Interpreting in Teams: A Pilot Study on Requesting and Offering Support

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Abstract

This article begins by examining the limited literature on interpreting in teams and concludes that the suggestions and guidelines contained therein are exclusively anecdotal in nature. That is, there has been no empirical research examining the work of interpreters in teams. Thus, to date the practice of interpreting in teams has not been informed by empirical research. This article reports on the first in a planned series of studies focused on the functioning of interpreters in teams.

This pilot study examines the functioning of five teams of interpreters and analyzes those behaviors that team members use to request support. Specifically this article presents the results of an analysis of videotapes of each team interpreting a 45-minute American Sign Language (ASL) monologue as well as the preliminary meeting of each team of interpreters prior to the interpretation task. The study not only presents a taxonomy of behaviors actually used by interpreters to request support but also demonstrates that there is a discrepancy between those behaviors that interpreters state they will use when asking for support and those behaviors that they actually use. The study also demonstrates that more experienced interpreters are significantly more likely to offer unsolicited offers of support when compared with their less experienced team members.

In addition to offering suggestions for interpreters when working in teams, this article also presents questions for further research.

Background

Although the field of sign language interpreting is almost 40 years old if measured from the establishment of the Registry of Interpreters for the Deaf (RID), the concept of team interpreting is a relatively recent phenomenon within the field of sign language interpreting. A review of the very limited literature on

team interpreting reveals virtually no empirical research designed to inform meaningfully the practice of interpreters working in teams. The literature that does exist contains predominantly anecdotal information or formulations of specific guidelines that attempt to address the conditions under which more than one interpreter should be employed and the manner in which those interpreters should work. However, research that seeks to inform practice by analyzing the actual work of teams of interpreters is, for all intents and purposes, nonexistent.

Much of the literature on interpreting in teams has been devoted to justifying the need for more than one interpreter at an interpreted event or interaction. Given the additional expense involved and the naiveté of the general public about interpretation, it is understandable that justification of the need for teams would be a major focus in the literature. Excepting certain legal situations, the first large-scale use of sign language interpreter teams, as we know them now, was in conference settings beginning with the 1980 National Symposium on Sign Language Research and Teaching held in Boston, Massachusetts. Prior to that time, the notion of an interpreter "team" generally meant that more than one interpreter was physically present at an event, but they functioned as discrete individuals, merely alternating periods of work with each other but not working together as a team.

The most frequent justification of the need for multiple interpreters was fatigue. "Larger signing [during platform assignments] can be fatiguing and, therefore, platform interpreters should only work for periods ranging from 15 to 30 minutes at a stretch, trading with other interpreters" (Neuman Solow, 1981). However, in the early evolution of team interpreting, individual interpreters employed for given assignments functioned not as a team, but rather as discrete individuals, generally working in isolation from one another (Fisher, 1993). Because physical fatigue was the underlying justification, the implication and quite often the expectation was that when an interpreter was relieved, and thus not actually "working," that interpreter should rest. This pattern of work-rest-work-rest would then continue throughout the duration of the assignment. Indeed, the underlying operating premise of "resting to avoid fatigue" was evidenced, in its most extreme cases, by interpreters who would leave the room or read when they

weren't "working." This pattern of work-rest-work-rest and the underlying fatigue justification meant that team members acted independently rather than cooperatively. This alternating pattern and decidedly non-cooperative approach to the work also had the unfortunate effect of creating and reinforcing the notion that even though there were two interpreters present, only one of them was actually working at any one time. Fortunately the notion of working cooperatively has now become the common expectation (or at least the generally accepted goal) of team members. For example, the RID Standard Practice Paper on Team Interpreting states that "...all team members are constantly active in the team process" (RID, 1996).

The initial justification based on physical fatigue was reinforced by evidence in the mid to late 80s that some sign language interpreters were negatively impacted by repetitive stress injuries. Because certain manifestations of repetitive stress injuries, such as carpal tunnel injury, can be career ending for interpreters, the potential physical consequences of interpreting from voice to sign for extended periods without opportunities for rest soon became justification for the use of multiple interpreters. However, as the field of sign language interpreting began to focus more on the quality of interpretations (i.e., message equivalence, accuracy, and acceptability), the justification for the presence of multiple interpreters began to shift from a focus on the consequences of physical fatigue and stress to the consequences of cognitive fatigue and stress. While the two are not unrelated, it soon became clear that fatigue, both physical and cognitive, negatively impacts the accuracy of interpretations. As a result, the profession began to advocate for multiple interpreters whenever an assignment was "...longer than one interpreter can work with top performance" (Frishberg, 1986) and, indeed, the length of an assignment became the dominant factor in determining whether to advocate for multiple interpreters or not. (It is worth noting that the introductory text published by RID (Frishberg, 1986) not only advocated multiple interpreters whenever assignments involved extensive time but also whenever assignments took place in a physically large space). The fact that length of assignment was the dominant factor became evident in attempts by referral agencies to create policies that mandated that assignments of longer than a specified length of time (e.g., an hour to an hour and a half) required a team of two or more interpreters.

The literature also contains a number of suggestions or guidelines for how teams of interpreters should function. A number of these guidelines, while certainly meaningful and appropriate, are based more on anecdote, opinion, and common sense than on empirical evidence. Among these suggestions and guidelines are the following:

- "...20–30 minute shifts is a comfortable working time" (Frishberg, 1986)
- "...Interval lengths need to be discussed and agreed upon at the beginning of the assignment" (Frishberg, 1986)
- "...You must know what the other person needs and how you can work most effectively" (Plant-Moeller, 1991)
- "...[the interpreter not actively interpreting] monitors the spatial arrangement and sign choice of the working interpreter" (Fischer, 1993)
- "Compatibility and comfort in an assignment means...knowledge of each other's skills, style, personality, knowledge level, and familiarity with the situation, subject and participants" (Shaw, 1995)

As the notion of working in teams started to become more widely practiced and accepted, specific labels for team members and responsibilities of team members began to emerge. Even today, it is commonplace to designate one member of the team as the "on" interpreter (i.e., the team member who is actually producing the interpretation). This individual is often also referred to as the "working interpreter" or the interpreter who is in the "hot seat." The other member of the team is responsible for monitoring the accuracy of the interpretation and providing or offering support. This individual is often referred to as the "off" interpreter, the "back up" interpreter or the interpreter who is in the "cold seat." Among the responsibilities of this interpreter are: feeding missed information, ensuring use of consistent signs and signing space, and relieving the other interpreter when appropriate (Plant-Moeller, 1991). Although

these labels for members of an interpreting team appear in the literature and in various discussions about interpreter teams (see, for example, the RID Standard Practice paper (RID, 1996) which uses the terms "primary" and "support"), their use is problematic because they imply an unequal apportionment of responsibilities for an interpreting assignment. The use of these labels also leads to the inference that the interpreter who is in the monitor role is not actually working or, at a minimum, is not working as hard as the other member of the team. In other words, the terminology that has emerged to identify members of an interpreting team does not make it immediately apparent that the interpreter in the monitor role is charged with responsibilities that are at least as cognitively difficult as those of the interpreter who is producing the interpretation. (Ironically, a rather convincing case could be made that the task of the interpreter who is in the monitor role is the cognitively more difficult task). Throughout this article, members of an interpreting team will be identified by the role that they are fulfilling within the team (i.e., the lead role or monitor role).

