Consecutive and simultaneous interpreting

Debra Russell

University of Alberta

1. Introduction

Studies in the field of interpretation and translation have offered various models with which to explore the nature of the interpreting process, whether using simultaneous or consecutive interpreting. This chapter examines both simultaneous and consecutive interpreting, particularly as they relate to American Sign Language (ASL)-English interpreters, and argues for the increased use of consecutive interpreting. One of the unique features of working between ASL and English is that the languages are produced in different language modalities, one signed and one spoken, which has created a long-held view that because there is no auditory interference, as is the case with interpreting between two spoken languages, there is no need to work consecutively. Here we explore the role of consecutive interpreting in the education of ASL-English interpreters in North America, highlight some of the perceptions and myths held by interpreters and by consumers of interpreting services, and discuss the impact of choosing simultaneous or consecutive interpreting on the accuracy of the work. While the studies described in this chapter are largely based in Canada and the United States, the principles discussed will apply to interpreters working in other signed languages throughout the world.

2. Consecutive and simultaneous interpreting

The issue of whether or not to use consecutive or simultaneous interpreting is an important one in any discussion of how to achieve the most accurate interpretation in a format that works effectively for all participants in the interpreted event. It is important for all concerned: signed language and spoken language interpreters, interpreting students, interpreter educators and consumers of interpreting services. We begin our discussion by defining what consecutive interpreting means. There appear to be several perceptions of consecutive interpreting that interpreters hold, for example some interpreters see consecutive interpreting as having a processing time so as to

stay several seconds behind the speaker, while others view it as a form that requires the speaker to stop speaking in order for the interpreter to deliver the message. This chapter, however, adopts definitions commonly found in spoken language and signed language interpretation research. That is, SIMULTANEOUS INTERPRETATION is defined as the process of interpreting into the target language at the same time as the source language is being delivered. CONSECUTIVE INTERPRETATION is defined as the process of interpreting after the speaker or signer has completed one or more ideas in the source language and pauses while the interpreter transmits that information.

Interpreting, whether simultaneous or consecutive, is a highly complex discourse interchange where language perception, comprehension, translation and production operations are carried out virtually in parallel. In addition, when the interpretation is delivered simultaneously, it is performed under severe time pressure (Tommola & Hyönä 1990). Early research on interpretation conducted by Gerver (1976) and Moser (1978) led to the development of several models of interpreting performance based on information processing. Empirical studies reviewed and described by Goldman-Eisler (1972), Gerver (1976), Barik (1973, 1975), Chernov (1979), and Lambert (1984) focus on the various aspects of input and output, such as the overlap between comprehension and production, the length of ear-voice span, also known as PROCESSING TIME,[1] the effect of source text delivery rates and hesitation pauses, and the recall performance of simultaneous interpreters. All of this research points to the numerous challenges of providing accurate simultaneous interpretation in the field of spoken language interpreting. During the 1980s, Cokely (1984), Colonomos (1987), and Ingram (1985) contributed to a body of literature on simultaneous signed language interpreting by describing models of cognitive processing and the impact of these on providing effective interpretation. All these research studies, and the models of the process that have been proposed, have served to draw our attention to some of the important stages of cognitive processing required to comprehend a message, analyze it for its salient features, and then determine the appropriate linguistic structure and features needed to convey the message accurately in the second language.

Humphrey and Alcorn (1995) summarize the common features of these models, which apply to both consecutive and simultaneous interpreting:

a)   The interpreter takes in the source utterance;
b)   lexical and semantic units are strung together and held until the interpreter has sufficient units to determine the meaning of what is being said or signed;
c)   a string of lexical and semantic units (referred to as a chunk) is analyzed to identify the speaker's or signer's intent and communication goal(s), explicit and implicit ideas, and a multitude of sociolinguistic features that impact upon the meaning of the source utterance. This could include gender, power distance between the speakers, setting, and contextual factors such as the impact or significance of the message on the receiver;
d)   cultural and linguistic equivalents are sought, observing cultural norms and the cultural overlays of meaning;

e) a search is made of the target language to identify the lexical and semantic units and communication behaviours that can be used to produce an utterance in the target language with an equivalent meaning;

f) the interpretation is expressed in the target language; and

g) the interpreter monitors internal and external feedback to check for errors or needed corrections.

Models of cognitive processing are critical to an interpreter's understanding of how to produce accurate interpretation, and how to assess whether a situation requires the use of either consecutive or simultaneous interpreting. What is clear is that interpreting is not an easy task, and this is especially true for interpreters who have ASL as a second language. There is much to learn about interpretation processes and this learning typically begins when the student enrolls in an interpreter education program.

3.   The role of consecutive interpreting in the education of interpreters

By investigating the programs of study offered by interpreter education sites, it can be seen that approaches to teaching the cognitive models of interpreting in the curricula vary greatly. Russell (2002b) conducted a pilot study of fifteen interpreter education programs in both Canada and the United States. The purpose of the study was to explore the ways in which consecutive interpreting is taught in those programs and to invite interpreter educators to comment on their experiences of teaching consecutive interpreting and of using it in their professional practice. Also, interviews were held with fifteen interpreters who graduated from interpreter education programs between 2000 and 2002. The results indicate that ten out of the fifteen programs emphasize the need for students to gain a solid understanding of the cognitive processes involved in interpreting by acquiring text analysis skills and then to use these to build towards consecutive interpreting exercises. Subsequently, only after consecutive interpreting has been mastered do students begin to move toward simultaneous work. By contrast, other programs choose to teach cognitive models and consecutive interpreting through an informational approach, providing theory but little time for acquiring the foundational skills necessary for consecutive interpreting. The approach used and the length of time spent teaching consecutive interpreting varies from program to program, from one-half a semester, one full semester, two semesters, to one program where there are three semesters of consecutive interpreting taught to students.

Several problems arise for educational programs that do not thoroughly address cognitive models of interpreting or that teach consecutive interpreting primarily through an informational approach. This pedagogical approach can lead to difficulties that include the following:

a) Students approach interpretation as a transcoding activity, looking for the sign choice that may reflect a particular word, versus looking for deeper meaning and producing grammatically and semantically correct interpretation. For ASL-

English interpreters, this often means that the interpreter produces sign-for-word matches, and follows the structure of English when the task is to produce ASL.

b) Students who lack a thorough grounding in consecutive interpreting immediately begin interpreting in a simultaneous mode, not recognizing the relationship between the use of processing time and the number of errors produced in the interpretation. Again, because ASL and English are two different language modalities, the languages do not interfere or overlap. This appears to have led to the long-held belief in the field of signed language interpreting that because there is no signal interference, there is no need to perform consecutive interpreting. Without the foundation of consecutive interpreting, interpreters frequently develop ingrained patterns whereby several of the tasks identified in cognitive models of interpreting have been missed, thus producing work that is consistently processed at the lexical level. The impact of this work on Deaf consumers is that they must assume the task of "translating" the interpreter's form-based message themselves, trying to determine the meaning behind the signed message. For consumers who use ASL this results in a situation where their linguistic preferences and needs are not met via the interpretation.

c) Students are unaware of the benefits of consecutive interpreting, and lack a decision-making schema to guide them in determining when to use consecutive interpretation (for example, when the material is particularly complex or deleterious to consumers, or when the nature of the interaction lends itself to consecutive interpreting, such as an informational interview). As well, students lack the ability to articulate the benefits to colleagues and consumers in order to engage in meaningful dialogue about consecutive interpreting in the workplace.

