

## **Telephone Interpreting: Boon or Bane?**

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### **Introduction**

First world countries experiencing unprecedented waves of immigration are looking for ways to meet the overwhelming need for interpreters to enable immigrants speaking dozens of different languages to communicate with service providers in their new land. One solution has been to provide remote interpreting services, usually by telephone, to make the most efficient use of scarce interpreting resources. Telephone interpreting makes it possible to connect the parties almost instantaneously with a professional interpreter who may be hundreds of miles away.

There are certain drawbacks to communicating in this manner, however, and telephone interpreting is not appropriate for all situations. This article will explore the advantages and disadvantages of telephone interpreting, and will make recommendations for future research.

### **The Need**

The wealthier nations of the world have experienced a tremendous influx of immigrants in the past two decades. The International Organization for Migration (IOM) estimates that one out of every 35 individuals in the world is an international migrant (IOM, 2003). In Europe, 7.7% of the population immigrated from another country (IOM, 2003). Germany, France and the United Kingdom have large numbers of foreign workers in their labor force (IOM, 2003). Canada has taken in 2 million immigrants in the last 10 years, of whom 9.4 percent speak neither French nor English (CBC News, 2003). Between 1986 and 2000, Australia accepted over 1.4 million migrants from overseas (Department of Immigration and Multicultural and Indigenous Affairs, 2002). In 2001 alone, 384,334 immigrants applied for asylum in European Union countries (European Council on Refugees and Exiles, 2003). Since 1998, an average of 82,000 refugees have been admitted each year to the United States, in addition to immigration by relatives of U.S. residents or citizens and foreign workers with special visas (U.S. Committee for Refugees, 2002). Over 17 million Americans reported to the U.S. Census Bureau that they do not speak English very well, with 7 million claiming to speak little or no English (Gracia-García, 2002).

The countries of origin of these immigrants are constantly changing, resulting in the need for interpreters in new languages that have never been required before. In the United States, for example, the top ten countries of origin of recent refugees are Somalia, Ethiopia, China, India, Haiti, the former Yugoslavia, Iran, Liberia, Guatemala, and Russia (U.S. Committee for Refugees, 2002). Moreover, the refugees have been resettled in states that have never before received large numbers of immigrants, such as Georgia and Virginia; or states like Missouri and Minnesota, which have not had an influx of immigrants since the 19th century (U.S. Committee for Refugees, 2002). These communities are ill-prepared to deal with the myriad social and economic problems faced by refugees, not least of which is the language barrier.

Immigrants, especially refugees who have fled war-torn countries and experienced harrowing ordeals, tend to be heavy users of public services such as hospitals, mental health facilities, and social service agencies (Mikkelson & Neumann Solow, 2002). Although immigrant children tend to learn the language of their new home quickly, their parents may still need interpreters to help them communicate with school personnel. Immigrants may also find themselves dealing with

law enforcement officials and judicial authorities in disproportionate numbers because of different cultural attitudes and practices, misunderstandings, or behaviors stemming from the stress of adjusting to a new country.

Until recently, most of the interpreting required by immigrants was performed by family members or friends on a volunteer basis. Court decisions and legislation have altered that situation, however, in many cases mandating that public agencies provide interpreters at their own expense. For example, in the United States the Department of Justice has issued directives requiring health care facilities and law enforcement agencies that receive federal funds (which means practically all of them) to provide interpretation services for non-English speakers (Gracia-García, 2002). A bill pending in the California legislature, AB 292, would ban the use of children to interpret for their parents (Sanders, 2003). As a result of measures such as these, the use of professional interpreters is on the rise, and more and more facilities are turning to telephone interpreting to help them meet this need (Newman, 2003).

Interpreters are also needed in the private sector as employers attempt to communicate with immigrant employees and businesses reach out to tap the new markets represented by recent arrivals to their country (Heh & Qian, 1997). In short, there is a tremendous demand for interpretation services in host countries. Because professional interpreters are a scarce resource, and are not always available in the location where their services are needed, remote interpreting is an expedient that has been utilized more and more frequently in recent years.