In sum, although the literature does contain suggested guidelines for selecting members of a team, for the physical arrangement of members of a team while working, and as to how team members should prepare and "debrief," there are no reported empirical studies that focus on the actual behaviors that occur during the functioning of interpreting teams. In other words, the literature is silent on the question of whether the suggestions and guidelines that are proposed are actually followed by interpreters when working in teams, and the literature is also silent on the issue of the relative effectiveness of various strategies and behaviors used by team members in fulfilling their responsibilities as members of the team. Finally, the literature is also silent on the question of team composition (e.g., does it make a difference if team members are relatively equally experienced or not? If one member is significantly more experienced, does it make a difference which member of the team takes the first turn in the lead or monitor role?).

Research Questions

While the literature does contain guidelines and suggestions for the manner in which teams of interpreters should function, it offers little empirical data that could inform the practice of team interpreting. For example, there is no empirical research

to indicate the relative effectiveness of various behaviors used by interpreters to provide linguistic or process support to a team member. Given the lack of empirical data on team interpreting, this pilot study was designed to answer the following questions:

In preparing for an interpreting task,

- What specific behaviors do interpreters say they intend to use when requesting support during the assignment?

- What specific behaviors do interpreters say they wish their colleagues to use when offering support during the assignment?

- What specific behaviors do interpreters say they intend to use when offering support during the assignment?

- Are there differences in desired or intended behaviors based on relative levels of experience of team members?

In executing an interpreting task,

- What specific behaviors do interpreters actually use when requesting support during the assignment?

- What specific behaviors do team members actually use when offering support during the assignment?

- Are there differences in behaviors actually used based on relative levels of experience of team members?

In examining the work of pairs of interpreters,

- Are there differences in relative effectiveness of various supportive behaviors that are used?

- Are unsolicited offers of support incorporated into interpretations?

- Are there differences between more experienced and less experienced interpreting teams?

Research Design

To begin to answer these research questions, the interpretations of five pairs of interpreters were videotaped and analyzed. Each pair was asked to interpret a videotape of a Deaf person presenting a lecture on the topic of bilingual and bicultural education for Deaf students. The original lecture was delivered to a class of approximately 75 students enrolled in a course entitled "Deaf People in Society," which fulfills a core curriculum requirement within the College of Arts and Sciences at Northeastern University. In fact, during the fall 2000 quarter, each lecture in this course, which is co-taught by a Deaf and non-Deaf instructional team, was videotaped at the request of the lead instructor, one of the coauthors of this article. All video recording of the course lectures was done using digital video recording equipment, thus providing extremely high quality videotapes. Each of the videotaped lectures was approximately 60 minutes in length. Because enrollment in the course is open to all students within the University, a majority of students in the class lack sufficient competence to comprehend lectures delivered in ASL. Consequently, each class meeting must be interpreted. The same team of interpreters has interpreted this course, which is offered twice a year, for the past four years. However, neither of these interpreters was involved in this study.

The specific videotaped lecture was chosen as the stimulus material for all teams in this study for several reasons: first, the lecture portion of this class lasted approximately 45 minutes, with the remaining 15 minutes devoted to a question and answer session. A lecture of 45 minutes meant that, for purposes of this study, interpreting team members could reasonably be asked to switch roles after approximately 20 minutes. All teams interpreted the same 45-minute lecture, thus ensuring that each individual would be placed in both the lead and monitor roles. Second, because the presenter paced while lecturing, there were several instances in which he was momentarily out of frame and his signing was not fully visible. This afforded opportunities for requests for or offers of support within each team. Third, the content of the lecture, bilingual and bicultural education for Deaf students, contained numerous examples of culturally rich realities. The special challenges of interpreting culturally rich realities (Cokely, 2001) also offered opportunities for team members to request or offer

support. For purposes of this study, copies of the videotaped lecture were made without the original interpreted voice-over.

Each pair of interpreters was asked to participate in a research project. Upon arrival at the site, they were told that they were being asked to provide a voice-over soundtrack for a videotaped class lecture. They were given background information about the class lecture in an attempt to provide the type of information that would be available in a preconference meeting (e.g., they were told that the lecture was part of a course, Deaf People in Society; they were told the topic of the lecture to be interpreted and the name of the presenter; and they were given a general idea of the lecture and the purpose of the lecture as well as its place within the course sequence). Each team was also told the length of the presentation and was told that they did not have to interpret the question and answer portion of the tape. Teams were also instructed that because they were providing a "real time" voice-over, they would be unable to stop the videotape once it began. This was done to simulate the real time pressure faced by interpreters working in live situations. (In fact, one could reasonably argue that the constraint of not being able to stop the tape or to rehearse placed more pressure on the team than might exist in a live situation. This, in turn, would provide more opportunities for team members to ask for or offer support). Teams were told that members should switch roles after approximately 20 minutes. Finally, they were reminded that because of the nature of the research project and the need to provide a "voice over," they would be unable to stop the videotape once it began.

Each team was seated in front of a 19" television monitor placed on a table. The monitor was wired to a 19" TV/VCR positioned behind and above the interpreting team. Thus, the stimulus videotape was displayed on each of the television sets. A digital video camera was positioned at a slight angle behind the television monitor. The video camera was framed so that it recorded the interpreters as well as the stimulus material displayed on the TV/VCR behind them. A directional microphone captured the discussions during the preliminary meeting as well as the interpretation. The physical arrangement is shown in the following staged photo that was taken from the position of the video camera.

Each team was allowed approximately 15 minutes immediately preceding the interpretation to discuss logistics, their work preferences, and how they would proceed. This planning session was videotaped by one of the coauthors, who remained in the room. When the team was ready to begin the interpretation task, the researcher left the room after ensuring that the camera was recording properly.

Subjects

As mentioned above, there were five pairs of interpreters in this pilot study. These 10 individuals represented a wide range of experience and years of certification. It is worth noting at this point that because this was a pilot study, control of the experience level of team members was beyond the scope of this study. Clearly, the results of this study suggest that follow-up work in this area should not only attempt to control for relative experience, but also for other factors such as whether team members attended an interpreter education or training program. Table 1 captures the experiential qualifications of the individual interpreters (years of interpreting experience and number of years certified).

A determination of overall team experience was made on the basis of the less experienced member of each interpreting pair. The basic reasoning underlying this determination was that, in the absence of information to the contrary, since the two individuals comprising any team have not worked together before, it is reasonable to assume that the less experienced member of the team can define the experience of the team. This is partly a function of longevity—the more experienced an individual is (and the longer the individual has held certification),

Interpreter Pair	Years Experience	Years Certified
Pair A – member 1	12	11
Pair A – member 2	1	0
Pair B – member 1	9	5
Pair B – member 2	6	1
Pair C – member 1	30	28
Pair C – member 2	7 months	0
Pair D – member 1	11	9
Pair D – member 2	6	4
Pair E – member 1	7	3
Pair E – member 2	3	0

Table 1.
Experience of Interpreters by Teams.

the more likely it is that the individual has had increased opportunities to work as a member of an interpreting team. (As interpreter education programs and interpreter training programs begin to emphasize working in teams, this assumption may cease to be true in the future). It is also worth noting that, for purposes of this study, we are concerned with relative experience in working in teams. For example, even though in Pair A member #1 has 12 years experience and member #2 has only 1 year of experience, it is reasonable to conclude that, because the focus of this study is the team, at least in comparison to other teams in this study Pair A is relatively inexperienced. Using the less experienced member of each team as the categorization metric, it is possible to classify the five pairs of interpreters as shown in Table 2.

Data

The videotape of the preliminary meeting of each pair of interpreters was analyzed to identify those behaviors that team members stated they intended to use when requesting support and those behaviors they stated that they would use when offering support. Next, the tape was analyzed to identify those behaviors that were actually used to request and offer support during the actual interpretation.