Cokely (2003) reviews the theoretical and philosophical influences on North American interpreter education programs that led to deliberations at the 1983 biennial conference of the Conference of Interpreter Trainers, resulting in a document that organized the principles behind, and sequencing of, skill-sets necessary for interpreting. These make up the commonly accepted sequence of developing translation skills first, followed by consecutive interpreting and finally, simultaneous interpreting. Cokely acknowledges that the sequence is indeed helpful to students in acquiring the interpreting skills needed, however he questions the practice of teaching these skill-sets as distinct courses. By examining the work settings of recent ASL-English interpreter graduates in the state of Massachusetts, Cokely concludes that a redesign of the interpreting curriculum is needed. His suggestion is that each skill-oriented course should focus on the entire range of skill-sets: translation, consecutive interpreting and simultaneous interpreting. Cokely also recommends that the skill courses should have as their main focus the interaction types revealed in the work settings data, thus better meeting the needs of both interpreters and employers. The interaction types included inquiry, narrative, expository and persuasive interactions. In each course, however, the relative weight of each skill-set in the sequence varies. For example, in the first semester, the course "Interpreting Inquiry Interactions" has translation skills weighted

at 50% of the classroom time, consecutive interpreting at 40% and simultaneous interpreting at 10%. Such an approach to the teaching of interpreting skills would address the problem identified in Russell (2002b) that suggests some educators and recent graduates of interpreter education programs see consecutive interpreting only as a stepping stone to the development of simultaneous interpreting, not as a mode of interpretation to be used throughout an interpreter's career. The practice of consecutive interpreting in the education of interpreters will be addressed again in later sections of this chapter in more detail. The next section addresses some of the beliefs and myths that interpreters in the field hold regarding consecutive interpretation.

4.   Myths and perceptions

As stated earlier, the research indicates that some interpreter education programs focus on consecutive interpreting as a distinct skill-set, and others are not seeing it as an important area of focus (Russell 2002b). However, it is not only some interpreter education programs that dismiss the importance of consecutive interpreting. There are interpreters and consumers who also hold a number of myths and misperceptions that discount the effectiveness of consecutive interpretation. For example, one of the prevailing myths in the field is that if an interpreter interprets consecutively, it is an indication that she is less skilled than an interpreter who uses simultaneous interpretation. In the study outlined in Russell (2002b) the following comment illustrates this myth. The quote comes from one interpreter surveyed, but it was a consistent theme expressed by twelve out of fifteen of the interpreters who graduated between 2000–2002:

> I was told by my mentor that while the program stresses consecutive, that it isn't used in the "real world". She said Deaf people hate it and the best interpreters don't use it.   (Russell 2002b: 7)

When interviewing Deaf consumers for the study in Russell (2000) it was clear that these consumers can benefit from conversations with interpreters who use consecutive interpreting. Often, once consumers have seen consecutive interpretation used well, and have observed the benefits of it, they are open to its use. These Deaf consumers indicated, however, that they didn't want interpreters learning how to use consecutive interpreting during appointments. If the interpreter could set up appropriate signals and allow the Deaf and hearing participants to feel connected, consecutive interpreting was acceptable. Interrupting consumers in mid-thought, or making them wait for long periods for the interpretation, was not appreciated.

Such comments imply that if interpreters have strategies to process the message while attending to it, have a clear sense of when to ask speakers or signers to pause without being disruptive to the process, and can use note-taking strategies when it is not appropriate to interrupt, then Deaf consumers are willing to try consecutive interpreting. Some Deaf consumers occasionally view consecutive interpretation as the

thing that hearing children of Deaf adults do when learning to communicate messages between non-deaf people and their Deaf parents. Another perception held by some interpreters and consumers alike is that it is too time-consuming to perform consecutive interpretation. However, this perception can be countered with the argument that if simultaneous interpretation is inaccurate and has be to repaired and clarified numerous times, it can take longer to provide the work than when using consecutive interpretation. Ultimately, interpreters have contributed to these myths. They have shaped the perceptions held by many consumers that simultaneous is the preferred mode of interpreting because they rarely use consecutive interpreting, rarely speak about it if they do use it in their professional practice, and they don't support other colleagues who are trying to learn to use consecutive interpreting effectively.

Beliefs and perceptions held about consecutive interpreting have also shaped the face of the profession's testing procedures, in that very few employment screening tools, quality assurance mechanisms, or national certification exams allow for the use of consecutive interpreting in contexts that may in fact lend themselves to the process, such as one-to-one interviews. Cokely (2003) suggests that the extensive use of monologue interpreting in interpreter education programs has influenced the testing procedures of the Registry of Interpreters for the Deaf (RID), which tested samples of monologue interpreting exclusively until 1988. After that year, RID introduced a dialogue situation as one-third of its testing condition. In Canada, the Association of Visual Language Interpreters of Canada (AVLIC) implemented their testing model in 1990. The test includes monologues and dialogues, and like RID, simultaneous interpreting has been required for all segments.

These beliefs, myths and misperceptions that have in many ways shaped the field are slowly being challenged through professional dialogue among practitioners and educators, through research findings that support the need for consecutive interpreting, and by interpreter education programs that include consecutive interpreting skills as a core skill-set, not just as a skill-set that supports simultaneous interpreting. Interpreters are increasingly using consecutive interpreting in a variety of settings, including courtrooms, interview appointments and counseling sessions. In Canada, employment screening mechanisms such as the British Columbia Medical Interpreting Screening Tool, the British Columbia Post-Secondary Interpreter Registry, and the Deaf and Hard of Hearing Services Interpreter Screening Tool used in Alberta, allow interpreters to choose consecutive or simultaneous interpretation or a combination of both in interview segments of the test. In June 2003, AVLIC passed several motions at their Annual General Meeting directed toward the creation of new test materials that allow the test taker the choice of using consecutive interpreting during interview segments.

These examples of testing practices reflect an awareness of recent research and the increasing practice of interpreting consecutively in settings such as one-to-one interviews. Such dialogue settings are well suited to consecutive interpreting or a blend of consecutive and simultaneous interpreting, given that the discourse is often a question and answer format or is informational. There are natural pauses after questions are

asked that allow for consecutive processing, and typically an answer can be chunked into appropriate units so that it can be handled using consecutive interpreting. While this is helpful to interpreters at any stage of their career, it is especially helpful to novice interpreters who may need the extra time to process language. However, while there is an increasing awareness of the importance of consecutive interpreting among some interpreters, interpreter educators, Deaf consumers and test developers, the profession has a long way still to go before there is a more consistent understanding of the relevance of consecutive interpreting in a multitude of settings.

5.   Models of interpreting and their role in consecutive interpreting

Pöchhacker (2004) provides us with an excellent overview of the theoretical and methodological paradigms that have shaped interpretation research and interpreting models. In his text *Introducing Interpreting Studies* Pöchhacker reminds us that no single model can illustrate interpretation as a whole. For each of the models that have emerged in the field of spoken and signed language interpreting research, one can trace the model back to the researcher's or scholar's epistemological position (2004:107). Indeed, other authors in this text have discussed cognitive models and introduced new models in order to broaden the discussion and address some of the weaknesses of the previous models (see Janzen, Chapter 1; Leeson, Chapter 3; and Wilcox and Shaffer, this volume). Pöchhacker (2004) reports on models that reflect many levels of analysis within interpreting studies, and while all are relevant to the discussion here, I have chosen to examine some of the *cognitive*, *textual,* and *interactional* models that have impacted the field of signed language interpreting.

Some of the earliest models from the 1970s focused on *cognitive* processes. Seleskovitch (1978) was one of the first to posit a cognitive model of interpreting that focused on the interpreter's understanding and expression of "sense" as part of a three-part process. Her model, which was not based on empirical evidence, became the foundation of the Paris School and continues to be debated today. Her work also shaped the early stages of the education of signed language interpreters in North America via her writing and presentations. In the field of signed language interpreting specifically, Colonomos (1987) also described three stages of cognitive processing, each with its own cognitive tasks. Her model focuses on some of the tasks of accessing short-term and long-term memory for knowledge, making the target language switch based on linguistic and cultural knowledge including awareness of discourse frames in both ASL and English, and thus introducing communication norms into the discussion. During this same period, Cokely (1992) also offered the field a cognitive model of interpreting, based on a detailed breakdown of the mental processes that occur during linguistic analysis and reconstruction. His model highlights seven main processing stages, and many more sub-processes that reflect top-down processing.

