture content.

Davis (1989, 1990a, 1990b) discussed the impact on interpreters’ translation style when interpreting in a language contact environment, by analyzing the linguistic interference and transference that took place when two lectures were interpreted from English into ASL. He defined linguistic interference as the rules of one language being transferred to the other, as opposed to linguistic transference, which was defined as the transfer of material from the source language while the rules of the target language are maintained. In his analysis of the data, Davis focussed on the occurrence of code-switching, code-mixing (switching within a sentence or clause), and lexical borrowing within the interpretations of the lectures and found that linguistic interference happened far less than linguistic transference. He identified a rule-governed approach to code-mixing (transference), as the interpreters used it in very similar ways when making

their language choices. For example, the interpreters used the mouthing of English words simultaneously with the production of ASL signs for nouns, question words, numbers, and fingerspelled words.

Davis (1989, 1990a, 1990b) described transference as a linguistic strategy used to avoid any vagueness or ambiguity within an interpretation, with interpreters encoding English forms in their ASL output, thus switching to a more literal translation style. He noted that when interpreters encoded English forms visually, they used systematic markers to elucidate discontinuities between ASL and English. For example, they used the ASL sign for “quotation markers” before and after fingerspelling a lexical item to emphasize a lexical item that was not ASL. On the other hand, Davis described “interference” as the incorporation of encoded English into ASL output, which actually interferes with the propositional content of the message, and is “sporadic and unsigaled” (p.308), without the patterning noted with the systematic use of markers when fingerspelling and mouthing. It can be argued, therefore, that the transference skills that Davis (1989, 1990a, 1990b) highlighted can be regarded as a linguistic strategy, in that interpreters made conscious decisions about the language choices they made to clarify information within the interpretation and thus adapted their translation style accordingly. Interpreters will particularly switch between translation style as a linguistic strategy when interpreting for lexically dense text.

According to Messina (1998), previously prepared texts that are read out verbatim create more problems for interpreters than spontaneous speech. He cited the “peculiarities of written texts and how they are usually delivered by speakers” as being the main reason affecting an interpreter’s performance (p. 148). In this regard, Messina is referring not only to the grammatical simplicity and lexical density of written text but also to the prosodic features of speech delivery when reading text aloud. Some examples include monotonous intonation, faster rate of delivery, and lower frequency of pauses. Balzani (as cited in Messina, 1998) studied interpreters’ performances when working from a written text that was read out and found that more mistakes were made. The notion of text being read out, however, is not the only difficulty for interpreters. Spoken texts that are not

necessarily read out verbatim, but which are well prepared, may also be lexically dense and thus provide a challenge to interpreters.

Interpreters, therefore, may face difficulties in interpreting for any spoken text that is more lexically dense than usual, that is, has a lexical density of more than 33% (Ure, 1971). A university lecture is a good example of the kind of source text that may prove challenging for an interpreter, especially when considering the point made by Halliday (1978), that academics often deliver lectures using a structure of language more typical of written than spoken language.

The lexical density of university lectures also has implications for how deaf people will access information through sign language interpreters. As sign language has no conventional written orthography, a deaf audience may have no frame of reference for what a lexically dense interpretation into Auslan should look like. This situation presents a challenge for sign language interpreters in that they have to decipher the meaning of a text and decide which lexical items are the most important to convey. Sign language interpreters have to take into account the following issues: the language contact situation of interpreting between English and Auslan, what the norms of sign language production would be for a lecture in general, what cultural relevance certain lexical items may hold, and their linguistic and cultural equivalents. The "contextual force" (Isham, 1986) of the message on the receiver ultimately should be as much as possible the same for both deaf and nondeaf audiences.

Nida (1998) summarized the sociolinguistic and sociocultural contexts that require consideration throughout an interpretation into four categories: (1) the appropriate language register to be used in the context, (2) the expectations of the target audience as to the type of translation they expect to receive, (3) distinctive sociolinguistic features of the source text, and (4) the medium employed for the translated text (i.e., written or spoken). For sign language interpreters working with deaf students in a university lecture, there are additional sociolinguistic and sociocultural factors to consider, as well as the lexical density of the text.

Educational interpreting is unique to sign language interpreters (Bremner & Housden, 1996) and requires special skills (Saur, 1992). The skills employed by interpreters have to be adapted to allow for conditions specific

to the university discourse environment, so that educational interpreters can effectively contribute to the academic achievement of deaf students (Paul & Quigley, 1990). The interpreter needs to consider his or her role in an educational environment and the fact that deaf people may be disadvantaged when compared to other university students. Although all university students may attend lectures without any background knowledge to the subject, and thus lack familiarity with subject-specific terminology, the interpreter is faced with the task of deciding how to provide an interpretation that is linguistically and culturally sensitive, incorporating meaningful equivalents, while still providing deaf students with the opportunity to access specialized terminology that may be important for them to know to fully understand the subject of the lecture and pass examinations.

This context presents sign language interpreters with a dilemma of whether to freely interpret the content of a lecture or whether to establish a language contact situation that occasionally relies on the finger-spelling of English words and possible use of literal interpretation. In light of the interpreter's knowledge of the consumer's language and his or her knowledge of the topic and its terminology, the interpreter needs to decide which concepts should be interpreted into Auslan equivalent and which terms should be rendered literally. The interpreter's decision making will be influenced by how he or she perceives his or her role in this discourse environment. The current thinking is that interpreters should present themselves as bilingual and bicultural mediators, who make linguistic decisions based on their cultural knowledge of the groups for whom they are interpreting and their knowledge of interactional norms. In making decisions as to whether deaf students need to access subject-specific terminology, interpreters should not perceive their role as educators, but rather as linguistic decision makers.

I posited earlier that interpreters should employ a process of free interpretation to best meet the needs of a deaf audience. Pollitt (2000a) conversely suggested that a more literal approach would be appropriate in education, undoubtedly to allow for the need to provide access to English terminology. I postulate here, however, that sign language interpreters working in university lectures should switch translation style, between free and literal methods, as a linguistic strategy to enhance their

decision-making process and their interpretation output. Use of this linguistic strategy would therefore give deaf students access to specialized vocabulary when appropriate (through incorporation of fingerspelling in a literal interpretation), while providing a meaningful, conceptually accurate and culturally relevant message (through free interpretation).

Interpreting in the University Setting

One of the major considerations for interpreters working in universities, according to Stewart, Schein, and Cartwright (1998), is subject matter. In an ideal world, it would be possible to place interpreters with deaf students according to their background knowledge. Unfortunately, in reality, with the shortage of available interpreters, this is not the case. Due to the wide range of subjects studied by deaf students (Bremner & Housden, 1996), interpreters are often assigned to interpret for subjects they know nothing about and are given few opportunities for preparation according to V. Woodroffe, coordinator of university interpreting services (personal communication, December 8, 1999).

Lawrence (1987) conducted a study of 20 educational interpreters in order to document differences in prepared and unprepared interpretations. He found that preparation, and therefore some knowledge of subject matter, lead to more accurate interpretations. Eighinger (2000) clearly stated that when required to interpret for deaf students studying toward a tertiary level degree, interpreters should never accept work that involves interpreting at an educational level higher than they have achieved themselves.