Pair	Categorization
Pair A	Relatively inexperienced
Pair B	Very experienced
Pair C	Relatively inexperienced
Pair D	Very experienced
Pair E	Moderately experienced

Table 2.
Relative Experience of Teams.

Intended and Preferred Behaviors for Requesting and Receiving Support

As noted above, prior to the actual interpretation task each pair of interpreters was given approximately 15 minutes to prepare for the task. These preparatory discussions, which were videotaped, generally consisted of determining which interpreter would assume the lead role (always the more experienced of the pair) and a discussion of strategic behaviors the pair intended to use during the interpretation. The discussion of strategic behaviors generally revolved around those behaviors that would be used by the lead interpreter in requesting support and the manner in which the lead interpreter preferred to receive any support.

These preparatory discussions were analyzed, and specifically mentioned behaviors were categorized into those behaviors intended to request support, those behaviors preferred for receiving support, and information designed to focus the monitor's attention.

Behaviors Intended to Request Support

These behaviors are those that interpreters claimed they would use when they were in the lead interpreter role in order to request support from the interpreter in the monitor role. Specifically mentioned intended behaviors were: lean, gaze, tapping, silence, and making a specific request for support.

Lean:

"I'll lean into you."
"I'll lean."
"I'll lean when I am really lost."
"If I lean over and say nothing, I probably just don't know where we're going."

Gaze:

"I tend to look (at you)."
"I'll look—you'll know!"
"I may look at you."

Tapping:

"I may just go like this [tapping partner's leg]."

Silence:

If I haven't said anything in a long time [I'm lost]."

Specific Request:

"I usually will ask a question, I'm pretty specific about what I lost, like, 'Where were they?' or 'Who?'"

Table 3 indicates the number of interpreters who stated that they intended to use a specific behavior in requesting support.

It is not surprising that the majority of interpreters stated that they would "lean" in order to request support. This behavior, when used during an ASL-English interpretation task, allows the lead interpreter to maintain visual contact with the signer and simultaneously signal the interpreter in the monitor

Behavior	Interpreters
Lean	7
Gaze	1
Silence	1
Specific Request	1
Tapping	1

Table 3.
Behaviors to Request Support.

role that support is needed. That no other behavior received more than a single mention would seem to provide rather clear evidence that in ASL-English interpretation tasks, at least, it is commonly expected that interpreters will "lean" in order to request support. The fact that no other behavior received more than a single mention would also seem to indicate that any behavior other than "lean" would be an unusual request for support and might be a behavior that many interpreters would be unaccustomed to recognizing as a request.

What is quite surprising is the relative lack of precision that accompanies discussion of these intended strategic behaviors. Certainly there is little ambiguity in the meaning of three of these intended behaviors. There can be little doubt that an interpreter who employs "gaze," "specific request," or "tapping" is making a request for support. While there may be no ambiguity about the intent of these behaviors (i.e., a request for support), there is considerable ambiguity, as will be discussed later, about the nature of the support that is being requested.

It is also interesting to note that there is a certain ambiguity about the most frequently mentioned behavior intended to request support. In other words it is not clear what bodily movement constitutes a "lean" (e.g., is a head tilt a "lean" or must a "lean" consist of head and upper torso movement?). Certainly, if each member of a pair has a different notion of what constitutes a "lean," then the possibility exists that a request for support signaled by a "lean" will be unrecognized as a request. The consequences of this ambiguity will be addressed later.

"Silence" has been included as an intended behavior requesting support although one might adopt the philosophical position that silence is the absence of behavior rather than a behavior itself. It is included in this category because it is clear that silence is to be taken as a request for support. However, it is worth noting that there is also significant ambiguity in the meaning of "silence" (i.e., "silence" could be an indication that the lead interpreter is processing a portion of the source language material, or "silence" could also be an indication that the lead interpreter does not comprehend a portion of the source language message).

would be unhelpful or meaningless for the lead interpreter. Also, the manner in which this interpreter will treat any support that is offered ("...if I can use it, i'll take it; If I can't, I'll ignore it") might create harmful ambiguity. The interpreter in the monitor role may be unsure whether an offer of support was rejected because of the content or because of the linguistic form of the offer. This may have the unintended negative effect of the interpreter in the monitor role deciding not to make future offers of support.

The final expressed structural preference ("If I'm completely wrong and it's a long concept, just say 'No, that wasn't it.'") is perhaps most puzzling. It is unclear how having the interpreter in the monitor role uttering "No, that wasn't it" can function effectively as an offer of support. If a segment of an interpretation deviates from the meaning and intent of the original source language message, such a statement ("No, that wasn't it") certainly can serve as an external monitor of interpretation accuracy. However such a statement by itself provides no material with which the misinterpretation might be rectified. If this preference were to be followed, then the lead interpreter would be burdened with the sole responsibility of rectifying the interpretation. Of course, the lead interpreter, having just produced a misinterpretation, may be unable to reformulate a more accurate, and thus successful, interpretation. This stated structural preference severely limits the role of the interpreter in the monitor role and consequently serves to eliminate one of the most important functions of the interpreter in the monitor role—not only to indicate that a portion of an interpretation may be inaccurate, but more importantly to indicate why the portion of the interpretation may be inaccurate. (Clearly a topic for future study is precisely the impact of effective team functioning on the overall success of the interpretation.)

The final category, a temporary exchange of roles, is perhaps the most extreme form of receiving support from the interpreter in the monitor role. Clearly, the willingness of interpreters to relinquish temporarily the lead role indicates a commitment to the overall success of the interpretation and the interaction. However, what is noteworthy is that there is significant ambiguity surrounding the conditions under which the interpreters are to exchange roles. Apart from the single, specific request to exchange roles ("I may just go like this [tapping leg]..."), there is virtually no specificity about precisely when

an exchange of roles should occur and for how long the exchange of roles should last. For example, how long a pause is required before a switch is warranted? What constitutes a "sizeable chunk"? This lack of specificity may make it extremely difficult for the interpreter in the monitor role to determine when to execute an exchange of roles. There is similar ambiguity about the conditions under which the exchange of roles should cease and roles should be restored.

Focusing the Monitor's Attention

During the videotaped preparatory sessions, only two interpreters provided their team members with any indication of those aspects of either source or target texts that are typically problematic for them (Table 5). These statements are clearly designed to alert the team member in the role of monitor to focus on language-specific features that pose difficulties for the interpreter when in the lead role.

Source Language Issues:

"[I miss] lexical items: fingerspelled words, dates and names."

Target Text Issues:

"Usually it's a word I can't think of."

Behavior	Number of Interpreters
Source Language issues	1
Target Text issues	1

Table 5.
Focusing Areas of Support.

It is not surprising that interpreters in general are (or at least should be) aware of specific linguistic features that are most problematic for them. What is surprising is that only a single interpreter chose to articulate linguistic features of the source language likely to be problematic and thus alert the interpreter in the monitor role to those areas where there is an increased likelihood of needed support. Certainly it is a hallmark of professional interpreters that they, ideally, constantly

examine their own work and seek to identify aspects of their work that may need professional development. It would seem logical then, that sharing this information would be the most efficient way of helping to focus the attention of the interpreter in the monitor role. The importance of this level of self-awareness for effective team functioning also underscores the importance of interpreters continually seeking meaningful feedback, diagnostic assessment, supervision, and mentoring.