Each of the cognitive models mentioned above has made contributions to the field of interpreting by articulating some of the concepts that can help interpreters

find strategies to improve their work, and offering tools to interpreter educators in teaching interpreting. However, the models have also invited critique and further debate about the complexity of interpretation, which has resulted in further research into communication processes and the ways that interpreting affects communication among participants who do not share the same language. In the late 1980s we saw an increase in the discussion of the nature of *text* and *discourse* in interpreted interactions (Pöchhacker 2004). Pöchhacker's (1992) own model of interpreted interaction brings attention to the "perspective" of the individuals in the event, moving us away from a sole focus on text and content. Alexieva (2002) emphasizes seven parameters which influence the interpreted event, raising our awareness of distance vs. proximity between participants, equality, status and power of participants, setting dynamics, goals of participants whether shared or conflicting, and cooperativeness/directness vs. non-cooperativeness/indirectness.

Again, specific to the field of signed language interpreters we find some examples of *textual processing models* that have been discussed. For example, Smith and Savidge (2002) and Witter-Merithew, Taylor and Johnson (2002) have written about additional features that need to be considered within cognitive models of interpreting. They suggest that interpreters, no matter how competent, bilingual, and bicultural they may be, must constantly weigh choices in search of the best ways to convey shades of meaning and speaker intent. Interpreters must also deal with the cultural differences that are embedded in the linguistic structures. For example, narrative structures found in ASL, the depth of detail of a description, and the social fabric of a culture all differ from the language and culture of the majority creating incredible challenges for an interpreter when she is attempting to convey equivalent meaning so that all parties in the event can communicate effectively. This type of discussion parallels the models advanced by Pöchhacker (2002) and Alexieva (2002) and takes us away from the conduit models of simply encoding and decoding messages.

During the 1990s, Roy (1996) and Wadensjö (1998) led the field to examine interpreting as dialogic discourse-based interaction. Roy (1996) specifically studied signed language interpreters while Wadensjö (1998) examined the work of spoken language interpreters. Wadensjö explored interpreting from the perspectives of "interpreting as text" and "interpreting as activity", distinguishing between these different orientations that interpreters hold when they are working. Wadensjö uses the phrase "interactionally oriented" (1998:24) to describe interpreters who coordinate both interpreting at the textual level and at the level of situated activity as interaction within the interpreted event.
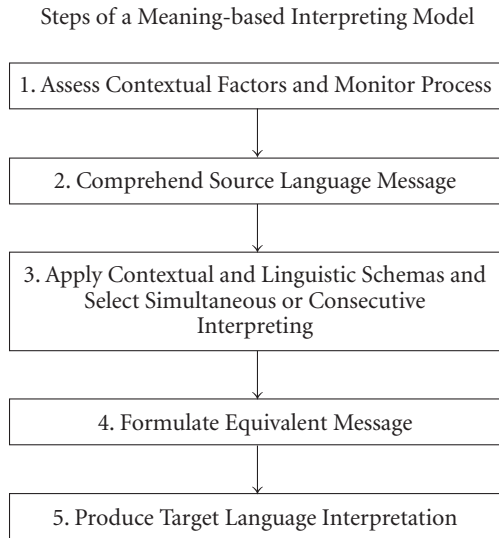
Given the numerous models and orientations of study that are prevalent in the field of interpreting, what are the benefits of using models in interpreter education programs, and how do these models reinforce consecutive interpreting skills? The value of some of these models to the field of ASL-English interpreting is that they offer guidance in understanding the nature of how communicators structure their messages and how interpreters try to capture that meaning in order to recreate it in a second language. They also offer us insight into how interpreters can practice the cognitive

sub-tasks of interpreting so as to develop the short- and long-term memory and analysis skills needed to produce accurate target texts. Shlesinger (2000) suggests that simultaneous interpreting is such a complex task that we may never fully understand all of the components of the process and how they interact, but that interpreting may actually be a combination of cognitive processes and proceduralized strategies. As stated earlier in Section 2, interpreters who do not have a thorough appreciation of the cognitive processes involved in interpreting will not be able to provide consistently accurate, meaning-based work. It is also helpful for us to have models of interpreting as an activity where interpreters focus on the participants' understanding of various parts of the interaction and the progression of that interaction, drawing on the context that participants bring and the meaning that is created during the interaction (Wadensjö 1998).

In the sections that follow, I discuss one additional model that may aid inter-preters in their work, whether working simultaneously or consecutively (Russell 2000, 2002a).[2] The model acknowledges differences in linguistic and cultural meanings be-tween two languages and the need for meaning-based work as the desired interpre-tation product that is created throughout the interaction. As the field of interpreting has developed, other approaches have been introduced, such as Gish's (1986, 1992) work that is a goal-to-detail/detail-to-goal schema for information processing in in-terpreting and Isham's (1986) text analysis framework based on understanding the purpose of a message, along with features of content, context, register and affect. Nei-ther Isham's work or Gish's model are cognitive models *per se*, but rather are very useful approaches to text analysis, and which form the foundation for the analysis stages of the model outlined below. In addition, the works of Wadensjö (1998) and Roy (2000) have shaped my awareness of context and the background information that the inter-preter must possess in order to deal with the multitude of decisions they make when observing both the language and patterns of interaction within an interpreted event.

Interpreting students often feel overwhelmed with the goal of learning to interpret, and such a model can demystify the interpreting process, strengthen the interpreter's text analysis skills, and help her handle the multitude of aspects required to produce an accurate interpretation by constructing meaning between parties. The model will be helpful throughout the interpreter's career, as it can be used as a diagnostic tool to provide insight into the interpreter's strengths by identifying successful interpreting patterns as well as areas of need, which can then be translated into ongoing profes-sional development. It can pinpoint where the processes may be breaking down for the interpreter and reveal the specific language tasks that need further development, for example semantic development in ASL or in English, or the ways in which the inter-preter did not attend to the patterns of interaction that shaped the discourse, missing key contextual information.

Steps of a Meaning-based Interpreting Model

1. Assess Contextual Factors and Monitor Process

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2. Comprehend Source Language Message

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3. Apply Contextual and Linguistic Schemas and Select Simultaneous or Consecutive Interpreting

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4. Formulate Equivalent Message

↓

5. Produce Target Language Interpretation

Figure 1. The Steps of the Model (adapted from Russell 2002a).

5.1   A meaning-based model of interpreting

The model developed in Russell (2000, 2002a) and refined in this section specifically identifies the need for the interpreter to assess and apply the contextual factors impacting the interpretation, actively using her background knowledge about language, culture, conventional ways of communication in both English and ASL, and to determine whether to use consecutive or simultaneous interpreting within a given interaction. It is an attempt to build on the models that highlight text and language analysis, and to incorporate the dynamics of the interaction via context. This model is shown in Figure 1.

The steps of the Meaning-Based Interpreting Model include:

1. ASSESS CONTEXTUAL FACTORS AND MONITOR THE PROCESS: As the interpreter approaches the interpreting task, contextual factors need to be considered, but this activity does not stop here. Throughout the interaction, the interpreter constantly assesses contextual factors and their impact upon communication. Context helps the interpreter determine the speaker's or signer's particular meaning within the specific interpreted interaction. This includes assessing factors such as the relationship between the parties in the interaction, the formal and informal power structures represented, the similarities and differences in backgrounds and experiences of the participants, the emotional overlay of the interaction, and the impact that having an interpreter present has on the way the speaker and signer construct their messages. As well, throughout all phases of the interpreted interaction, the interpreter monitors the communication process because the participants are creating additional context and experience through their dialogue.