In addition to subject and linguistic knowledge, understanding of the discourse environment and its language use is imperative. Roy (1987) studied the outcomes of an interpretation of a university lecture translated from ASL into spoken English and the impact of the message on an audience. She found that although the interpreter was conceptually accurate in her translation of content, the tenor of the interpretation was inappropriate for a university lecture, as the interpreter used speech patterns typical of children's storytelling. Roy's study demonstrates the importance for interpreters to consider the discourse environment, and the relationship between the discourse environment

and language register, in order to make appropriate linguistic choices within an interpretation. With regard to the interpretation of a university lecture, interpreters should consider the "global" message and the intent of the lecturer, as well as the information presented.

Johnson (1991) reported on ASL interpreters' abilities to facilitate communication in classroom interaction, as well as their ability to convey the content of a university lecture. Johnson noted that the most consistent problems occurred particularly when interpreters were unfamiliar with the subject and also when it was necessary for them to render a verbal description of a diagram into ASL. As a consequence, Johnson argued that deaf students are often left out of classroom interaction, or misinterpret the content of lectures.

Harrington (2000) analyzed the relationships and dynamics between university lecturers, deaf and hearing students, and BSL interpreters. The express goal of his study was to identify access issues for deaf students in university settings and whether interpreters were adequately meeting the needs of deaf students. Harrington observed issues that affected the interpreters' abilities to successfully communicate the message and therefore had an indirect impact on the general interaction within the classroom. One example involved interruptions from hearing students when the lecturer was addressing deaf students, and the dilemma interpreters experienced when more than one source message was being received at the same time, and which should be given priority for translation. Another example was in relation to a deaf student asking for clarification of a sign used by an interpreter. By the time the interpreter had explained and repeated his lexical choice, and the student asked a question about the concept, the lecture had moved on considerably; thus, the lecturer regarded the question raised by the deaf student as an unnecessary distraction. Harrington stated that the interpreter's unfamiliarity with the subject of the lecture may have contributed to the breakdown and noted that a common issue raised within the study was a lack of preparation materials for educational interpreters.

Locker (1990) looked specifically at the effectiveness of transliteration (literal interpretation) for accurately conveying the content of a university lecture and identified three types of frequent errors. These errors were defined as misperception of the source message,

lack of recognition of the source form, and failure to identify a target language equivalent. Locker analyzed the output of six ASL interpreters for “non-equivalent meanings resulting from lexical choices in the target form of the message” (p. 174) and found that three of the interpreters produced lexical errors, all of whom had no university qualifications. The three who did not produce any lexical errors had all completed a university qualification and were therefore more familiar with the academic discourse environment.

Thus far, several linguistic issues have been presented for consideration in relation to sign language interpreting in university lectures. The notion of discourse environment and contexts of situation have been introduced, and discussion of the lecture as a discourse genre, language variation, and lexical density of text has established the university lecture as a challenging discourse environment in which interpreters work. Interpreters’ linguistic strategies for coping with challenging discourse has also been discussed in relation to translation style, whether interpreters use free or literal interpretation methods, and which is more appropriate in which context. It has been suggested that interpreters should switch translation style to effectively deal with the complexity of university discourse and to provide deaf students with access to academic text. The rest of this article describes a study of sign language interpreters’ use of translation style while interpreting for a lexically dense university lecture, with the identification of linguistic issues that influenced the switching of translation style between literal and free interpretation methods.

Method

The aim of this study was to analyze the use of translation style by Auslan interpreters in a lexically dense university lecture. The lecture had been determined as having a lexical density of 51%. This level of density is 18% higher than the average spoken lecture (Ure, 1971); therefore, the source text was considered to be lexically dense.

Participants

The participants were 10 Auslan interpreters (nine women, one man) who had responded to a survey

(Napier, 2001) and indicated willingness to participate in an empirical study. All the interpreters were professionally accredited through the National Authority for the Accreditation of Translators and Interpreters and were a representative mix of the Auslan interpreting population. Six of the participants were native signers, with the other four having learned Auslan as an adult. Six had completed university education, two were studying toward undergraduate degrees at the time of the research, and two had never studied at university. All of the interpreters had some experience of university interpreting, but only five of the participants were familiar with the lecture topic.

Source Text

The source text was taken from a previously videotaped university lecture, which was delivered in English as part of a postgraduate degree program in Special Education (Sensory Impairment). The topic of the lecture was signed language acquisition of deaf children and had previously been interpreted by another professionally accredited Auslan interpreter, thus authenticating the “interpretability” of the lecture. The actual lecture lasted approximately 2 hours, although only the first 30 minutes of the lecture were used for the purposes of this research.

Procedure

Each interpreter was told the title of the lecture, given a list of proper nouns used during the lecture, and told that their target audience was a deaf first-year university student with some basic knowledge of the lecture topic. They were permitted to watch the first 10 minutes of the lecture to familiarize themselves with the content and pace of delivery, before being videotaped interpreting for the next 20 minutes. Throughout the procedure, a deaf person was present to act as a “receiver” for the interpretation. Interpreters often rely on feedback from their clients (in the form of facial expression, etc.) to gauge whether their interpretation is being understood and whether they need to make any adaptations (Brennan & Brown, 1997). For the purposes of this study, as well as being told to visualize their target audience in a particular way, the interpreters were able to maintain eye contact

with a real deaf person, thus making the interpretation process as authentic as possible. The same deaf person received the Auslan interpreted lecture from all participants and acted as a target for the interpreting output. Several writers have commented on the negative impact of not having a deaf target audience when analyzing the work of interpreters (such as Maroney & Singer, 1996; Napier, 1998b); therefore, it was considered a necessary component of the data collection.

On completion of the interpretation, the interpreters participated in a retrospective interview, where they discussed their feelings about the interpretation, and the factors that may have influenced their ability to cope with the lecture content. This interview was also videotaped.

Analysis

The interpreters were classified according to their dominant translation style. The classification process involved the transcription⁴ of three interpreted sentences randomly selected from different places within the source text, with a dominant approach being defined as two out of three, or all three sentences, being interpreted using the same style (i.e., free or literal). It was acknowledged that the interpreters might have code-switched between different approaches, depending on the content and speed of delivery at different parts of the lecture.

The dominant translation style of each interpreter was then cross-referenced with his or her educational background and with linguistic features of the source language (idiomatic, terminological, or academic English), and a linguistic feature of the target language (use of fingerspelling), to determine the relationship between these sociolinguistic features and the occurrence of switching between translation styles.

Results

Six of the interpreters were found to use a dominantly free interpretation approach, with two out of the six being extremely dominant, whereby they did not code-switch between free and literal interpretation methods. The other four subjects used a dominantly literal approach, with three of the four being extremely dominant. (Refer to Appendix 2 for definitions and examples

Table 1 Dominant translation style and educational background of each subject

Subject	Translation style	Level of postsecondary qualification
2	Extreme dominant literal	None
3	Extreme dominant literal	None
10	Extreme dominant free	Undergraduate
7	Dominant free	Undergraduate
9	Extreme dominant free	Postgraduate
1	Dominant literal	Postgraduate
4	Dominant free	Postgraduate
6	Dominant free	Postgraduate
8	Dominant free	Postgraduate
5	Extreme dominant literal	Postgraduate

of free and literal interpretations and extreme dominant and dominant interpretations.)

There did not seem to be any major relationship between the translation style and level of education of each interpreter, as can be seen in Table 1. Five of the subjects who were dominant in their use of free interpretation held postgraduate qualifications, and two had almost completed undergraduate qualifications. Only two subjects had no postsecondary qualifications at all, and both of them used an extremely literal approach. Although it was originally foreseen that those with less education might rely more on literal translation if they were less comfortable with the academic discourse, this assumption was negated by the fact that one other subject with a postgraduate qualification also employed an extremely dominant literal approach.