Actual Behaviors Used to Request Support

After the initial 15-minute preparatory session, each pair of interpreters interpreted the 45-minute ASL lecture. Each member of each pair assumed the lead interpreter role for approximately 20 minutes, with the experienced member of each team assuming the lead role first. The videotapes of these interpretations were analyzed to identify the specific behaviors used by each interpreter to request support. What follows is a discussion of each behavior used to request support or to indicate the need for support and the number of interpreters employing each behavior.

Single Physical Behaviors

Single physical behaviors are those behaviors used as the only means of requesting support. In each instance it is clear that the interpreter in the lead role directs the physical behavior toward the interpreter in the monitor role as a means of requesting support.

Head Tilt

For purposes of this study, this behavior is defined as any instance in which the head of the interpreter in the lead role leans in the direction of the interpreter in the monitor role. As shown in the photo below, the lead interpreter maintains eye gaze on the signer while tilting the head toward the interpreter in the monitor role.

That lead interpreters would tilt their head to request support is not surprising. This behavior, as well as other types of leaning behavior, not only avoids breaking eye contact with the source message but is generally nondistracting to anyone dependent upon the interpretation. The use of head tilts, however, may be problematic because a head tilt may go unnoticed by the interpreter in the monitor role. In general, the interpreter in the monitor role, as depicted in the photo, is focused on the source language message (in this case on the television monitor). This means that the interpreter in the monitor role must rely upon peripheral vision in order to perceive the head tilt.

Behavior	Tokens	Interpreters
Head Tilt	24	9

Shoulder Lean

For purposes of this study, this behavior is defined as any instance in which both the head and shoulder of the interpreter in the lead role lean in the direction of the interpreter in the monitor role. As shown in the photo below, the lead interpreter maintains eye gaze on the signer while tilting the head and shoulder toward the interpreter in the monitor role.

Behavior	Tokens	Interpreters
Shoulder Lean	11	3

This behavior is a more obvious request for support than the simple head tilt while retaining all of the advantages of a head tilt. While it is possible that the interpreter in the monitor role may not notice a head tilt, it is less likely that this behavior, tilting both the head and shoulder, would go unnoticed. Even though the interpreter in the monitor role must rely on peripheral vision to perceive the request for support, the movement of both head and shoulder is more obvious and, hence, more likely to be noticed.

Head Shake

For purposes of this study, this behavior is defined as any instance in which the lead interpreter shakes his/her head as a means of requesting support from the interpreter in the monitor role. As shown in the photo below, the lead interpreter maintains eye gaze on the signer while shaking the head (experienced interpreters will be able to interpolate the shaking movement of the head from the picture below).

Behavior	Tokens	Interpreters
Head Shake	6	6

As with head tilt, this behavior may be problematic as a request for support. The interpreter in the monitor role, focusing on the source message and thus forced to rely on peripheral vision, may simply not perceive the headshake.

Eye Gaze

For purposes of this study, this behavior is defined as any instance in which the lead interpreter merely shifts visual focus for a period of time from the signer on the television monitor to the interpreter who is in the monitor role. As shown in the photo below, only the lead interpreter's head turns and eyes shift; however there is no accompanying head tilt.

Behavior	Tokens	Interpreters
Eye Gaze	4	4

What is noteworthy about this behavior is that it requires that the lead interpreter cease looking at the stimulus material in order to look at the interpreter in the monitor role. This means that the lead interpreter is unable to receive a portion of the ongoing source language message (that portion that is produced while the lead interpreter has shifted visual gaze to the interpreter in the monitor role). Additionally, since to the interpreter in the monitor role, this shift of eye gaze is at least as discreet as a head tilt, it means that the interpreter in the monitor role must rely upon peripheral vision to perceive the request for support.

Tapping

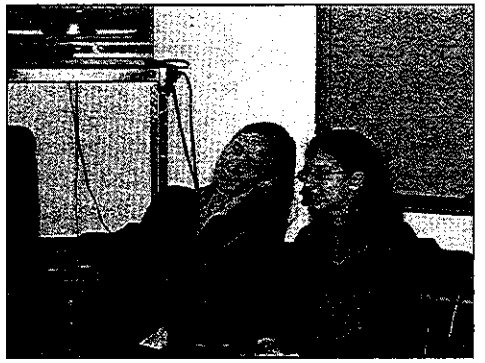
For purposes of this study, this behavior is defined as any instance in which the lead interpreter makes physical contact with the interpreter in the monitor role in order to request an offer of support. As shown in the photo below, the tapping request usually occurs on the forearm (but sometimes on the thigh) and the interpreter in the lead role does not break eye gaze with the source language message (in this case the television monitor).

Behavior	Tokens	Interpreters
Tapping	4	1

This behavior for requesting support avoids the difficulty created by relying on the peripheral vision of the interpreter in the monitor role. It also avoids the difficulty caused by the interpreter in the lead role shifting visual focus from the source language message. However, from the perspective of the interpreter in the monitor role, the behavior lacks specificity about what type of support is being requested. That support is being requested is clear; what manner or type of support is being requested is not clear.

Torso Lean

For purposes of this study, this behavior is defined as any instance in which the lead interpreter tilts the upper torso, head and shoulder in the direction of the interpreter in the monitor role. As shown in the photo below, while leaning, the interpreter in the lead role does not break eye gaze with the source language message.



Behavior	Tokens	Interpreters
Torso Lean	2	1

This behavior is similar to tapping as a request for support because the interpreter in the lead role makes physical contact with the interpreter in the monitor role but does not break eye gaze with the source language message. From the perspective of the interpreter in the monitor role, however, this behavior also lacks specificity about what type of support is being requested.

Singular Linguistic Behaviors

Singular linguistic behaviors are those behaviors in which the interpreter in the lead role modifies the language of the interpretation (spoken English) as a means of requesting support. There were five categories of singularly occurring linguistic behaviors used by interpreters to request support from the interpreter in the monitor role. What follows are the number of times each behavior was used to request support or indicate the need for support and the number of interpreters employing each behavior.

Decrease in Volume

For purposes of this study, this behavior is defined as any instance in which the lead interpreter produces an interpretation utterance that ends with a noticeable drop in loudness. Utterances with this type of intonation contour are typically associated with statements made by someone who is unsure of the accuracy of their utterance (particularly that portion which "trails off" or decreases in volume) and may be followed by silence. The portion of the utterance in italics in the following example indicates when volume begins to drop noticeably ("...*people*...") and when volume has dropped to such a level that it is barely discernable on the video recording ("...*center*...").

"So when *people come to the learning center*..."

Behavior	Tokens	Interpreters
Drop in Volume	11	6

That interpreters would have a decrease in volume when they question the accuracy of their interpretations is not surprising. However, while this may be a request for support from the interpreter in the monitor role (or at least reassurance that the utterance was accurate), it may also have an unsettling affect on those relying on the interpretation and may result in lack of comprehension of the intended message. There are at least two reasons for this. First, those relying on the interpretation may simply be unable to hear the interpretation. Second, those relying on the interpretation understand that this type of decrease in volume is characteristic of uncertainty (at least in spoken English). However, there may be ambiguity about whether the ambiguity should be attributed to the signer or to the interpreter.

Rising Intonation

For purposes of this study, this behavior is defined as any instance in which the lead interpreter produces a declarative utterance that ends with a rising intonation contour. Utterances with this type of intonation contour are typically associated with questions and may also be associated with lack of certainty about the accuracy of what is being uttered. The

portion of the following utterance in italics indicates the rising or questioning intonation.

"...predict that the next *five years*..."