At times, the interpreter finds herself surrounded by topics, specific lexicon and jargon, and descriptions of events that the participants have shared knowledge of, whereas the interpreter lacks that content and contextual information. This is Step 1, but importantly it overlays each further step represented in the model.

2. COMPREHEND SOURCE LANGUAGE MESSAGE: During this stage, the interpreter must draw upon skills related to bilingual and bicultural awareness and text analysis in order to support comprehension of the original message. The interpreter draws upon her fluency in both English and ASL in the following areas:

    a. Syntactic knowledge;
    b. Semantic knowledge;
    c. Associated knowledge and background experience;
    d. Cultural awareness; and
    e. Contextual knowledge.

    It is at this stage that the interpreter is required to process information at lexical, phrasal, sentential and discourse levels to determine characteristics of the discourse frame that the speaker or signer is using. For example, this could include identifying register and style features such as the use of politeness markers, and structural items such as syntactic forms needed to convey particular question or answer styles, say in a courtroom setting.

    At this stage the interpreter needs to verify comprehension and seek clarification when needed and when appropriate. This also includes negotiating movement between simultaneous and consecutive interpreting as required. Lastly, this stage also includes checking for and correcting errors as appropriate, which are often created when the interpreter lacks sufficient contextual knowledge[3] about the content or the situation in which she is interpreting.

3. APPLY CONTEXTUAL AND LINGUISTIC SCHEMAS AND SELECT SIMULTANEOUS OR CONSECUTIVE INTERPRETING: This stage involves the application of the interpreter's ongoing assessment of contextual factors influencing the interaction, such as linguistic competence, the experiential and cultural frames of the participants who are interacting, along with their cross-cultural and cross-linguistic experience. At this stage the interpreter also determines whether to use consecutive or simultaneous interpreting for the message in order to support genuine communication for all participants and to maintain message equivalence.

4. FORMULATE EQUIVALENT MESSAGE: After processing the information at all levels, that is, lexical, phrasal, sentential and discourse, and applying cultural and linguistic frames in order to realize the goals of the speaker or signer, the interpreter then makes these cultural and linguistic choices – planning, formulating and reviewing the elements to be used to express an equivalent message in the target language. Elements of the target message may be rehearsed at this stage. Assessing contextual factors and monitoring the process continues to apply.

5. PRODUCE TARGET LANGUAGE INTERPRETATION: At this stage the interpreter produces the target message, based on the previous stages. Once again, at this step,

the interpreter continues to assess contextual factors and monitors the process to ensure the effectiveness of the interpretation among the parties.

This model brings together the roles of context, linguistic and cultural schemas and the decision-making processes that involve choosing consecutive or simultaneous interpreting. The Meaning-based Model presented above offers the interpreter and the interpreter educator a window into the tasks to be accomplished when analyzing interpreted interactions. The process of interpreting is very complex but by identifying and practicing some of the tasks of each stage, the student learning to interpret can develop the linguistic and interactional skills necessary to perform the work.

The Meaning-based Model builds on the need for honed text analysis skills dependent on careful contextual assessment. These processes applied to consecutive interpreting in particular will enable the interpreter to solidify skills that promote meaning-based work. The message analysis and message production time needed by a novice interpreter, who may still be acquiring bilingual fluency, is such that consecutive interpreting is likely the only way she will have success. Successful experience in consecutive interpreting will then lead the interpreter to be able to handle simultaneous interpreting because she can return to the processes that have been firmly established and adequately rehearsed in her consecutive practice. By contrast, the consequence of undertaking simultaneous interpreting prior to mastering the process of consecutive interpreting often results in inaccurate meaning construction or the production of strictly form-based work. If the interpreter has missed the stages that involve recognizing contextual factors and the intent of speaker-chosen discourse frames, she will likely develop a strong tendency to transcode in her work.

Typical errors that occur for interpreters who have not employed consecutive interpreting include semantic errors, source language intrusions, omissions of content, missing cohesive devices that link ideas as effectively as they were linked in the source text, and ultimately excessive repairing of the message as the interpreter realizes the errors that she is making while performing simultaneous interpreting (Berk-Seligson 2000; Russell 2002a).

5.2   Consecutive interpreting and signed language interpreters

A review of studies conducted in the field of spoken language interpretation shows an emphasis on consecutive interpreting during programs of training. Numerous descriptive studies have examined differences between consecutive and simultaneous interpreting, and provide support for students to be well trained in consecutive interpreting prior to moving to simultaneous interpreting. Consistently, the evidence suggests that consecutive interpreting results in much greater accuracy in the transmission of the message (Alexieva 1991; Bruton 1985; Cokely 1992; Mikkelson 1994; Seleskovitch & Lederer 1995). Alexieva (1991) found that regarding simultaneous interpreting, not all types of texts can be interpreted successfully under the difficult conditions characterizing the circumstance (e.g., simultaneity of the speaker's and in-

terpreter's performance, speed of delivery of the source language, lack of knowledge about the context, and a single rendition of the source utterance). Barnwell (1989) concurs with this view, stating that simultaneous interpreting offers very little time to reflect on the linguistic choices needed for a precise rendering. Consecutive interpreting, in which the interpreter waits until a complete thought has been uttered and then begins interpreting, is the primary form of interpretation used in medical situations (Mikkelson 1994). Consecutive interpreting allows for the conveyance of the source message content, as well as critical information conveyed in the structural elements of that message that are not contained in the words: pauses, tone of voice, stress, etc. Nida (1964) and Seleskovitch (1978) note that a successful interpretation must not only include reformulation and "retranslation" into the target language, it must also produce the same impact or impression on the target language audience as that created by the speaker on an audience who understand the speaker directly. Further, there is agreement within the literature that interpreters using consecutive interpreting, who work from memory and notes, find it easier to break down the interpreting process and examine the skills required to cope with the process successfully (Alexieva 1991; Barnwell 1989; Bruton 1985; Gile 1988; Harris & Sherwood 1978; Mikkelson 1994).

Bruton (1985), Lambert (1984) and Seleskovitch and Lederer (1995) emphasize that through a progression of exercises aimed at teaching interpreters to grasp, analyze, remember, and only then reproduce the message of the speaker, it is subsequently possible to proceed to acceptable simultaneous interpretation where required or desired. This last point is an interesting one when contrasted with the practices of some signed language interpreter education programs, where students are placed in a position to interpret simultaneously without the foundation of progressive exercises designed to hone text analysis and consecutive interpreting skills.

As mentioned earlier, in a pilot study oulined in Russell (2002b), twelve out of fifteen ASL-English interpreter educators themselves had training in consecutive interpreting. Beyond this study, however, it is not known how widely interpreter educators across programs have received such training. It may be that educators default to how they were trained, and if their training has not included these methodologies consistently, including text analysis and consecutive interpreting, they may not be focusing on such skills with their own students. This also applies to the field, where recent graduates report that while on practicum they were discouraged from using consecutive interpreting by practicum mentors. The practicum mentors may also lack training and experience in consecutive interpreting, and hence they return to how they learned to interpret. The following comment came from an educator participating in the pilot study (Russell 2002b) regarding the teaching of consecutive interpreting. This quote invites us to consider how we can help practitioners in the field accept and then use consecutive interpreting when appropriate:

> Since we are working with existing practitioners the discussion is always dynamic and students are anxious about whether consecutive interpreting will be accepted. It is challenging – the interpreters are afraid, and they want to do what is familiar

> to them. I would estimate that 55–60% of the practitioners are able to successfully make the transition. The rest are not.   (Russell 2002b: 9)

Another educator's comments offer additional views:

> Some of our mentors model consecutive interpreting [CI] but the majority do not. Because our students are immersed in the CI perspective and practice it in role-plays, they are adept at analyzing situations in which they would prefer to use CI and explain the justification for it. So, even though some consumers may not want students to do it, the students can handle that and offer it as a mode when appropriate.   (Russell 2002b: 9)

She continued to say:

> All of our mentors are trained in the model and we have some taped modeling that reflects models of chunked/consecutive work. More importantly, students are taught to regularly prepare interpretation or rehearse portions that can be rehearsed in advance – even when doing simultaneous work.   (Russell 2002b: 9)

What is reflected in this information is that some programs are helping students to identify strategies to talk about consecutive interpreting with consumers and how to make effective choices about when to use it. As well, at least one program is working with mentors to help them understand the nature of consecutive interpreting. What would benefit students entering the field is to see instructors model consecutive interpreting, and to be able to engage working professionals in dialogue about its use.