Although the interpreters were not asked specifically to comment on their switching of translation style during the retrospective interview, it is possible to speculate on why some interpreters might have chosen to employ such a literal method and the issues that informed their decision making. For instance, the subjects who were university qualified may have made a decision to use literal interpretation as they felt it was the more appropriate method to use in a university context, rather than due to lack of understanding of the academic discourse. The two interpreters who were not university educated may have made their decision based on lack of familiarity with the discourse environment. They could, however, just as easily have made their decision based on their understanding of university lectures and what they

felt was the appropriate translation style to be used. During the retrospective interviews, all of the interpreters commented in some way on their familiarity (or lack of) with the level of language used and the fact that the extent of their familiarity influenced their ability to adequately understand and make appropriate translation choices. One interpreter did specifically raise the issue of translation style during the retrospective interview, which sheds some light on the processing of decision making for at least one of the interpreters: "Around about this time I started to realise 'I can use more English!' It's okay, I can spell specific words. It was just about then that it occurred to me. Some things I could've escaped with by fingerspelling, but I was trying to give an interpretation, you know?"

Although there does not seem to be a tangible link between translation style used and educational background, consistent patterns could, however, be identified between translation style and what Davis (1989, 1990a, 1990b) referred to as linguistic transference, in this case, fingerspelling.

Translation Style and Linguistic Transference

Aside from fingerspelling of names, which would be the norm (Johnston, 1998), and the use of lexicalized fingerspelling where fingerspelled English words have been assimilated into Auslan (Schembri, 1996); certain lexical items were consistently fingerspelled by the majority of the subjects. The amount of fingerspelling used by the subjects was consistent with typical Auslan use, in that borrowing of English words into Auslan in the form of fingerspelling frequently occurs. Johnston (1998) stated that the manual alphabet is often used in Auslan for the "fingerspelling of English words for which no direct sign equivalent exists or when there is a particular need to use an English word" (p. 591), as well as the use of lexicalized fingerspelling.

It can be argued that in a university context it would be important for a deaf student to receive key English words, as the terminology would be central to the comprehension of the topic. This argument would be supported by Bremner and Housden (1996), who reported that Australian deaf postsecondary students preferred interpreters to fingerspell technical or subject-specific

words that did not have an existing sign, rather than making up a sign.

Notwithstanding the appropriateness of fingerspelling in Auslan, the interpreters used fingerspelling differently for content or grammatical (function) words, depending on their translation style. From initial observation, it seemed that dominant literal interpretations incorporated more fingerspelling than dominant free interpretations. For example, one subject who was extremely dominant in using a free approach (i.e., did not code-switch at all) fingerspelled only one word in a particular sentence, compared to another subject who was extremely dominant in a literal approach, who fingerspelled eight different words in the same sentence. Examples from subjects using a dominant free approach and dominant literal approach are shown in examples 3 and 4 in Appendix 2.

The number of times each subject fingerspelled a lexical item throughout the whole 20-minute piece of interpretation was counted, and there was in fact no direct relationship between translation style and the amount of linguistic transference. Table 2 provides a breakdown of the number of fingerspelled lexical items produced by each subject.

On closer analysis, however, there was a relationship between the interpreters' translation style and what words were fingerspelled, rather than how many words were fingerspelled. Again, it is possible to speculate about why some subjects would incorporate more fingerspelling into their interpretations than others. First, they may have made a conscious decision, as a linguistic strategy, to fingerspell key words they identified as being important for the student to know. Alternatively, they might not have been aware of an existing equivalent Auslan sign for those words, or they may not have understood the meaning of the words in the context of the lecture and therefore did not know what would be the most appropriate equivalent sign to use. The major difference noted, however, between those dominant in using a free or literal interpretation approach was in relation to the fingerspelling of content or function words.

There was a corpus of content words that the interpreters were expected to fingerspell, regardless of translation style, that is, the names of people or places. Regardless of the translation style, it would be the norm for

Table 2 Number of fingerspelled lexical items per subject

Subject	Translation style	No. of fingerspelled lexical items	No. of aborted fingerspelling attempts
2	Extreme dominant		
	literal	271	5
6	Dominant free	172	1
5	Extreme dominant		
	literal	141	3
8	Dominant free	115	1
4	Dominant free	114	2
1	Dominant literal	100	2
3	Extreme dominant		
	literal	93	5
9	Extreme dominant		
	free	85	1
7	Dominant free	83	2
10	Extreme dominant		
	free	78	2

An aborted fingerspelling attempt was counted when an interpreter began to fingerspell a word then stopped, and either began fingerspelling a lexical item again, or chose to use a sign instead.

interpreters to fingerspell a name at least once when it is first introduced. Their linguistic strategy could then involve either establishing the person or place as a location in space, after which the same location would be referred to every time the name was used, or they could choose to fingerspell the name each time it is mentioned. In relation to function words, fingerspelling of the words “if” and “do” were considered appropriate, as they are commonly recognized as words that have been lexicalized into Auslan. Similarly, the word “to” is fingerspelled in specific contexts as a function word when it is not automatically incorporated into a directional verb, such as “give to.” For example, in the context of the sentence “a mother will adjust her language to meet the needs of . . .,” it would be acceptable for the word to be fingerspelled. With regard to the word “so,” it was confirmed by a sign language linguist and a sign language teacher that this function word is commonly used in Auslan as a discourse marker to signify the beginning of a new topic, or for emphasis, and as no sign exists, it is fingerspelled (T. Johnston, personal communications, January 12, 2001; R. Adam, January 14, 2001).

It was expected, therefore, that the interpreters would fingerspell the content and function words described above, regardless of their translation style. The

biggest difference noted was the way in which the interpreters dominant in a free approach seemed to use linguistic transference as a linguistic strategy, especially in relation to lexical words. As mentioned earlier, all the interpreters tended to fingerspell lexical words that could be classed as technical, subject-specific terminology, such as COGNITIVE, PRECOCITY, MODALITY, CO-ACTIONAL DUETING, and MOTHERESE. It seemed, however, that the interpreters using a dominant free approach strategically switched to literal borrowing from English to convey information and enhance the meaning of the message, while accounting for the needs of university students to access academic English. The interpreters in this group tended to translate the concept into a meaningful visual Auslan rendition, plus fingerspell the lexical item to introduce the English terminology. Those interpreters dominant in a literal approach, however, only fingerspelled the subject-specific content words and did not translate the meaning. They also experienced more linguistic interference and fingerspelled English function words other than those identified above, which would not ordinarily be fingerspelled in Auslan, including conjunctions such as *if, so, or, then, that, than, but*; prepositions such as *as, at, of, by*; and auxiliary verbs such as *be* and *did*.

Thus, it can be seen that Auslan interpreters who dominantly used a free interpretation approach seemed to use linguistic transference as a linguistic strategy and switched to a literal approach to complement paraphrasing with a fingerspelled lexical item and enhance the contextual force of a message, thus supporting the findings of Davis’s (1990a) study of ASL interpreters.

On closer inspection of the points where translation style switching occurred, lines of text featuring subject-specific lexical items, such as those noted above, had higher than average lexical density.