Behavior	Tokens	Interpreters
Rising Intonation	7	4

While this behavior clearly signals a request for support (either affirmation of the accuracy of an interpretation or correction of an interpretation) from the interpreter in the monitor role, it is a publicly made request and a public indication of uncertainty. That is, while the request is intended primarily for the interpreter in the monitor role, it is produced at the same overall volume as other segments of the interpretation. Thus, individuals who are fully dependent upon the interpretation can only assume that the rising intonation is a question and is intended by the producer of the original source language message.

Lexical Elongation

For purposes of this study, this behavior is defined as any instance in which the lead interpreter produces an interpretation containing a lexical item in which a segment of that lexical item, most often the final syllable, is extended or "held" for a much longer period of time than is usual or expected. The portion of the following utterance in italics indicates the portion of the lexical item that is held.

"...and Horace Mann has*sssssssssss*..."

Behavior	Tokens	Interpreters
Lexical Elongation	4	4

This particular behavior most commonly occurs when the lead interpreter is unsure of the next portion of the source language message. This usually occurs whenever lag time is too short to permit complete comprehension of that segment of

the source language utterance. In an effort to compensate for the lack of time needed for comprehension, the interpreter in the lead role chooses to elongate pronunciation and in this way provide the time needed for more complete comprehension. While this behavior may be used as an alternative to silence, it results in behavior that may be problematic for those dependent upon the interpretation. Not only is such behavior stylistically unusual as a means of indicating a lack of certainty, but also those relying upon the interpretation may well assume that the behavior (i.e., lack of surety) is attributable to the originator of the source language message, not to the interpreter.

Silence

For purposes of this study, this behavior is defined as any instance in which the lead interpreter has ceased producing a spoken interpretation for a long enough period of time that the interpreter in the monitor role feels compelled to offer support.

"...back in 1988 there was a big _____..."

Behavior	Tokens	Interpreters
Silence	8	2

Silence, particularly when it occurs abruptly and in mid-utterance as in the example given here, serves as a rather clear request for support from the interpreter in the monitor role. However, it is also a publicly made request. However, silence as a request differs from previously mentioned publicly made requests, because those dependent upon the interpretation can clearly identify that the difficulty lies with the interpretation. That is, they see that the originator of the source language message (the Deaf person) continues to sign despite the fact that the interpretation has ceased abruptly. Thus, unlike previously mentioned publicly made requests for support, silence is more likely to be attributed to a problem with the interpreter or the interpretation than with the originator of the source language message. The cause of such instances of silences is quite likely the same as that of lexical elongation. Specifically, lag time is too short to permit complete comprehension of that segment of the source language utterance and thus the lead interpreter has begun to produce an interpretation of a source language text before that text has been fully understood.

Fingerspelled or Signed Request

For purposes of this study, this behavior is defined as any instance in which the lead interpreter produces a sign or fingerspelled item in the direction of the interpreter in the monitor role as a request for support. Because there is only one token of this behavior, it is difficult to generalize about this behavior. However, at least in this single instance, the lead interpreter was seeking confirmation of the accuracy of a specific lexical item before using that item in the interpretation.

"...M-C-A-S..."

Behavior	Tokens	Interpreters
Sign	1	1

What is interesting in this case is that the behavior is used to seek confirmation of a yet-to-be-uttered lexical item in the interpretation of the meaning of the source language message. Without additional data, it is difficult to speculate on the nature of this externalization of the comprehension process. However, it is worth noting that all other singularly occurring linguistic requests for support appear as *after-the-fact* accuracy checks (i.e., after the interpretation has been produced).

Singularly Occurring Verbal Requests

Verbal requests occur when the interpreter in the lead role makes a specific or nonspecific linguistic request to the interpreter in the monitor role without any accompanying physical behaviors. In general such requests are made about a specific segment of the source language message that has not been understood by the lead interpreter or are requests for confirmation about the accuracy of an interpretation just uttered.

Nonspecific Verbal Request

For purposes of this study, nonspecific verbal requests are defined as any instance in which the lead interpreter indicates a lack of comprehension of the source language message and seeks support from the interpreter in the monitor role. These nonspecific requests are usually in the form of an utterance such as "Hmmm?" or "Huh?" The following table indicates the

number of such nonspecific requests by interpreters in the lead role.

Behavior	Tokens	Interpreters
Nonspecific Verbal Request	2	2

The very nonspecific nature of such requests for confirmation may be problematic for the interpreter in the monitor role. The difficulty is that the interpreter in the monitor role is unsure of exactly what portion of the source language message has not been perceived or understood and thus may be unsure of exactly what type of support is being requested.

Specific Verbal Request

For purposes of this study, specific verbal requests are defined as any instance in which the lead interpreter seeks confirmation of the accuracy of an interpretation from the interpreter in the monitor role or seeks support for a specific problematic segment of the source language message. Specific requests are usually in the form of a direct Yes-No question such as "Is that right?" or a question such as "Was that ___?"

Note that the request comes after the interpretation has been uttered. It seems clear that in such instances, the interpreter in the lead role is monitoring the accuracy of a segment of the interpretation after it has been uttered.

Behavior	Tokens	Interpreters
Specific Verbal Request	18	7

Simultaneous Requests

This category of requests for support occur when the interpreter in the lead role uses a physical behavior accompanied by a linguistic behavior to request support from the interpreter in the monitor role. As with singularly occurring linguistic requests, simultaneous requests can be either specific or nonspecific.

Nonspecific Simultaneous Requests

The linguistic component of nonspecific requests is usually in the form of an utterance such as "Hmmm?" or "Huh?" Only two types of physical behaviors occurred with nonspecific verbal requests: head tilt and headshake.

The fact that the interpreter in the lead role has accompanied a nonspecific linguistic request with a head tilt or a headshake does not alleviate the central difficulty caused by nonspecific requests. That difficulty is that the interpreter in the monitor role may be unsure of exactly what type of support is being requested.

Behavior	Tokens	Interpreters
Head Tilt with nonspecific Verbal Request	8	3
Headshake with nonspecific Verbal Request	7	5

This paired behavior involving head tilt may occur because the interpreter in the lead role is aware that the interpreter in the monitor role may not perceive a simple head tilt. Because the verbal portion of the paired request is uttered at a lower volume than the interpretation proper, it is also probable that the lead interpreter tilts the head in order to be heard by the interpreter in the monitor role (presumably so as not to be distractive to those dependent upon the interpretation).

Specific Simultaneous Requests

The linguistic component of specific requests is usually in the form of a direct Yes-No question such as "Is that right?" or a question such as "Was that ___?" Only two types of physical behaviors occurred with specific verbal requests: head tilt and eye gaze.

Interestingly, the vast majority of the specific simultaneous requests had a physical behavior that required that the interpreter in the lead role cease looking at the stimulus material in order to look at the interpreter in the monitor role. This means that the lead interpreter is unable to receive a portion of the ongoing source message (that portion that is produced while

Behavior	Tokens	Interpreters
Head Tilt with Specific Verbal Request	1	1
Eye Gaze with Specific Verbal Request	5	3

the interpreter has shifted visual gaze to the interpreter in the monitor role) while producing the verbal request. As will be discussed below, verbal requests are either specific or nonspecific.

Summary of Requests for Support

Table 6 summarizes those behaviors used by interpreters in the lead role to request support from interpreters in the monitor role.

Responses to Requests for Support

Table 6 makes clear that there were 123 requests for support from interpreters when they were in the lead role. Of these requests for support, the vast majority (84%) were acknowledged. That is, the interpreter in the monitor role produced some behavioral indication that a request for support had been received.