The field of spoken language interpreting has benefited from the progression of learning translation skills, leading to consecutive interpreting skills, which then support simultaneous interpreting. Certainly Cokely (2003) argues for the inclusion of all of these skill-sets within each interpreting course. We would be well advised to revisit our approaches to teaching based on the literature from the field of spoken language interpreting and from recent research on the accuracy of consecutive interpreting for signed language interpreters in order to bring about significant change in this field.

Cokely (1992) examined simultaneous interpreting among ASL-English interpreters, and his findings demonstrate that when calculating interpreting errors there is a critical link to the length of time between a speaker's utterance and the target language production. Cokely reports that one of the primary causes of misinterpretation appears to be the lack of sufficient source language input, which is determined by the interpreter's "lag" or processing time. The shorter the processing time, the greater the probability of inappropriate syntactic constructions and lexical choices appearing in the target text, and the greater the tendency for the interpreter to adhere to source language syntax, resulting in word-for-word transcoding. Given these findings, consecutive interpreting must be reconsidered as a viable option by ASL-English interpreters working in a variety of settings.

The research is sparse when it comes to examining the differences between experienced and novice interpreters' work, or about possible differences in the way they carry out the task. One school of thought suggests models developed for skilled inter-

preters do not apply to novice interpreters, and that there are important differences in the ways that novice and experienced interpreters perform the task (Dillinger 1994). For example, Dillinger points out that some studies suggest that experienced simultaneous interpreters may short circuit the deeper semantic analysis (Gerver 1976), and that experienced interpreters have been found to include more source information and delete less, process larger chunks of the input, and give less literal translations (Barik 1969). However, research conducted by Russell (2000, 2002a) with experienced, certified interpreters working in courtrooms shows that even their simultaneous work was not as accurate as their consecutive work. This difference in accuracy occurred despite interpretation being performed by experienced interpreters working in teams, with the expectation that they would monitor each others' work for accuracy.

Despite the significant body of literature from spoken language interpreting which suggests that consecutive interpreting allows for a greater degree of accuracy, the predominant practice of ASL-English interpreters has been to provide simultaneous interpretation. A striking difference is that signed language interpreters not only work between two languages, but two modalities. This modality shift is noted in Cokely's (1992) model, but there appear to be very few studies examining its significance. This modality difference has contributed to the predominant use of simultaneous interpretation which can occur more readily in this circumstance because there is no need for technology such as interpretation booths and infrared systems, nor for pausing, in that the interpreter can sign while someone is speaking and speak while someone is signing without the signals interfering. But a question arising from the predominant use of simultaneous interpreting must be asked: are consumers, both Deaf and non-deaf, receiving accurate and effective interpretation when the majority of service is being provided simultaneously?

6. Consecutive and simultaneous interpreting in legal contexts

There are, most certainly, ASL-English interpreters who use consecutive interpreting successfully in their practice. How do these interpreters decide how and when to use consecutive interpreting? What is the impact of their decision on the quality of the interpretation product? Russell (2000) conducted a study that consisted of a comparative analysis of simultaneous and consecutive interpreting provided by ASL-English interpreters in courtroom interactions. Three distinct courtroom events were studied: expert witness testimony, the entering of direct evidence with a Deaf witness, and cross-examination of the Deaf witness. The study also explored consumer satisfaction with the two different interpreting methods.

Quasi-experimental design principles shaped the study. Specifically, the study used a factorial design, and manipulated one independent variable. Four mock trials were conducted with four ASL-English interpreters. The interpreters worked in teams of two, and participated in all three courtroom events. The interpreters were chosen from four areas of Canada, and were selected on the basis of the following criteria:

1) interpreters needed to be experienced practitioners who were identified by the interpreting and Deaf communities as interpreters respected for their interpreting skills in a variety of settings; 2) interpreters holding national certification were preferred (i.e., the Association of Visual Language Interpreters of Canada (AVLIC) Certificate of Interpretation); and 3) interpreters had a minimum of 500 hours of interpreting in legal settings. Three females and one male who met the criteria were chosen, with three of the interpreters holding national certification at the time of the study. Other courtroom participants included judges, lawyers, an expert witness and two Deaf witnesses. The lawyers and judges who participated in this study each had more than five years of experience in criminal law, and only one lawyer had previous experience working with signed language interpreters. The four ASL-English interpreters were videotaped providing consecutive and simultaneous interpreting in four mock criminal trials and subsequently a sociolinguistic analysis was conducted on the interpretation data to determine its accuracy. As well, all mock trial participants gave post-trial interviews, offering their reflections on the experience.

The mock trials were written by the British Columbia Criminal Trial Lawyers Association based on actual courtroom cases. Mock trials are often used in the education of lawyers and include all the elements of real trials. Two criminal trials were chosen, one regarding a sexual assault charge and the other a charge of assault causing bodily harm. Criminal trials were chosen for the study because the consequences of interpreters' errors are grave in these circumstances. Participants were prepared for court by reviewing key materials. For example, the interpreters received details that are standard when considering accepting a courtroom assignment. The lawyers prepared for the witnesses as they would in any trial, and interpreters met with the Crown Prosecutor and Defense Counsel prior to the trials.

The trials were taped at the University of Calgary, Faculty of Law, using the Moot Courtroom. This room is equipped with multiple video cameras built into the walls, and a professional technician operated all of the equipment. The Moot Court closely resembles a regular courtroom and as such added to the simulation. Multiple camera angles allowed for all witnesses and interpreters to be recorded.

During the trials, the interpreters were videotaped performing ASL to English and English to ASL interpreting, while working with a non-deaf expert witness, a Deaf witness, the cross-examination of that same witness, and the interactions between judges and lawyers. They performed their interpreting in a team context, each team composed of two interpreters. None of the discourse was scripted in order to capture natural language interaction in the courtroom.

Quantitative data collected on videotape were analyzed by contrasting the original messages with the interpreters' target language texts. An ASL linguist and interpretation expert each verified the analysis. Further, a chi-squared analysis was conducted using the linguistic data. The qualitative interview data were summarized and analyzed for common themes, recommendations and significant insights.

Trials conducted with consecutive interpreting produced significantly different results from the trials using simultaneous interpreting. The consecutive mode demon-

strated a greater degree of accuracy than did simultaneous interpretation. The two trials where simultaneous interpreting was used achieved 87% and 83% accuracy rates, while the two trials conducted with consecutive interpreting realized 98% and 95% accuracy rates.

In all trials the number of interpreting errors across the discourse events was greater during expert witness testimony and when direct evidence was being given. For all four trials, there were fewer errors exhibited during cross-examination. The data were pooled and tested for significance using chi-squared tests. The three discourse events (expert witness, direct evidence, and cross-examination) were used as dependent variables, with type of interpreting (consecutive or simultaneous) as the independent variable. Tests of significance suggest that the consecutive mode of interpreting is superior to the simultaneous form, when used for all three legal discourse types. Tables 1 to 3 show the numbers of correctly versus incorrectly interpreted utterances (and percentages) over the three discourse event types.

From Table 1, we see that for the expert witness discourse, the number of correctly interpreted utterances during consecutive interpreting was 613/645, or 95%, whereas the number of correctly interpreted utterances during simultaneous interpreting was 362/415, or 87%. The chi-squared test shows that this difference is statistically significant. Tables 2 and 3 for direct evidence and cross-examination respectively, should be read in the same manner.