Translation Style and Lexical Density

As mentioned earlier, the overall lexical density of the university lecture text was calculated at 51%. According to the same calculation method, the average lexical density for a random line of text was calculated at 47.6%. This figure was reached by adding the total number of words on the first line of each page of text,

Table 3 Higher than average lexically dense lines of text

% of lexical density	Lines of text
62.5%	Line 58: What some people, or we can refer to Line 59: <i>as precocity or precociousness in, erm, sign language acquisition. There's very much a</i> Line 60: sort of an idea there in people's minds that children learning a sign language, acquire sign Line 61: language earlier than children acquiring a spoken language . . . Line 87: Erm, as I said, we don't have time to go into it tonight, but some of the work on early sign Line 88: language acquisition has, erm, made some interesting points in that regard and led a lot of Line 89: researchers to challenge the notion that that's the necessary relationship in quite the, the
62.5%	Line 90: <i>lock-step way that Piaget and others were suggesting. And the last issue that, again, we</i> Line 91: won't have time to go into tonight is the . . . issue of nativisation and denativization.
71%	Line 103: Where there's been a long tradition of oral education and Line 104: <i>very little El Salvador! El Salvador! And very little, er, use of sign language, and there's</i> Line 105: evidence on kids acquiring, sort of, linguistic or universal characteristics of sign language Line 106: in the absence of good input, and then gradually as more and more exposure to a formal Line 107: sign language occurs, denativising and moving towards that particular, erm, set of sign Line 108: language rules and features. Line 114: Erm, and a number of authors over a long period of Line 115: time have, and Snow, that we talked about last week, Catherine Snow? Who's been so
57%	Line 116: <i>vocal on the issue of erm, er . . . critical period hypothesis, thank you!</i> Line 117: has done an enormous amount of work on this.

The highlighted line is the lexically dense line shown within the context of the full sentence or sentences in which it appears.

then dividing each total by the number of lexical items on that line to arrive at a percentage. Of the eight lines of text selected at random, three were of average lexical density, two were above and three were below the average. Four different lines of text that had higher than average lexical density (i.e., higher than 47.6%), plus featured a switch of translation style through the use of linguistic transference, are highlighted in Table 3.

The occurrence of linguistic transference, and therefore the switching of translation style between free and literal interpretation methods, was typical for lines of text with higher than average lexical density and particular features of language use: (1) unfamiliar (possibly academic English) or subject-specific terms, for example, "precocity" and "precociousness" in line 59 and "critical period hypothesis" in line 116; (2) idiomatic English, for example, "lock-step way" in line 90; and (3) names of people or places, for example, "Piaget" in line 90 and "El Salvador" in line 104.

It would seem that there is a relationship between use of translation style and lexical density of text. The more complex the concept, the more content (rather than function) words are used in a sentence, therefore, the higher the lexical density of that sentence. If a sen-

tence presents terminology or subject-specific lexical items, it is inevitable that this category of lexical item will appear in a lexically dense sentence. Thus, based on this superficial analysis, it would appear that the lexical density of text does influence the decision-making process of interpreters to switch translation style as a linguistic strategy.

It is arguable, however, that it is not the lexical density alone that influences the switching of translation style, but the lexical items themselves. If interpreters are familiar with content words being used in lexically dense parts of text, they may be more likely to finger-spell the item, as well as provide a conceptually accurate rendition of the meaning. It is also conceivable that interpreters may generally experience difficulties in interpreting lexically dense text, dependent on the presentation style and whether the text is read out or spontaneous. To establish the extent to which the lexical density of a text affects the use of translation style, it would be necessary to analyze interpreters' switching between free and literal methods while interpreting for a lexically dense piece of prepared text that is read out, or when interpreting for different texts with alternative percentages of lexical density. These preliminary find-

ings do suggest, however, that there is a relationship between the lexical density of the source text and the translation style of interpreters.

Discussion

Translational Contact

The results of the analysis show that the interpreters involved in this study had a dominant interpretation approach, using either a free or literal interpretation method, even if they code-switched between approaches during the interpretation. A spectrum was identified that demonstrated that the interpreters were either extremely literal or extremely free, or code-switched between literal and free, but were still dominant in one style or the other. Of the 10 participants involved in the study, one was dominant in using a literal approach, three were extremely dominant in using a literal approach, four were dominant in using a free approach, and two subjects were extremely dominant in using a free approach.

The majority of recent literature on spoken and sign language interpreting advocates for a free, equivalence-based, approach to interpreting, as this allows interpreters to make linguistic and cultural decisions based on their knowledge of the communities with whom they work. It can be argued, however, that sign language interpreting in university settings may require a more flexible approach due to the sociolinguistic and socio-cultural factors within the discourse environment. The results of this study indicate that it might be more appropriate, in a university context, for both free and literal interpretation methods to be used in combination. By switching between free and literal methods as a linguistic strategy, interpreters can provide conceptually accurate interpretations of lecture content, as well as give access to academic jargon or subject-specific terminology. This suggestion is corroborated when consideration is given to the notion of language contact. As mentioned earlier, several authors (Davis, 1989, 1990a, 1990b; Fontana, 1999; Lucas & Valli, 1989, 1990) have argued that code-mixing or linguistic transference often occurs in sign language use in more formal situations, leading to use of more mouth patterns and finger-

spelling than would be expected, for example, in conversational use of sign language. Davis's (1989, 1990a, 1990b) research showed that interpreters used linguistic transference appropriately to the formality of the interpreting context. Therefore, in relation to this study, it could be argued that those interpreters who incorporated use of fingerspelling (i.e., linguistic transference) for key lexical items of the text were using an appropriate translation style for a university lecture. Given the fact that university lectures will often use subject-specific terminology central to the understanding of the subject matter, it is imperative that deaf university students are given access to terminology in the form in which it is delivered. It is also essential, however, that deaf students receive information in semantically and syntactically correct sign language structure. Therefore, an interpretation approach that introduces subject-specific lexicon through the use of fingerspelling, incorporating patterning as appropriate to the formality of the situation, would be an effective way of transmitting this information.

I suggest here that interpreters should switch between different styles as a linguistic strategy for dealing with the context of situation. This study has found that interpreters using a dominant free interpretation approach switched to a more literal style at key points of the message, in order to borrow English lexical items, as well as interpreting the concept visually into Auslan. For example, subject-specific vocabulary such as the term "critical period hypothesis" was fingerspelled, followed by a conceptually accurate translation of the meaning of the term. This linguistic transference allowed the interpreters to provide a meaningful rendition of the message in Auslan, as well as providing access to the discourse-specific lexicon. According to Bremner and Housden (1996), it is this kind of translation style that deaf university students prefer, as they want interpretation into "an Auslan framework with English terms" (p. 13). Bremner and Housden's statement could be interpreted to mean interpretation using a free translation style with code-switching into a more literal style for the introduction of English terms.