There are two general categories of acknowledgement: confirmation of the accuracy of an interpretation just uttered, and the offer of new material to be incorporated into the interpretation. Of the 123 requests for support, 23% were acknowledged by confirming the accuracy of the interpretation and 61% were acknowledged by offering new material to be incorporated into the interpretation.

Acknowledgement by Confirmation

Confirmation can be either nonverbal or verbal. Nonverbal confirmation in all cases consisted of a head nod produced by the interpreter in the monitor role. What is particularly interesting about the use of head nod as confirmation is that the interpreter in the monitor role is almost always seated next to and slightly behind the interpreter in the lead role. This means that the interpreter in the lead role, directing visual attention to the source language message, is most probably unable to

Behavior	Tokens	Interpreters
Head Tilt	24	9
Shoulder Lean	11	3
Head Shake	6	6
Eye Gaze	4	4
Tapping	4	1
Torso Lean	2	1
Volume Decrease	11	6
Rising Intonation	7	4
Lexical Elongation	4	4
Silence	8	2
Fingerspelled/Signed	1	1
Nonspecific Verbal Request	2	2
Specific Verbal Request	18	7
Head Tilt with Nonspecific Verbal Request	8	3
Headshake with Nonspecific Verbal Request	7	5
Head Tilt with Specific Verbal Request	1	1
Eye Gaze with Specific Verbal Request	5	3
TOTAL	**123**	

Table 6.
Behaviors Used to Request Support.

perceive that the interpreter in the monitor role is, in fact, confirming the accuracy of the questioned portion of the interpretation. Consequently, the interpreter in the lead role may assume that no support is forthcoming from the interpreter in the monitor role. Thus, the use of head nod as a signal of support would seem to be quite problematic and of little practical value, except as a self-reinforcing behavior for the interpreter in the monitor role.

Verbal confirmation can either reaffirm the accuracy of an interpretation just produced in a somewhat nonspecific manner (e.g., "Yeah that's right" or "Uh huh.") or can be rather specific by repeating the questioned lexical item (e.g., "...*five* years?" "Five."). In either case, it is clear to the interpreter in the lead role that the portion of the interpretation being questioned has been confirmed as accurate in the opinion of the interpreter in the monitor role.

Acknowledgement by Offer

Confirmation of a request for support can also be provided by offering new material to be incorporated into the interpretation. An offer of new material is inherently an acknowledgement of the request for support. Almost three-fourths of all acknowledged requests were responded to by offering new material, which could be in the form of a single lexical item or a short phrase. What is of importance here is that the offer of material is in direct response to a request or a perceived request for support. These are universally instances in which the interpreter in the monitor role has determined that the interpretation contains miscues or misinformation that needs to be rectified. The range of new material offered is from a single word to fully formed sentences. When requests were acknowledged by offers of new material, the new material was always incorporated into the interpretation by the interpreter in the lead role.

No Support Offered

In a surprising number of requests for support (16%) no support was offered at all by the interpreter in the monitor role. Perhaps even more surprising is the fact that in all of these cases the request for support was not even acknowledged by the interpreter in the monitor role. There would appear to be only two possible explanations for the lack of support. The first possibility is that the interpreter in the monitor role did not realize that a request for support had been made (either because the behavior used by the interpreter in the lead role was not recognized as a request for support or because the interpreter was momentarily cognitively disengaged from the task at hand). The second possibility is that the interpreter in the monitor role simply had nothing to offer (either because the interpreter in the monitor role also does not comprehend the incoming source language message or because the interpreter in the monitor role does comprehend the source language message but was unable to express what has been comprehended in a manner that would be immediately helpful to the interpreter in the lead role). This could be because the interpreter in the monitor role either simply was unable to determine an English equivalent quickly enough or because, given the way that the interpretation has been formulated, the interpreter in the monitor role was unable to provide an offer of material that would be functional.

Regardless of the reason, the fact remains that these requests for support were unacknowledged. Not only were potential miscues and misinformation in the interpretation allowed to stand, but also the lack of acknowledgment has the potential for undermining the level of confidence that the interpreter in the lead role has of the interpreter in the monitor role.

Summary of Responses to Requests for Support

Table 7 summarizes responses by interpreters in the monitor role to requests for support by interpreters in the lead role.

Unsolicited Offers of Support

Solicited offers of support are those offers that are in direct response to a request for support from the interpreter in the lead role. Clearly, the expectations of the interpreters in both the lead and the monitor roles are that support will be offered when requested. While the specific behaviors used by inter-

Behavior	Tokens	Confirmed	Offer	No Support
Head Tilt	24	8	14	2
Shoulder Lean	11	1	7	3
Head Shake	6		4	2
Eye Gaze	4	2	1	1
Tapping	4	1	2	1
Torso Lean	2		2	
Volume Drop	11	7	4	
Intonation Rise	7	2	5	
Silence	8		7	1
Elongation	4	1	3	
Sign	1	1		
Nonspecific Verbal Request	2		1	1
Specific Verbal Request	18	1	15	2
Head Tilt with Nonspecific Verbal Request	8		4	4
Headshake with Nonspecific Verbal Request	7		4	3
Head Tilt with Specific Verbal Request	1		1	
Eye Gaze with Specific Verbal Request	5	4	1	
Total Tokens:	**123**	**28**	**75**	**20**
Percent of Total:	**100**	**22.76**	**60.98**	**16.26**

Table 7.
Responses to Requests for Support.

preters in the lead role to request support have been discussed above, it is also instructive to examine unsolicited offers of support. These are instances in which the interpreter in the monitor role determines that the interpretation is not equivalent to the source language message or suspects that the interpreter in the lead role is encountering difficulty in crafting an interpretation. In these instances, the interpreter in the monitor role initiates an offer of support. The support is usually offered in the form of whispered information.

During the preparatory discussions, the focus was clearly on interpreters indicating how they would request support from the interpreter in the monitor role. While it is not surprising that interpreters would make known their preferences for requesting support, it is surprising that so little attention was given to how interpreters would offer support. Certainly the efficient and effective functioning of a team is, in large measure, a consequence of complementary styles of requesting and offering support. This "goodness of fit" is what distinguishes a well-functioning team of interpreters from two interpreters who simply take turns producing interpretations. In light of this, it is surprising that so little time during the preparatory meetings was devoted to the intended and preferred behaviors for offering support.

Readiness to Offer Support

For purposes of this study, readiness to offer support is defined as a physical indication by the interpreter in the monitor role of being prepared to offer support to the interpreter in the lead role. However, the interpreter in the monitor role did not actually produce any linguistic indication of support. Interpreters in the monitor role predominantly used a single behavior to indicate a readiness to provide support to the interpreter in the lead role. This behavior is a head tilt or lean in the direction of the interpreter in the lead role. Although no support is given, the behavior clearly indicates that the interpreter in the monitor role is prepared to offer support should it be needed or requested.

Table 8 summarizes, by team and by team member, the incidence of readiness to offer support.

The readiness to offer support may well be a reflection of the fact that, despite discussions during the preliminary meeting, individual interpreters are unaccustomed to each other's work preferences (e.g., lag time, tolerance for silence). Even

Interpreter Pair	Member 1	Member 2
A	7	14
B	19	0
C	6	0
D	5	3
E	14	9
TOTALS:	**51**	**26**

Table 8.
Readiness to Offer Support.

slightly differing lag times or levels of tolerance for silence might result in the interpreter in the monitor role believing that support is or will be needed, as in the case of member 2 in Interpreter Pairs A and E. It is also possible that, as in the case of member 2 in Interpreter Pairs B and C, since the preliminary discussion focused almost solely on requests for support, that the perception was created that support should only be offered when requested. (Future research that controlled for experience might control for experience working together as a team in addition to the experience of individual members of a team).