The following table (Table 4) shows the number of interpretation errors across each trial and each discourse event. Trials One and Four were conducted using simul-

Table 1. Accuracy of interpretation for the expert witness discourse event, consecutive versus simultaneous

Evaluation of Interpretation	Consecutive	Simultaneous	Total (N)
Correct	613/95.04%	362/87.23%	975
Incorrect	32/4.96%	53/12.77%	85
Total N/Total %	645/100.00%	415/100.00%	N = 1060

Chi Square = 20.188, df = 1, p < 0.001:Phi = 0.14, p < 0.001

Table 2. Accuracy of interpretation for the direct evidence discourse event, consecutive and simultaneous

Evaluation of Interpretation	Consecutive	Simultaneous	Total (N)
Correct	237/95.95%	290/77.54%	527
Incorrect	10/4.05%	84/22.46%	94
Total N/Total %	247/100.00%	374/100.00%	N = 621

Chi Square = 39.25, df = 1, p < 0.001:Phi = 0.25, p < 0.001

Table 3. Accuracy of interpretation for the cross-examination discourse event, consecutive and simultaneous

Evaluation of Interpretation	Consecutive	Simultaneous	Total (N)
Correct	241/98.37%	331/91.18%	572
Incorrect	4/1.63%	32/8.82%	36
Total N/Total %	245/100.00%	363/100.00%	N = 608

Chi Square = 13.55, df = 1, p < 0.001:Phi = 0.15, p < 0.001

Table 4. Ratio of interpretation errors over total number of utterances by trial and discourse event

Trial Number	Expert Witness	Direct Evidence	Cross-Examination
Trial One (S)	21/213*	39/189	15/188
Trial Two (C)	5/292	4/154	1/157
Trial Three (C)	27/353	6/193	3/188
Trial Four (S)	32/202	45/185	17/175

*To be read as 21 errors out of 213 total utterances

taneous interpreting (S) and Trials Two and Three were conducted using consecutive interpreting (C).

The results also show a greater number of errors when the target language was ASL. For many interpreters, ASL is a language they develop as a second language, after acquiring spoken English, and often during their adult years. Three of the four interpreters identified ASL as their second language, whereas one interpreter has Deaf parents and therefore ASL is a first, or native, language. This second language factor may have contributed to the number of errors made interpreting into spoken English, in that the majority of the errors appeared to be related to comprehending ASL utterances. This was not tested in Russell (2000) but would be an important factor to test in future study. When examining errors made while interpreting from ASL to English, it became clear that the interpreters could produce fluent English, but the *message* was inaccurate.

Across all four trials the cross-examination discourse events showed far fewer errors than the other discourse events. This was an expected result in that the evidence had already been entered via direct testimony, and cross-examination is an opportunity to refute that same evidence. At this stage in the trials, the interpreters had previously interpreted the witness's evidence, so were therefore more prepared for the cross-examination of the witness. There was nothing substantially new that arose during cross-examination, and hence the accuracy rate was higher across all four trials when contrasted with the other two discourse events.

An examination of the transcripts revealed that common patterns of errors emerged from all trials, including omission of content and summarized answers for the court when critical details were explicit in the source text, shifts in tense (mixing

present and past tenses), shifts of register (more casual in ASL than indicated in the English source message), target messages produced in fluent English that included inaccurate content, ungrammatical ASL, source language intrusions which resulted in form-based or transcoded work, and interpreter-initiated utterances which were not interpreted for all participants. As well, there were patterns of "hedging" in the target spoken English when the answer had been complete and definitive in ASL. There were also times when the interpreters inappropriately used a previous question and linked it to the current question which resulted in an answer of "no" when the predicted response was "yes".

When using simultaneous interpreting, the number of errors was highest during the direct evidence discourse event, followed by the expert witness discourse event. Direct evidence is a critical part of any trial so errors made in that testimony are often discovered during cross-examination, resulting in a witness who appears to have changed her story when in fact the errors belong to the interpreters. Such errors have grave consequences for the judicial process, and interpreters and consumers should both be very concerned about such findings. In this study, simultaneous interpreting, even when performed by experienced and certified interpreters, resulted in dramatic errors that were not corrected during the trials.[4]

During post-trial interviews, interpreters were able to identify segments of the simultaneous trials where they believed the interpretation would have been more accurate if they had interpreted consecutively. In these segments, the interpreters indicated that they lacked the time to fully analyze the messages and find equivalent choices in the target language. When asked about how the simultaneous mode impacted upon their management of the interpreting process, two interpreters noted that during the expert witness testimony they felt the pressure of time and that seemed to push them from the first stage of attending to the source message to directly producing the target message, with very little time for analyzing the meaning, let alone the contextual variables that were influencing the message. The data show that when source messages were intricate in either English or ASL, and the interpreting was provided in a simultaneous form, there were numerous grammatical errors, omissions of essential content, as well as content errors.

However, there were times when simultaneous interpreting was used effectively. This occurred during the cross-examination process, in that the scope of questions related only to the previous testimony, so the interpreters likely knew the information and the witnesses' responses were more predictable. When the answers were inconsistent, or introduced new information, the interpreters appeared to verify answers more frequently with the Deaf witnesses and also between themselves, and moved into using consecutive interpreting for some of the ASL to English responses. This decision to use consecutive interpreting within the trials where simultaneous interpreting was to be used is an interesting one and appears to indicate that the interpreters were monitoring their work effectively and knew that a change in mode of interpretation was required for those specific utterances.

From a consumer perspective, the lawyers noted that the consecutive process was familiar to them based on previous experience with spoken language interpreters, but it was not the preferred mode of interpretation when conducting a cross-examination, as the pausing interfered with their cadence when questioning the witness. The lawyers also expressed concern about the signals used by the interpreters to ask participants to pause in order to deliver the consecutive interpretation. The interpreters and trial participants had reviewed signals such as holding up one finger to indicate that the interpreters needed to stop the speaker or signer for a moment. During the trials, however, interpreters reverted to using signals that had not been discussed and this was confusing to the lawyers. The interpreters also stopped lawyers or witnesses at inappropriate times, such as in the middle of an utterance, or they allowed participants to continue to speak or sign for long periods without using any signal for them to pause. This resulted in consecutively delivered interpretations that were very lengthy, or times when an interpreter would begin the interpretation and then ask for a restatement as they had forgotten the original message.

Deaf witnesses noted that they found the interpretation easier to understand when presented consecutively, especially during complicated questioning. They identified that the interpretation was more grammatically correct, used more of the natural features of ASL, and exhibited fewer false starts and less repetition in the message. They also observed that they felt more relaxed when the interpretation was presented consecutively, allowing them to participate more fully in the trial.

When presented with simultaneous interpreting the Deaf witnesses commented that they observed more frequent false starts and repairs, and found that the interpretation moved closer to the structure of English, the source language. The Deaf witnesses commented on how this move affected them, in that it heightened their anxiety about whether they were understanding the proceedings fully, and whether the interpreting team would understand their answers. Hence, their attention shifted from participating in the proceedings to worrying about the accuracy of the interpretation.

It is also interesting to contrast the judges' perceptions and experiences with those of the Deaf witnesses. The presiding judges were interviewed one week after the conclusion of the mock trials. They indicated that they appreciated the simultaneous interpreting, which seemed to help speed up the proceedings. However, when presented with information about the nature of interpretation, and potential impact of errors within the interpretation when performed simultaneously, the judges all agreed that the quality and accuracy of interpretation was paramount in the assessment of the evidence. They also admitted that in their time on the bench, they had never received information about the nature of interpreting and how best to accommodate Deaf people who appear in court. Based on these interviews, the judges subsequently requested professional seminars in order to educate lawyers and judges about the complexity of interpretation, and the best practices that could be employed in courtrooms when working with Deaf witnesses.