The results of this study demonstrate that it may not be appropriate to discuss translation styles as distinct entities, but rather interpretation approaches should be

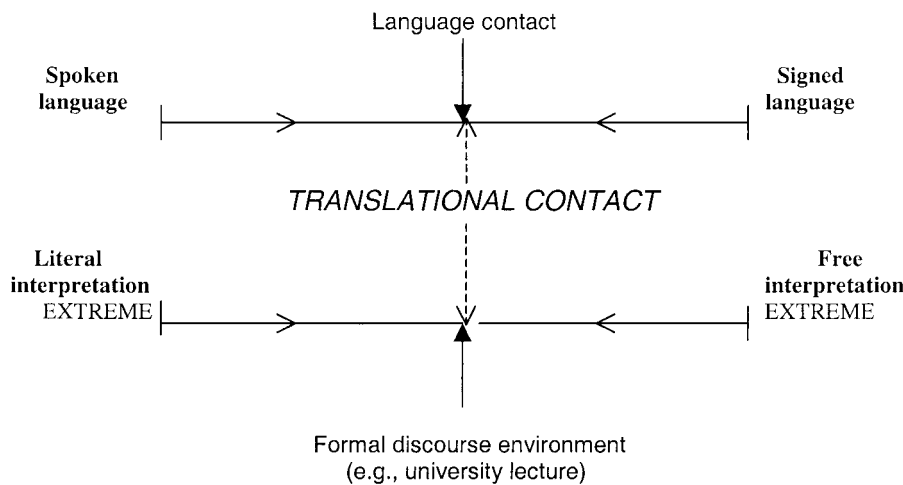


Figure 1. Translation of style continuum

considered within a continuum. A free interpretation approach can be considered as the most effective general method for translation, but it is important to recognize that a literal approach can also be effective and may in fact be preferred by some deaf consumers. Although extreme forms of free and literal interpretation may be appropriate for some contexts of situation, I suggest here that for university lectures, a combination of the two approaches is the most appropriate. In giving consideration to language contact between signed and spoken languages, and the notion of a continuum of sign language use, a translation style continuum is proposed, as seen in Figure 1. It is posited here that the use of code-switching between translation styles should be used particularly in contexts presenting features of language contact in formal discourse environments, such as university lectures. A suggested term for this type of code-switching is *translational contact*.

In recognizing that sign language interpreters can use different interpretation approaches and adapt their translation style to meet the needs of deaf consumers in different contexts, it is possible to accept that they are continuously making linguistic decisions based on the sociolinguistic and sociocultural influences on the interpreting situation.

Implications: Sign Language Interpreter Education

The findings of this study have implications for the education and training of sign language interpreters in

Australia and internationally. In accordance with the statement that “graduates of university programs with bachelors’ and more especially masters’ degrees are prepared for most interpreting tasks” (Frishberg & Wilcox, 1994, p. 18), the general finding of this study has been that Auslan interpreters thought that they coped better with interpreting for a university lecture when they had completed a university education themselves. The educational background of the Auslan interpreters in the study also had some impact on the linguistic strategies used, which implies that the level of education achieved by sign language interpreters worldwide is significant.

In Australia there is no requirement for sign language interpreters to have completed a university degree, and until now there has been no university program available in sign language interpreting, although several graduate diploma and degree courses exist for interpreters of other, spoken languages (Ozolins, 1998). Patrie (1994) stated that interpreter education and training are two different experiences that should provide entry to the profession at two different levels. The Auslan interpreter training and education system is currently reflected in the national accreditation system, in that postsecondary, nonuniversity interpreter training is recognized with accreditation at a paraprofessional level. This system corroborates a suggestion from Patrie (1994) that community college interpreter training is sufficient for entry to the profession at a “technical” level. Patrie also suggested, however, that for entry to the profession at a “professional” level, interpreter

education at a minimum level of undergraduate study should be a requirement. Education at this level would provide interpreters with a deeper and broader base of knowledge, analysis, and application. Accreditation at a professional level is available in Australia and will soon be complemented by an appropriate education program to enable Auslan interpreters to acquire the depth of knowledge necessary to achieve professional level skills. In 2002, the first postgraduate education program for sign language interpreters will be offered in Australia.

The field of sign language interpreting has recognized that highly skilled interpreters must be highly educated but has also recognized that entry to the profession at a technical level is appropriate, if graduates restrict their work to particular areas for which they have been trained (Stauffer, 1994). With a university Auslan interpreter education program, more practitioners can enter the field at the professional level and thus have the necessary skills to provide interpreting services in highly demanding discourse environments, such as university lectures. Other countries can also take note of the outcomes of this research, to lobby for more undergraduate programs or postgraduate programs for sign language interpreters to be established.

Another implication of this study is in relation to the content of sign language interpreter education and training programs. The study has demonstrated that interpreters use translation style differently, with some interpreters switching between free and literal interpretation approaches as a linguistic strategy to deal with the complexity of the message and the needs of their deaf consumers. This study reinforces, therefore, the notion that interpretation does not have “context-independent rules” (Moser-Mercer, 1997, p. 3).

Appendix 1

Transcription Conventions

Know (conventional orthography)	- spoken English words
KNOW	- English representation (gloss) of an Auslan sign
I-ASK-YOU	- when more than one English word is needed to gloss an Auslan sign, the English words are separated by a hyphen
T-R-U-E	- when an English word is fingerspelled, the letters in the word are separated by a hyphen

Consequently, I suggest that sign language interpreters be educated on the theoretical standpoints of both free and literal interpretation methods and be taught how to switch between these two methods as a linguistic strategy, depending on the context of situation and the consumers with whom they are working. This approach is endorsed by various writers (Davis, 2000; Metzger, 2000; Pollitt, 2000b; Roy, 2000b; Winston & Monikowski, 2000), who advocate for interpreter education to treat interpreting as a discourse process. They suggest that interpreter education should incorporate theoretical and practical discourse analysis to better enable interpreters to understand, and develop strategies for coping with, the various discourse environments they will encounter in their everyday work. In doing so, interpreters can adopt an interactive model of interpreting and thus make informed linguistic and cultural decisions about which interpretation approach to use to ensure the successful outcome of a communication event.

Notes

1. For expediency, henceforth referred to as Auslan interpreters.

2. Foreigner talk is the simplified register often identified as being appropriate for addressing foreigners or outsiders (Fontana, 1999). Certain features that characterize foreigner talk include short sentences, lack of function words, avoidance of colloquialisms, repetition of lexical items, slow and exaggerated enunciation, and less use of inflections (Ferguson & DeBose, 1977; cited in Cokely, 1983).

3. “A change in footing implies a change in the alignment we take up to ourselves and the others present as expressed in the way we manage the production or reception of an utterance. A change in our footing is another way of talking about a change in our frame for events” (Goffman, 1981, p. 128).

4. For transcription conventions, see Appendix 1.

WHAT*	- the asterisk indicates the sign is emphasized
KNOCK+	- the plus symbol indicates that the sign is repeated
(VERY)	- the signer has started to execute a particular sign but has stopped and moved on to another sign
LIMIT (1) LIMIT (2)	- numbers indicate that two different signs are used for the same gloss, one directly after another
point-left	- the signer has pointed to a specific location with
point-right	reference to a location or established entity or entities,
point-arc	e.g., FAMILY FAMILY (point-left) (point-right)
left/right	- indicates placement of sign by either left or right side of signer's body, e.g., ACQUIRE ACQUIRE (left) (right)
their-left/right	- indicates placement of possessive pronoun
his/her-left/right	
<i>Nonmanual grammatical markers</i>	
(q)	- the facial expression and head movements used indicate a question is being asked (often rhetorical)
hd	- indicates affirmation through head nod
neg	- indicates negation through head shake

Adapted and developed from Baker and Cokely (1980), Harrington (2000), Roy (1992), and Sutton-Spence and Woll (1998).

Appendix 2

Classification of Translation Styles

Free interpretation

Free interpretation is "the process by which concepts and meanings are translated from one language into another, by incorporating cultural norms and values; assumed knowledge about these values; and the search for linguistic and cultural equivalents" (Napier, 1998b, p. 36), whereby "the linguistic structure of the source language is ignored, and an equivalent is found based on the meaning it conveys" (Crystal, 1987, p. 344).