Unrequested Offers of Support

Despite the fact that the majority of the preliminary discussions focused on behaviors that would be used to solicit support and on preferences for receiving support, interpreters in the monitor role offered support even when not requested to do so. This, coupled with the readiness to offer support, is one clear indication that interpreters have as a goal the success of the interpreted interaction and their functioning as a team. That is, interpreters in the monitor role do not expect to act only reactively, providing support when requested, but also expect to act proactively whenever they determine that there is a lack of equivalence between the interpretation and the source language message.

Table 9 summarizes the offers of support initiated by interpreters in the monitor role.

Recall that in each interpreting pair, member 1 is the more experienced of the pair. Thus, it is not surprising that in each case, the more experienced member of the pair offered significantly more unsolicited offers of support than the less experienced member of the pair. That the less experienced member

Interpreter Pair	Member 1	Member 2
A	13	1
B	32	2
C	22	0
D	13	3
E	39	5
TOTALS:	**119**	**11**

Table 9
Unrequested Offers of Support

of each pair offered virtually no unsolicited support may be due to the fact that in each case the more experienced member began the interpretation task assuming the lead interpreter role. Thus the less experienced member, while in the monitor role, may have been unsure exactly how the team would actually function and whether any unsolicited support should be offered. An alternate explanation is that the lack of unsolicited offers might simply be a sign of deference to the more experienced member of the team.

That unsolicited offers of support occur is neither surprising nor significant. On the contrary, the absence of unsolicited support would surely be significant given that the pairs of interpreters are attempting to function as a team. Given that there are no perfect interpretations, an absence of unsolicited support would be an indication that the interpreter in the monitor role is, at least for this particular interpretation task, unable or unwilling to fulfill the functions and expectations of the monitor role. At the very least, the absence of such support would mean that the individual in the monitor role assumes that support is to be offered only when solicited by the interpreter in the lead role.

If the presence of unsolicited offers of support is not significant, then the manner in which the interpreter in the lead role treats such offers is. Interpreters in the lead role can either decline or accept unsolicited offers of support. If accepted, an offer can simply be acknowledged but not incorporated into the interpretation or can be acknowledged and incorporated into the interpretation. Table 10 indicates the disposition of unsolicited offers by team member.

This table makes clear that when member 2 of Pair A was the lead interpreter, member 1 made 13 offers of support. One

of the offers was acknowledged but not incorporated into the interpretation by member 2, and 12 offers of support were incorporated into the interpretation. Conversely, when member 1 was the lead interpreter, member 2 made only a single offer of support that was incorporated into the interpretation by member 1.

It is interesting to note that the 14 instances of declined offers of support can be accounted for by a single interpreter (although this same interpreter did incorporate unsolicited offers of support in 25 instances, and there seems to be nothing noteworthy about the 14 declined instances. One can only assume that the interpreter's degree of surety about the accuracy of the interpretation in each of those instances was quite high.). If this individual is excluded from the analysis, then unsolicited offers of support were incorporated by the lead interpreter in 99% of the cases. In one other instance, an offer was acknowledged but not incorporated into the interpretation. In all remaining cases, the interpreter incorporated the unsolicited offer of support into the interpretation. That almost 90% of all unsolicited offers of support were incorporated into the interpretation would seem to be a rather clear and convincing indication of the fact that interpreters in the lead role implicitly trust the judgment of interpreters in the monitor role.

Discussion

Before drawing any conclusions, it must be acknowledged that the data presented in this study and the analysis of those data can only be taken as a preliminary study. The limited number of interpreting teams in this study allows only tentative conclusions to be drawn. Nevertheless, the data presented above and the embedded discussion of the data raises a number of issues worth considering when examining the behavior and functioning of interpreters working in teams.

It is worth noting that in all five teams the more experienced member assumed the role of lead interpreter for the first turn. This ordering decision was independently made by each team during their initial meeting. Among the reasons for this order might be the perceived difficulty of the task (interpreting a videotape of an ASL lecture), a sense of deference on the part of the less experienced team member, or the fact that the team's work was being videotaped as part of a research study.

Interpreter Pair	Total offers made when in Monitor Role	Disposition of Unrequested Offers when in the Lead Interpreter Role		
		declined	accepted acknowl.	incorpor.
Pair A – member 1	13	0		1
Pair A – member 2	1	0	1	12
Pair B – member 1	32	0		2
Pair B – member 2	2	0		32
Pair C – member 1	22	0		
Pair C – member 2	0	0		22
Pair D – member 1	13	0		3
Pair D – member 2	3	0		13
Pair E – member 1	39	0		5
Pair E – member 2	5	14		25
Total Tokens::	**130**	14	1	115
Percent of Total:		10.77	0.77	88.46

Table 10.
Disposition of Unrequested Offers of Support.

In any event, it is worth considering that this decision establishes certain patterns of operation within the team, including readiness to offer support and actual offers of unsolicited support. A follow-up study (including interviews with the teams) should try to control for this factor to help determine, among other things, whether order of turns has any impact on readiness to offer support and actual offers of unsolicited support. Such a study might also reveal that the topics for discussion during preliminary meetings change as a function of experiential equality of team members.

In this study, interpreters used the preliminary meeting to determine logistics and identify behavioral signals that would ensure the smooth functioning of the team. However, only 2 of the 10 interpreters identified linguistic or interpretation process issues that might be problematic for them during the interpretation. The fact that only 20% of the interpreters in this pilot study dealt with this issue during the preliminary meeting is somewhat puzzling. It is clearly in each interpreter's own self-interest and in the best interests of the team to be candid about linguistic and interpretation process limitations. Identifying and discussing those linguistic and/or process areas in which one's level of confidence may be variable or historically problematic can serve to focus the attention of the other interpreter when assuming the monitor role. This forewarning would, during the actual interpretation itself, help to alert the interpreter in the monitor role to potential areas in which support might be needed. Certainly it is possible for the interpreter in the monitor role to discern areas of likely difficulty after they have occurred. However, given the other cognitive demands on the monitor role, it would seem that it would be highly desirable to increase the monitor's ability to be effective by identifying those areas in which heightened focus might be needed.

In general, it is significant that there is a discrepancy between the behaviors that interpreters said that they would use to request support and the actual behaviors that they used to request support. During the preliminary meetings, only seven behaviors were mentioned and of those seven, only "lean" was mentioned by more than a single interpreter (and apparently was intended to refer to a range of behaviors). This stands in contrast with the 16 different behaviors actually used by interpreters to request support. Thus, it would appear that

either interpreters do not clearly understand what behaviors they will use to request support (and thus are not able to articulate them) or they see little reason to specify those behaviors, feeling that a request for support will be obvious and will be taken as such. This later line of reasoning is partially borne out by the fact that 84% of all requests for support by interpreters in the lead role were acknowledged and support was provided. Thus, while greater specificity beforehand might reduce a level of ambiguity on the part of the interpreter in the monitor role, it would appear that the interpreter in the monitor role must nonetheless be open to understanding a wide range of behaviors as conveying a request for support. This merely adds to the complexity of the task for the interpreter in the monitor role and strengthens the view that the interpreter in the monitor role has the cognitively more difficult task.