The interpreters in this study who were most successful in using the consecutive interpreting process knew how to segment or chunk messages effectively, and had

a sense of the appropriate time and place to pause so that part of the overall text could be interpreted. All the interpreters who participated in the study had experience with consecutive interpreting, but despite their experience, not all the interpreters were well trained in how to use consecutive interpreting effectively, with the least disruption to the proceedings. For example, not all the interpreters had consistent strategies for chunking messages in appropriate ways, or effective note-taking skills to help retain complex utterances, nor did they have well-established signals to use with Deaf and non-deaf consumers. As well, only two out of the four interpreters had effective ways to explain the use of consecutive interpreting to consumers in both spoken English and ASL.

Interpreters who employed both consecutive and simultaneous approaches to interpreting identified the need to educate consumers regarding the rationale for consecutive processing and how it can enhance the accuracy of the work (Russell 2000, 2002a). In the study of courtroom interpreting, the interpreters were taped while conducting their preparation conversations with the lawyers. Interpreters who were viewed as successful in educating the lawyers about their work in the courtroom were those who had non-technical explanations, who were confident about expressing their needs, and who identified that the accuracy of the interpretation was paramount in making decisions about when to use simultaneous or consecutive interpreting. Educating consumers is critical because it is then that interpreters can address any fears or concerns that arise about the use of consecutive interpreting. The establishment of signals to be used between interpreters and consumers to request that discourse participants pause in order for the interpreter to produce the interpretation was another critical aspect of the preparation process leading to the consumers' acceptance of consecutive interpreting.

This section has described but a small portion of the results of the study in Russell (2000, 2002a), however the research clearly provides insight into the current challenges of providing accurate interpretation, and the results strengthen the argument to use consecutive interpreting in such settings.

7.   Deciding factors in the use of consecutive interpreting

How do ASL-English interpreters determine when to use consecutive interpreting? The results of the pilot study in Russell (2002b) and subsequent consultation with two interpreter referral agencies in Canada reveal that consecutive interpreting is typically being used in several types of assignments, and the setting itself appears to be one of the determinants for choosing to interpret consecutively. For example, six out of fifteen interpreting program graduates reported that while on practicum their practicum mentors had modeled the use of consecutive interpreting and encouraged its use in one-to-one and small group settings. Still Interpreting Inc., an interpreting referral agency based in Vancouver, British Columbia, reported that consecutive interpreting was most frequently used in job interviews, counseling appointments, legal interviews,

and in courtrooms during direct evidence or expert testimony (David Still, personal communication, August 2003). Still Interpreting, Inc. has full-time interpreters who report using consecutive interpreting daily, and these interpreters indicated that they base their decision to use consecutive interpreting on the density or structure of the message. These reports were matched by those at another interpreter referral agency, the Independent Interpreter Referral Service (IIRS)[5] of Winnipeg, Manitoba, who identified that increasingly consumers and interpreters alike are becoming more comfortable using consecutive interpreting in one-to-one interviews (Bonnie Dubienski, personal communication, August 2003).

Interviews with seven out of fifteen interpreters revealed that while they knew how to make decisions about consecutive interpreting, and had some confidence about describing their reasons in spoken English (to non-deaf consumers), thirteen out of fifteen interpreters said they lacked the same confidence to describe consecutive interpreting in ASL. Clearly, interpreters require strategies in both ASL and spoken English to describe their desire to produce accurate interpreting. Such strategies would help to influence change within the field. Most interpreter educators reported that they use consecutive interpreting in their own work as interpreters and use the following variables in making the decision to do so (Russell 2002b):

– Complexity and density of information
– Setting (e.g., one-to-one interaction where the discourse frame lends itself to natural chunking of information for consecutive work)
– Consumers' non-conventional use of signed languages
– Consumer is a child
– Consequences of interpreting errors are grave
– When working with a Deaf interpreter
– One educator added an additional factor: when she did not know the participants well and the newness of the situation or information was challenging for her. This speaks to the role of contextual variables and their impact on the interpretation.

This type of information, coupled with current research, is crucial for interpreting students so that they can understand when they should be using consecutive interpreting, along with the rationale that can be used to negotiate for consecutive interpreting in both spoken English and ASL in the work environment. It is also crucial that interpreter educators model consecutive interpreting for students.

Both IIRS and Still Interpreting Inc. indicated that interpreters who came into their employ had divergent experiences and understandings about the use of consecutive interpreting, depending on where and when they completed their interpreter education. For those interpreters not well trained in consecutive interpreting, the employers have had to provide additional education and opportunities for skill development, by having interpreters who are comfortable with consecutive interpreting mentor inexperienced interpreters, and by creating in-house learning opportunities.

Over the past twenty years, our field has been fortunate to have a number of interpreter educators offer workshops and publish papers on discourse analysis,

text analysis and cognitive processing models. By noting the work of Roy (1996), Wadensjö (1998), Smith and Savidge (2002), Winston (1998), and Witter-Merithew et al. (2002), to name but a few, we are gaining a body of knowledge upon which to build consecutive interpreting exercises that are effective and educationally sound. The Model Curriculum edited by Baker-Shenk (1990) offers a framework for teaching and learning about consecutive interpreting. Witter-Merithew et al. (2002) provide an effective and comprehensive ten-step discourse analysis process leading to consecutive interpreting. For any interpreting student or practitioner who wants to develop her consecutive interpreting skills, these materials are crucial and offer very helpful information. As Witter-Merithew et al. (2002) remind us, students ideally come to the task already possessing bilingual and bicultural competence. Then, through systematic exercises designed to practice the cognitive processes necessary for translation and consecutive interpreting, we can help students to achieve mastery of the interpreting process. Such training, whether in the classroom setting or on the job, must include:

– experience with text analysis that includes identification and control of linguistic aspects such as genres, registers, affect, cohesion, semantics, grammar and prosody
– auditory and visual memory development
– mapping of texts for linguistic elements and patterns of interaction among communicators
– note-taking and mapping techniques
– the ability to identify and segment linguistic and meaning-based chunks within the interaction that are suitable units for interpretation
– creation of culturally appropriate signals to use in order to ask consumers to pause so that the interpretation can be given
– consecutively interpreted texts modeled by interpreters who demonstrate success
– live models for simulated one-to-one role-plays

When interpreters are faced with content that is complicated, detail laden, or presented using linguistic structures that are challenging for the interpreter to construct meaning from, consecutive interpreting should be used. Interpreters who use consecutive interpreting report that when working with Deaf children, who may not use standard language features or conventional discourse structure, or when working with Deaf people who are using non-standard varieties of signed language, they will often move toward consecutive interpreting. By doing so, they better ensure that they are comprehending the complete message, are able to apply text analysis principles and bring the contextual analysis into the creation of meaning, and then can restructure the message in the target language. This reduces miscommunication and false starts, and increases the use of conventional discourse strategies in the English to ASL work.

There are settings where an interpreter may choose to use a blend of both forms of interpreting within one assignment. An example of using both consecutive and simultaneous interpreting naturally within one interpreted event might occur during a police interview. The interpreter may begin the interview using simultaneous interpreting for some of the more predictable content (e.g., questions designed to

establish rapport, confirming printed information such as name, address, employment details, etc.). Once the interviewer moves the discussion toward facts or details of an incident, the interpreter may choose to switch to consecutive interpreting, thus allowing for greater complexity in questioning style and the level of detail that must be accurately conveyed across languages. As the interview closes and the incident related information exchange portion of the interview ends, the interpreter may return to simultaneous interpreting for the leave-taking process, which once again may be more predictable in nature. The interpreter can rely on several criteria to help her make this decision during the assignment, such as the question and answer discourse style itself, the complexity of questions and answers, the density of information, and the consequences of interpreting errors on the communication event. Sometimes interpreters prepare the consumers for such a switch prior to the assignment, and others choose to let consumers know during the assignment if they perceive a need to alternate between consecutive and simultaneous interpreting. Both negotiating strategies can be effective, depending on how the interpreter presents the two possibilities both in English for the non-deaf participants and in ASL for the consumer who is Deaf. Ultimately, consumers are usually willing to make adjustments when they understand that it will ensure a greater degree of accuracy. It is clear from Russell (2002b) that Deaf consumers are more concerned with miscommunication among participants than they are about the use of consecutive interpreting.