Linguistic markers: Use of possessive pronouns, placement and corresponding spatial reference, exploitation of visual metaphor, use of rhetorical questioning and nonmanual features. Elaboration on meaning. Interpretation provides equivalency of meaning, not necessarily equivalency of each lexical item. Use of fingerspelling typically limited to glosses already lexicalized in Auslan. Grammatically appropriate use of lip pattern. Possible translation of example sentence:

We should try and encourage families to support the first language acquisition of their deaf children.

ALL FAMILY HAVE DEAF CHILDREN.. WE SHOULD WHAT ENCOURAGE PARENTS LEARN
(point-arc) (q) (point left-middle-right)

SIGN LANGUAGE.. MEANS PARENTS AND CHILD HAVE SAME LANGUAGE.. MEANS CHILD CAN ACQUIRE
(point-left point-right) (point-left) (their-left)

SIGN FIRST LANGUAGE
(hd)

Literal interpretation

Literal interpretation means that “the linguistic structure of the source text is followed, but is normalised according to the rules of the target language” (Crystal, 1987, p. 344).

Linguistic markers: Use of possessive pronouns, spatial reference, and nonmanual features. Less exploitation of visual metaphor, and little meaningful elaboration. Equivalency based on lexical gloss, with higher proportion of borrowing from English in terms of fingerspelling. Use of lip patterns articulating English words especially noticeable when fingerspelling. Possible translation of example sentence:

We should try and encourage families to support the first language acquisition of their deaf children.

WE SHOULD TRY ENCOURAGE FAMILY HAVE DEAF CHILDREN SUPPORT
(point-left-middle-right)

CHILD FIRST LANGUAGE ACQUISITION'
(point-left) (their-left)

Examples of translation styles

Example 1: Extreme dominant approach (free interpretation)

subject 9

Sentence 1 (free):

And what they did was contrast the acquisition of these these features with the acquisition of

WELL THREE WRITE NOTE-DOWN WHAT THEY D-O WHAT WELL COMPARE CHILDREN
(point-right) (q)

the same types of grammatical features in English, and came up with, as a result of this study,

ACQUIRE SIGN LANGUAGE GROW-UP ACQUIRE ENGLISH (STRUCTURE) G-R-A-M-M-A-R
(left) (right)

with what seemed to me some quite consistent patterns of grammatical acquisition across the

COMPARE+ FIND THEIR RESEARCH SHOW HAVE+ SAME COMPARE+ CHILDREN ACQUIRE MANY
(hd) (their-right)

two languages.

SAME HOW

Sentence 2 (free):

Er, any of you who're, er, particularly those of you that are interested in early childhood education will be aware of the work in this area, the work of people like John Piaget, who made a very very strong case

YOU AWARE KNOW WHAT J-O-H-N P-I-A-G-E-T WORK.. PERSON WRITE A-LOT-
(point-middle) (q) (his-middle) (point-middle)

for... the, erm, for a binding relationship between early sensory-motor development and early

OF-TEXT STRONG* TALK OVER WELL.. RELATIONSHIP WITH WHAT WHEN BABY CHILDREN
(q)

language acquisition.

GROW-UP THEIR HANDS EYES ARMS-MOVE EARLY MOVE RELATE-TO EARLY ACQUIRE LANGUAGE
(their-right) (point-right)

Sentence 3 (free):

If you look at the work of someone like Steve Krashen, even in second language research, his notion of,
DOESN'T-MATTER SECOND LANGUAGE RESEARCH S-T-E-V-E

that we have to be at or just, just above the language receptive capacities of the language
K-R-A-S-H-E-N SECOND LANGUAGE RESEARCH AREA WELL THEIR LANGUAGE MUST ALMOST
(point-right) (his-right) (point-right) (their-right) (point-right)

learner, that if we're too far above it, then the capacity for the learner to actually make use of
AHEAD ME ACQUIRE+ THEIR SPEAK+ T-O ME ME-UNDERSTAND LITTLE-BIT AHEAD WHAT MY
(their-right)

language input is certainly diminished.
UNDERSTAND ME CAN AHEAD IMPROVE WELL I-F FAR-AHEAD ME CAN'T ACQUIRE DAMAGE MY
(neg/hd) (point-right) (neg)

ACQUIRE T-O LEARN SECOND LANGUAGE

Example 2: Dominant code-switching approach (free interpretation)

subject 6

Sentence 1 (free):

And what they did was contrast the acquisition of these these features with the acquisition of
WELL ACTUALLY COMPARE HOW

the same types of grammatical features in English, and came up with, as a result of this study,
PEOPLE LEARN F-E-A-T-U-R-E-S WITH HOW PEOPLE LEARN SAME
(point-left)

with what seemed to me some quite consistent patterns of grammatical acquisition
G-R-A-M-M-A-R F-E-A-T-U-R-E-S ENGLISH.. FROM.. FOUND SAME SAME HOW
(point-left-right) (left) (right)

across the two languages.
PEOPLE LEARN OR LEARN DOESN'T-MATTER WHICH LANGUAGE
(point left) (point right) (point both)

Sentence 2 (literal):

Er, any of you who're, er, particularly those of you that are interested in early childhood education
aware of the work in this area, the work of people like John Piaget, who made a very very strong c
MAYBE YOU.. EXPERIENCE WITH WORK O-F J-E-A-N P-I-A-G-E-T HIMSELF
(point-arc)

for... the, erm, for a binding relationship between early sensory-motor development and early
REALLY BELIEVE.. VERY STRONG RELATIONSHIP B-I-N-D-I-N-G RELATIONSHIP BETWEEN EARLY

language acquisition.
S-E-N-S-O-R-Y M-O-T-O-R DEVELOP AND EARLY LANGUAGE ACQUISITION

Sentence 3 (free):

If you look at the work of someone like Steve Krashen, even in second language research, his notion of, that we have to be at or just, just above the language receptive capacities of the language

I-F LOOK-AT WORK O-F S-T-E-V-E SOMEONE RESEARCH.. ANOTHER PERSON
(their-right) (hd)

learner, that if we're too far above it, then the capacity for the learner to actually make use of

HAVE-TO EQUAL-TO SIMILAR T-O LANGUAGE LEARN I-F HIGH-ABOVE* SOPHISTICATED VERY
(point-left)

language input is certainly diminished.

DIFFICULT CAN'T-UNDERSTAND WHAT PERSON SAY
(neg) (point-right)

Example 3: Dominant free approach use of fingerspelling

SUBJECT 10

And what they did was contrast the acquisition of these these features with the acquisition of the same types of grammatical features

WHAT WHAT RESEARCH WHAT COMPARE WITH
(point arc) (q)

in English, and came up with, as a result of this study, with what seemed to me some quite

G-R-A-M-M-A-R LIST IN ENGLISH COMPARE WITH SIGN LANGUAGE HOW LIST COMPARE..

consistent patterns of grammatical acquisition across the two languages.

RESEARCH FOUND LIST ALMOST SAME LANGUAGE ACQUISITION BOTH LANGUAGE ALMOST SAME
(left) (their right) (their left) (hd)

Example 4: Dominant literal approach use of fingerspelling

SUBJECT 2

And what they did was contrast the acquisition of these these features with the acquisition of

WHAT THEY.. RECEIVE
(point-right)

the same types of grammatical features in English, and came up with, as a result of this study,

F-E-A-T-U-R-E WITH SAME TYPE O-F G-R-A-M-M-A-T-I-C-A-L F-E-A-T-U-R-E-S IN ENGLISH AND

with what seemed to me some quite consistent patterns of grammatical acquisition across the

COME UP WITH.. BECAUSE O-F STUDY WHAT S-E-E-M-E-D T-O B-E WHAT CONSISTENT
(q)

two languages.