Although interpreters would seem to rely upon the acumen of the interpreter in the monitor role in determining when a request for support has been made, there are two areas in which greater clarity during preliminary meetings would seem warranted. The first would be specification of the cluster of behaviors that would fall into the category of "lean". These behaviors (head tilt, shoulder lean, torso lean, head tilt with nonspecific verbal request, and head tilt with specific verbal request) account for slightly more than a third (37%) of all requests for support. Since almost one fifth (19.5%) of all requests signaled by behaviors in this category were not responded to, it would seem worthwhile to discuss and possibly demonstrate this behavior during preliminary meetings.

Another signal for support that warrants discussion during preliminary meetings is "silence." Clearly, silence itself does not need to be demonstrated, but what might be worthwhile discussing is each interpreter's general working lag time. The reason for this is that the interpreter in the monitor role may mistake silence that occurs during working lag as a request for support. Silence counts for 6.5% of all requests of tokens taken as requests for support. A response to silence also accounts for almost half of the cause of "readiness to offer support" tokens. Certainly, it is in the best interests of the team for the interpreter in the monitor role to have a sense of whether silence is indeed a request for support or is simply a byproduct of the lead interpreter's work. Thus, some discussion of each interpreter's preferences for working lag time and lag time range

would serve to reduce anxiety on the part of the interpreter in the monitor role and improve the overall functioning of the team.

The discussion of each interpreter's working lag time range is also germane to the issue of temporary exchange of roles. If the smooth functioning of the team is predicated upon clear and unambiguous communication between team members, then it would seem to be in the best interests of the team to establish a clear behavioral signal to indicate the need for an exchange of roles. Given the preliminary discussions of the interpreting teams in this study, the most unambiguous signal mentioned was tapping the leg of the interpreter in the monitor role. Other suggested means of signaling the need for a temporary exchange of roles would seem to rely overly much on the accurate understanding of silence (e.g., "if there's a pause" or "if I don't have it") by the interpreter in the monitor role. Because there is at least one alternate possibility for the meaning of silence in such circumstances (i.e., a byproduct of working lag time), relying upon a team member's accurate understanding of silence is far too ambiguous to be a reliable signal. As is the case for all requests for support by the interpreter in the lead role, clear and unambiguous signals reduce uncertainty on the part of the interpreter in the monitor role and increase the likelihood that the request will be acknowledged and responded to.

It seems quite clear that interpreters in the lead role assume that their requests for support will be responded to and, in fact, 84% of their requests were. Interpreters in the lead role also appear to have unquestioning confidence in the interpreter in the monitor role as evidenced by the fact that 88% of unsolicited offers of support were incorporated into the interpretation (99% if the 14 cases of rejected offers by a single interpreter are excluded from the analysis). Thus, it would seem that when the interpreter in the monitor role fails to acknowledge a request for support, the smooth functioning of the team might be significantly jeopardized. Certainly, an unacknowledged request for support serves to undermine the confidence of the interpreter in the lead role. Thus, at the very least it would seem quite important that interpreters in the monitor role provide some indication that the request has been received and also to provide some indication that no support can be offered at this time.

Unsolicited offers of support and readiness to offer support would seem to be two areas in which the relative experience of members seems to make a significant difference in the functioning of the team. Of the total number of unsolicited offers of support (130), 91.5% were produced by the more experienced member of each team. Similarly, of the total number of instances of readiness to offer support (77), 66% were produced by the more experienced interpreter. Since the more experienced member of each team assumed the role of lead interpreter first, it is quite probable that there was a natural reluctance on the part of the less experienced member to offer unsolicited support. It would be instructive to determine whether the same pattern would be obtained if the less experienced team member assumed the role of lead interpreter first.

The "order effect" issue is certainly worth considering and should be explored in future research to determine whether an order effect exists and, if so, what the implications of that effect are. One possible hypothesis is that when the more experienced interpreter first occupies the role of lead interpreter (as in this study), then the level of interpretation performance and expectation that is set may serve to undermine the confidence of the less experienced interpreter. Not only is the less experienced interpreter then reluctant to offer support but may also be inclined to request support at a greater frequency than might be the case if the less experienced interpreter had first assumed the role of lead interpreter. Likewise, such an ordering may have an impact on the number and frequency of unsolicited offers of support by the more experienced interpreter when placed first in the monitor role. Future research should seek to determine whether the overall interpretation provided by the team and the overall functioning of the team is enhanced or hindered by placing the more experienced member of the team in the lead position first.

Summary and Conclusions

This pilot study was designed to provide empirical evidence of the functioning of teams of interpreters in an ASL-to-English interpretation task. The study examined behaviors that interpreters stated they intended to use to request support and the behaviors that they actually used. The study also explored the relative frequency and effectiveness of various strategies used by interpreters in requesting support from their team members.

The primary finding of this study is that there is a discrepancy between those behaviors that interpreters state that they intend to use when requesting support and those behaviors that they actually use when requesting support. Indeed, many of the behaviors actually used were not mentioned at all by interpreters during their preliminary meetings. The study has also provided evidence of the need for a greater level of precision by interpreters when discussing behavioral strategies for requesting support during preliminary meetings of the team prior to an interpretation assignment. This is particularly true regarding interpreters' intended use of silence as a means of requesting support. Among the conclusions that can be drawn from this study is that, during preliminary meetings of the team, interpreters should include a discussion of those linguistic and interpretation process areas that have proven problematic for them in the past. Finally, this study suggests that the question of order of turns should also be discussed, not merely from the perspective of logistics but also from the perspective of comfort and confidence of the less experienced member of the team and the impact of order on the smooth functioning of the team.

This study has raised a number of issues that warrant further research. Many of these issues revolve around the relative level and types of experience of team members. Are there qualitative and quantitative differences in the functioning of the team when members are rather equally experienced? Is there an order effect such that the smooth functioning of the team is affected by whether the more experienced member of the team assumes the lead role first? Are there qualitative and quantitative differences in the functioning of the team when members are graduates of interpreter education programs or interpreter training programs?

However, there are also a number of questions that are not addressed by this study that warrant exploration. If the task were an English-to-ASL task, would there be as great a discrepancy between intended behaviors and actual behaviors used to request support? Given the lack of physical proximity of team members during an English-to-ASL task in contrast to an ASL-to-English task, what different signaling behaviors are used? What effect would a greater level of precision regarding intended behaviors for requesting support have on the functioning of the team? What effect would discussion of linguistic and inter-

pretation process limitations or difficulties have on the smooth functioning of the team?

Another fruitful area for future research is the functioning of teams containing multiple interpreters. It is important to bear in mind that this study only examined the functioning of pairs of non-Deaf interpreters. However, in conference situations it has become increasingly commonplace to employ teams consisting of more than two interpreters. For example, during a keynote speech delivered in spoken English at a national conference, one might see an interpreting team consisting of two non-Deaf English-to-ASL interpreters and two Deaf CDIs who will take turns on the platform delivering the interpretation. Not only is there a conspicuous gap in the literature on the use and coordination of multiple interpreters (i.e., more than two) for an assignment or event, but there is no empirical research to inform the practice of an interpreting team, one of whose members is a CDI. (Indeed there is an appalling lack of research about the role and function of CDIs altogether.) All of the questions regarding the smooth functioning of teams must be visited anew when considering teams of multiple interpreters and especially teams containing a Deaf member.

This study has produced the first empirically based taxonomy of behaviors used by interpreters to request support during interpreted events. The study has also shown the extent to which support is requested and offered. These data, in addition to the theoretical and anecdotal arguments that have historically been used, would seem to hold great significance for those who have to justify the presence of an interpreting team rather than a single interpreter. Minimally, this study should help inform the practice of those interpreters who work in teams. Finally, this study should also be instructive to those in interpreter education and training programs who attempt to prepare their students to work effectively in teams. ■

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