Interpreters who successfully use consecutive and simultaneous approaches to interpreting are those whose practice includes:

– strategies to discuss and negotiate for the use of consecutive or simultaneous interpreting (in spoken English and ASL) with consumers in order to produce the most effective interpretation possible;
– the ability to establish culturally appropriate signals in spoken English and ASL to cue consumers when to pause for the interpreter to deliver the interpretation;
– strategies to manage the interpreting process, including how to chunk complete thoughts or fully-formed questions in the source language;
– knowing when to employ mapping and note-taking approaches and when to rely upon short-term memory;
– the ability to move between consecutive and simultaneous interpreting, based on the nature of the content (complexity, lack of familiarity with content or context, impact of errors, type of discourse, goals, etc.); and
– knowing how to monitor the work for success and for errors, and how to modify processing time in order to produce accurate work.

This list may seem daunting but these skill-sets can be honed if the interpreter develops strong text and contextual analysis skills and has the opportunities and time needed to create a solid foundation of consecutive interpreting skills. Less experienced interpreters can learn from watching more proficient models of consecutive and simultaneous interpreting, and from dialogue with colleagues about the benefits of approaching their work from within this framework.

There are divergent views among educators and interpreters about what constitutes best practices in interpretation. For example, Russell (2002b) reports that while fifteen out of fifteen interpreter educators in the sample agreed that consecutive interpreting could provide a more accurate interpretation, only eight out of fifteen practicing interpreters agreed with that statement, revealing different perspectives among educators and interpreters. When these educators and interpreters were asked about their experience talking with consumers about the benefits of consecutive interpreting, two out of fifteen interpreter educators felt it was difficult to speak to consumers about the issue, compared to ten out of fifteen interpreters. There is agreement among these two groups that their experiences have shown them that consumers of interpreting services do not like consecutive interpreting, however we might ask whether consumers don't like it because the interpreters are not performing it well, or because interpreters on the whole have thus far "trained" consumers to believe that they can consistently produce accurate simultaneous interpretation. My own experience working with Deaf interpreters leads me to believe that they are some of our best allies because it is these Deaf interpreters who are having important conversations within the Deaf community about how communication and meaning-building among participants occurs in the interpreting process, and why consecutive interpreting is needed in some situations. Clearly, if interpreters are committed to accurate interpretation, they must engage all stakeholders in discussions of what constitutes best practices altogether, incorporating research, educational practices and effective interpreting strategies.

8.   Implications for our field

There are several opportunities that emerge for the profession from recent research on consecutive interpreting. Educators and students have opportunities to explore methods of integrating research into the classroom, bringing new awareness of the role of cognitive models of interpreting and of consecutive interpreting as part of the critical skill-set that interpreters require throughout their careers. As the field changes, we have opportunities to examine our curriculum and the language we use to describe consecutive interpreting to students, practitioners and consumers. Over the past twenty years we have given consumers a strong message that simultaneous interpreting is somehow "better" than consecutive interpreting.[6] It is time to revisit what it is that informs our practice and perceptions, and to learn more about when consecutive or simultaneous interpreting can be used most effectively. Our goal must be to apply the knowledge that research brings us to our work as interpreters, and to question our motives for valuing one mode of interpretation over another.

9.   Conclusion

This chapter has examined some of the models of interpreting which provide insight into the nature of the interpreting process and has emphasized the need to use such models when learning how to interpret. These models are useful in teaching interpreting, and have relevance for both spoken and signed language interpretation, especially when examining what defines successful practices regarding the relationship between processing time and the ability of the interpreter to realize meaning based on the interaction and context that all participants bring to the communication event. This chapter has also examined consecutive interpreting research that supports the use of consecutive interpreting in a variety of settings in order to improve upon accuracy during the interpreting process.

It is clear from the literature that there are advantages to teaching consecutive interpreting as a distinct skill-set that will be needed throughout the career of a signed language interpreter. It is thus critical that students receive solid training in the use of consecutive strategies, and learn to apply them effectively as they work. Managing processing time requires that interpreters develop strong visual and auditory memory abilities, and that they understand how to take meaningful notes, when appropriate, that can reinforce their memory of the source message. As well, they must learn how to effectively segment messages during interpreted interaction while applying text analysis principles to determine meaning that has been created throughout the dialogue.

Preliminary results from the study of courtroom interpreting demonstrate that interpreters can and do successfully employ both consecutive and simultaneous interpreting within an interpreted event. Regardless of the skill level of the interpreter, simultaneous interpreting is a very complex process, and the risk of errors and miscommunication increases when the content or context is challenging to the interpreter, when the rate of speech and signing is rapid, when interpretation is performed under tight time constraints, when speakers' and signers' utterances overlap, and when interpretation mediates interactions that are emotionally charged. The impact of an interpreter's choice to use only simultaneous interpreting is significant; it can have grave consequences for the accuracy of the interpretation, and thus adversely impact the lives of those whose discourse depends on that equivalent meaning.

Research supports the use of consecutive interpreting and emphasizes that accuracy is higher when it is used. But, are there times when the use of consecutive interferes with the pragmatic and interactional goals of the participants for whom we are interpreting? This is one question still to be examined by further research studies. Clearly, further research is needed that will offer important insights into the many facets of providing interpretation. These include cognitive approaches to our work, the nature of interpreting for those who do not share the same language, culture, social identity or world views in legal and health care settings, the ways in which technology impacts the delivery of services, and the role that interpreters play in shaping the events that occur in an interpreted interaction. Pöchhacker (2004) suggests that interpreting

researchers can look to a number of disciplines that may advance our knowledge, such as those studying cognitive pragmatics and situated cognition, in addition to building on interpreting studies that incorporate linguistic analysis and discourse studies.

Learning what constitutes effective practice in the field of spoken language and signed language interpreting is an avenue for further exploration. Expanding the research in our field and learning to incorporate that knowledge into interpreter education programs and into interpreters' daily practice will move us forward. Given the consistent evidence suggesting that consecutive interpreting yields greater accuracy in the interpreted interaction, it is a practice that clearly warrants expanded use in the context of signed language interpreting. By exploring when and where consecutive interpreting might be used most effectively, we will be exploring ways to better serve those who rely on our professional services.

Notes

1. Ear-voice span is a term used in spoken language research that measures the period of time between when the ear receives the input and when the interpreter begins her interpretation. This period of time is also called "processing time", referring to the cognitive tasks that are occurring during that time. The term "processing time" implies an active process and is preferred over the phrase "lag time" which does not address the cognitive functioning required in order to understand and reformulate the message into the target language. However, when the intent is, in fact, to address the time differential between source and target utterances, "lag time" can be an appropriate term, as is the case in Leeson (this volume, Chapter 10).

2. Wilcox and Shaffer (this volume) present an additional cognitive approach to both communication in general and interpreting in particular. This work represents important new insights into cognitive models of interpreting, and the interpreter's direct involvement in constructing meaning. I encourage readers to consider the ideas that Sherman Wilcox and Barbara Shaffer present in their chapter.

3. For further reading on contextual knowledge, see Witter-Merithew et al. (2002).

4. It is of interest that federal legislation is in effect in the United States that requires consecutive interpreting for all non-English speaking witnesses giving direct testimony.

5. As of 2005 called the E-Quality Communication Centre of Excellence (ECCOE).

6. Perhaps this is a "self-preservation" strategy that buys into Gile's (1995) rule of Self Protection, discussed in Leeson (this volume, Chapter 3).

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