P-A-T-T-E-R-N O-F G-R-A-M-M-A-T-I-C-A-L ACQUISITION ACROSS AREA
(hd)

References

- Baker, C., & Cokely, D. (1980). *American Sign Language: A teacher's resource text on grammar and culture*. Maryland, TJ: Publishers Inc.
- Bremner, A., & Housden, T. (1996). *Issues in educational settings for deaf students and interpreters*. Retrieved July 18, 2002, from Deakin University Web site: <http://www.deakin.edu.au/extern/rdlu/deafstud.html>.
- Brennan, M., & Brown, R. (1997). Equality before the law: Deaf people's access to justice. Durham, UK: Deaf Studies Research Unit, University of Durham.
- Brown, P., & Fraser, C. (1979). Speech as a marker of situation. In K. Scherer & H. Giles (Eds.), *Social markers in speech* (pp. 33–62). Cambridge: Cambridge University Press.
- Cerney, B. (2000). The ten C's of effective target texts. *Journal of Interpretation*, 131–150.
- Cokely, D. (1983). When is pidgin not a pidgin? An alternate analysis on the ASL-English contact situation. *Sign Language Studies*, 38, 1–24.

- Cokely, D. (1992). *Interpretation: A sociolinguistic model*. Burtonsville, MD: Linstok Press.
- Crystal, D. (1984). *Who cares about usage?*. New York: Penguin.
- Crystal, D. (1987). *The Cambridge encyclopedia of language*. Cambridge: Cambridge University Press.
- Crystal, D. (1995). *The Cambridge encyclopedia of the English language*. Cambridge: Cambridge University Press.
- Crystal, D., & Davey, D. (1969). *Investigating English style*. Bloomington: Indiana University Press.
- Davis, J. (1989). Distinguishing language contact phenomena in ASL. In C. Lucas (Ed.), *The sociolinguistics of the Deaf community* (pp. 85–102). San Diego, CA: Academic Press.
- Davis, J. (1990a). *Interpreting in a language contact situation: The case of English-to-ASL interpretation*. Unpublished doctoral dissertation, University of New Mexico.
- Davis, J. (1990b). Linguistic transference and interference: Interpreting between English and ASL. In C. Lucas (Ed.), *Sign language research: Theoretical issues* (pp. 308–321). Washington, DC: Gallaudet University Press.
- Davis, J. (2000). Translation techniques in interpreter education. In C. Roy (Ed.), *Innovative practices for teaching sign language interpreters* (pp. 109–131). Washington, DC: Gallaudet University Press.
- Deuchar, M. (1979). *Diglossia in British Sign Language*. Unpublished doctoral dissertation, Stanford University.
- Deuchar, M. (1984). *British Sign Language*. London: Routledge & Kegan Paul.
- Eighinger, L. (2000). *Re: Literate interpreters*. [On-line]: IEPFAC email discussion list, 26 February 2000. Available: listserv@admin.humberc.on.ca.
- Finegan, E., Besnier, N., Blair, D., & Collins, P. (1992). *Language: Its structure and use*. Sydney: Harcourt Brace Jovanich Publishers.
- Fontana, S. (1999). Italian Sign Language and spoken Italian in contact: An analysis of interactions between Deaf parents and hearing children. In E. Winston (Ed.), *Storytelling and conversation: Discourse in Deaf communities* (pp. 149–161). Washington, DC: Gallaudet University Press.
- Frishberg, N., & Wilcox, S. (1994). Issue paper: Differentiating training from education, technical and professional. In E. Winston (Ed.), *Mapping our course: A collaborative venture, Proceedings of the 10th National Convention of the Conference of Interpreter Trainers* (pp. 15–20). Minneapolis, MN: Conference of Interpreter Trainers.
- Fromkin, V., Rodman, R., Collins, P., & Blair, D. (1990). *An introduction to language* (2nd Australian ed.). Sydney: Holt, Rinehart & Winston.
- Gerot, L., & Wignell, P. (1995). *Making sense of functional grammar*. Cammeray, NSW: Antipodean Educational Enterprises.
- Goffman, E. (1981). *Forms of talk*. Oxford: Basil Blackwell.
- Halliday, M. A. K. (1978). *Language as a social semiotic: The social interpretation of language and meaning*. London: Edward Arnold.
- Halliday, M. A. K. (1985). *Spoken and written language*. Burwood, VIC: Deakin University Press.
- Halliday, M. A. K. (1993). *Language in a changing world*. Applied Linguistics Association of Australia: Deakin University.
- Halliday, M. A. K., & Hasan, R. (1985). *Language, context and text: Aspects of language in a social semiotic perspective*. Burwood, VIC: Deakin University Press.
- Harrington, F. (2000). Sign language interpreters and access for Deaf students to university curricula: The ideal and the reality. In R. Roberts, S. A. Carr, D. Abraham, & A. Dufour (Eds.), *The critical link 2: Interpreters in the community. Selected papers from the 2nd International Conference on Interpreting in legal, health and social service settings, Vancouver, BC, Canada, 19–23 May 1998*. Philadelphia: John Benjamins.
- Harrington, F., & Traynor, N. (1999, July). *Second-hand learning: Experiences of Deaf students in higher education*. Paper presented at the Pathways to Policy: Deaf Nation 2 conference, University of Central Lancashire, Preston, UK.
- Hatim, B., & Mason, I. (1990). *Discourse and the translator*. London: Longman.
- Humphrey, J., & Alcorn, B. (1996). *So you want to be an interpreter? An introduction to sign language interpreting*. Amarillo, TX: H & H Publishers.
- Hymes, D. (1967). Models of the interaction of language and social setting. *Journal of Social Issues*, 23.
- Isham, W. (1986). The role of message analysis in interpretation. In M. McIntire (Ed.), *Interpreting: The art of cross-cultural mediation* (pp. 111–122). Silver Spring, MD: RID Publications.
- Johnson, K. (1991). Miscommunication in interpreted classroom interaction. *Sign Language Studies*, 70, 1–34.
- Johnston, T. (Ed.). (1998). *Signs of Australia: A new dictionary of Auslan*. North Rocks, NSW: North Rocks Press.
- Joos, M. (1967). *The five clocks*. New York: Harbinger Books.
- Kyle, J., & Woll, B. (1985). *The study of deaf people and their language*. Cambridge: Cambridge University Press.
- Lawrence, R. (1987). Specialised preparation in educational interpreting. *Journal of Interpretation*, 4, 87–90.
- Lee, D. (1982). Are there really signs of diglossia? Re-examining the situation. *Sign Language Studies*, 35, 127–152.
- Llewellyn Jones, P. (1981). *Target language styles and source language processing in conference sign language interpreting*. Paper presented at the 3rd International Symposium on Sign Language Interpreting, Bristol.
- Llewellyn Jones, P., Kyle, J., & Woll, B. (1979). *Sign language communication*. Paper presented at the International Conference on Social Psychology & Language, Bristol.
- Locker, R. (1990). Lexical equivalence in transliterating for deaf students in the university classroom: Two perspectives. *Issues in Applied Linguistics*, 1(2), 167–195.
- Longacre, R. (1983). *The grammar of discourse*. New York: Plenum Press.
- Lucas, C., & Valli, C. (1989). Language contact in the American Deaf community. In C. Lucas (Ed.), *The sociolinguistics of the Deaf community* (pp. 11–40). Washington, DC: Gallaudet University Press.
- Lucas, C., & Valli, C. (1990). ASL, English and contact signing. In C. Lucas (Ed.), *Sign language research theoretical issues* (pp. 288–307). Washington, DC: Gallaudet University Press.
- Maroney, E., & Singer, B. (1996). *Educational interpreter assessment: The development of a tool*. In D. Jones (Ed.), *Assessing our work: Assessing our worth. Proceedings of the Eleventh National Convention of the Conference of Interpreter Trainers* (pp. 93–148). Minneapolis, MN: Conference of Interpreter Trainers.
- Messina, A. (1998). The reading aloud of English language texts in simultaneously interpreted conferences. *Interpreting*, 3(2), 147–161.

- Metzger, M. (1995). *The paradox of neutrality: A comparison of interpreters goals with the reality of interactive discourse*. Unpublished doctoral dissertation, Georgetown University, Washington, DC.
- Metzger, M. (1999). *Sign language interpreting: Deconstructing the myth of neutrality*. Washington, DC: Gallaudet University Press.
- Metzger, M. (2000). Interactive role-plays as a teaching strategy. In C. Roy (Ed.), *Innovative practices for teaching sign language interpreters* (pp. 83–108). Washington, DC: Gallaudet University Press.
- Moser-Mercer, B. (1997). Methodological issues in interpreting research: An introduction to the Ascona workshops. *Interpreting*, 2(1/2), 1–12.
- Napier, J. (1998a). *An analytical study of free interpretation and its use by British Sign Language interpreters*. Unpublished master's dissertation, University of Durham.
- Napier, J. (1998b). Free your mind—The rest will follow. *Deaf Worlds*, 14(3), 15–22.
- Napier, J. (2000). Free interpretation: What is it and does it translate into training? In A. Schembri, J. Napier, R. Beattie, & G. Leigh (Eds.), *Deaf studies, Sydney 1998: Selected papers from the Australasian Deaf studies research symposium, Renwick College, Sydney, August 22–23 1998*. Renwick College Monograph No. 4 (pp. 21–33). North Rocks, NSW: North Rocks Press.
- Napier, J. (2001). *Linguistic coping strategies of sign language interpreters*. Unpublished doctoral dissertation, Macquarie University.
- Nida, E. (1998). Translators' creativity versus sociolinguistic constraints. In A. Beylard-Ozeroff, J. Kr'lov', & B. Moser-Mercer (Eds.), *Translators' strategies and creativity* (pp. 127–136). Philadelphia: John Benjamins.
- O'Loughlin, K. (1995). Lexical density in candidate output & semi-direct versions of an oral proficiency test. *Language Testing*, 12(2), 99–123.
- Ozolins, U. (1998). *Interpreting and translating in Australia: Current issues and international comparisons*. Melbourne: Language Australia.
- Patrie, C. (1994). Entry level to the profession. Response paper #1: The readiness-to-work-gap. In E. Winston (Ed.), *Mapping our course: A collaborative venture. Proceedings of the 10th National Convention of the Conference of Interpreter Trainers* (pp. 53–56). USA: CIT.
- Paul, P. V., & Quigley, S. P. (1990). *Education and deafness*. London: Longman.
- Pollitt, K. (2000a). On babies, bathwater and approaches to interpreting. *Deaf Worlds*, 16(2), 60–64.
- Pollitt, K. (2000b). Critical linguistic and cultural awareness: Essential tools in the interpreter's kit bag. In C. Roy (Ed.), *Innovative practices for teaching sign language interpreters* (pp. 67–82). Washington, DC: Gallaudet University Press.
- Richards, J., Platt, J., & Platt, H. (1992). *Dictionary of language teaching and applied linguistics*. Singapore: Longman.
- Roy, C. (1987). Evaluating performance: An interpreted lecture. In M. McIntire (Ed.), *New dimensions in interpreter education: Curriculum and instruction. Proceedings of the 6th National Convention of the Conference of Interpreter Trainers, November 6–10, 1986* (pp. 139–147). Silver Spring, MD: RID Publications.
- Roy, C. (1992). A sociolinguistic analysis of the interpreter's role in simultaneous talk in a face-to-face interpreted dialogue. *Sign Language Studies*, 74, 21–61.
- Roy, C. (2000a). *Interpreting as a discourse process*. Oxford: Oxford University Press.
- Roy, C. (2000b). Training interpreters—Past, present and future. In C. Roy (Ed.), *Innovative practices for teaching sign language interpreters* (pp. 1–14). Washington, DC: Gallaudet University Press.
- Ryan, E. B., & Giles, H. (1982). *Attitudes towards language variation: Social and applied contexts*. London: Edward Arnold.
- Saur, R.E. (1992). Resources for deaf students in the mainstreamed classroom. In S. B. Foster & G. G. Walter (Eds.), *Deaf students in postsecondary education* (pp. 96–113). London: Routledge.
- Schembri, A. (1996). *The structure and formation of signs in Auslan (Australian Sign Language)*. Renwick College Monograph No. 2. North Rocks, NSW: North Rocks Press.
- Sinclair, J., & Coulthard, R. (1975). *Towards an analysis of discourse*. London: Oxford University Press.
- Siple, L. (1995). *The use of additions in sign language transliteration*. Unpublished doctoral dissertation. State University of New York.
- Stewart, D., Schein, J., & Cartwright, B. (1998) *Sign language interpreting: Exploring its art and science*. Boston: Allyn & Bacon.
- Stauffer, L. (1994). Entry level to the profession. Response Paper #2: A response to the readiness-to-work-gap. In E. Winston (Ed.), *Mapping our course: A collaborative venture. Proceedings of the 10th National Convention of the Conference of Interpreter Trainers* (pp. 57–59). USA: CIT.
- Stokoe, W. (1969). Sign language diglossia. *Studies in Linguistics*, 20, 27–41.
- Sutton-Spence, R., & Woll, B. (1998). *The linguistics of British Sign Language*. Cambridge: Cambridge University Press.
- Ure, J. (1971). Lexical density and register differentiation. In G. E. Perren & J. L. M. Trim (Eds.), *Applications of linguistics: Selected papers of the 2nd International Congress of Applied Linguistics* (pp. 443–452). Cambridge: Cambridge University Press.
- Wardhaugh, R. (1992). *An introduction to sociolinguistics*. Oxford: Blackwell Publishers.
- Wilcox, S., & Wilcox, P. (1985). Schema theory and language interpretation. *Journal of Interpretation*, 2, 84–93.
- Winston, E. A., & Monikowski, C. (2000). Discourse mapping—Developing textual coherence skills in interpreters. In C. Roy (Ed.), *Innovative practices for teaching sign language interpreters* (pp. 15–66). Washington, DC: Gallaudet University Press.
- Woodward, J. (1973). Some characteristics of Pidgin Sign English. *Sign Language Studies*, 3, 39–46.
- Wray, A., Trott, K., & Bloomer, A. (1998). *Projects in linguistics. A practical guide to researching language*. London: Hodder Headline Group.
- Zimmer, J. (1989). Toward a description of register variation in American Sign Language. In C. Lucas (Ed.), *The sociolinguistics of the Deaf community* (pp. 253–272). New York: Academic Press.

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