## **History**

It is logical to surmise that remote interpreting would be most applicable in countries with vast expanses of land. Indeed, the first telephone interpreting service was developed in Australia in 1973. The 24-hour Emergency Telephone Interpreting Service was created by the Department of Immigration in that country, and originally it provided interpreting in eight languages. In the ensuing years, the number of languages offered expanded rapidly, and the service evolved to reflect the changing situation in Australia (Ozolins, 1998).

Other countries were slower to organize the provision of remote interpreting services. In the United States, a private company founded in the mid-1980s eventually became AT&T Language Line, perhaps the best-known telephone interpreting service in that country (Heh & Qian, 1997; Phelan, 2001). An internet search reveals that at present there are some two dozen companies competing with Language Line on the U.S. private market. Court systems and hospitals are also experimenting with in-house remote interpreting services (Hewitt, 2000; Orme & Bautista, 2001), but most telephone interpreting in the United States is outsourced to private companies.

Japan's international telecommunications company, KDD, launched a telephone interpreting service in 1986 (Heh & Qian, 1997). In Europe, the United Kingdom has also seen a rise in the frequency of telephone interpreting since a pilot project launched in 1990 at the Royal London Hospital in London (Phelan, 2001). Many of the translation and interpreting companies advertising their services on the internet now offer telephone interpreting to their clients. According to Phelan (2001), this mode of interpreting is also practiced in France, where it has been available since 1990, as well as Italy and the Netherlands. Fors (2003) reports that remote interpreting is becoming "increasingly popular" in Sweden.

## **Attitudes Towards Telephone Interpreting**

The advent of telephone interpreting has been greeted with mixed reactions. Administrators of public service agencies are generally positive about the convenience and cost-effectiveness of this mode of interpreting (Valentine, 1994). One court clerk was quoted in a pilot study as saying the service was a "great bargain for the government," and judges were said to be

"delighted with the way things went" (Hofer, 1993, p. 7). Grabau and Gibbons (1996), looking at state court systems' use of telephone interpreting in the United States, reported, "Overall, based on published reports, court administrators and judges are pleased with AT&T Language Line Services" (p. 327). A patient representative recently interviewed in the press termed the telephone interpreting system used in her hospital a "tremendous success," noting that "what it accomplishes outweighs any cost" (Melani, 2003).

Phelan (2001) notes, "The main motivation is financial – it is cheaper to employ an interpreter over the phone rather than pay for travel and accommodation" (p. 32). The Administrative Office of the U.S. Courts acknowledges that one of the main reasons for instituting the practice of telephone interpreting in the federal courts is cost savings (U.S. Courts, 2002). Not everyone agrees that telephone interpreting saves money, however (Gracia-García, 2002). Whether or not the service costs less depends on how long the communication lasts (Hewitt, 2000).

Serious concerns about quality have been raised from the first use of telephone interpreting, particularly by interpreters themselves. Before deciding to adopt telephone interpreting as a means of providing service to courts in far-flung areas where no qualified interpreters were located, the New Jersey Administrative Office of the Courts conducted a pilot study in which regular staff interpreters were trained to interpret short proceedings over the phone. Even with careful briefings and safeguards to ensure quality, the interpreters expressed dissatisfaction with the service, reporting that they felt it was less accurate. They also indicated that remote interpreting was "more stressful and draining than on-site work" (Lee & Newman, 1997, p. 33). The staff interpreters who participated in an experiment with remote simultaneous interpreting at a hospital also said they preferred the conventional method of interpreting consecutively in the room with the doctor and patient, even though the patients and doctors were happier with the experimental system (Hornberger et al, 1996).

The professional associations representing interpreters have taken a negative stance on all kinds of remote interpreting, even when there is a video connection to overcome the lack of visual cues (Mouzourakis, 1996; AIIIC, 1997; Mintz, 1997; Niska, 2003). The newsletter of the National Association of Judiciary Interpreters and Translators, *Proteus*, has featured several articles that portray telephone interpreting in a negative light (Swaney, 1997; Mintz, 1997; Vidal, 1998; Mintz, 1998). The main reasons cited for opposing telephone interpreting are the interpreter's inability to hear the parties, perceive vital visual information, or control turn-taking.

Interpreters who have performed both on-site and remote interpreting usually prefer to be present with the parties they are serving, though there are some exceptions (Thompson, 1993; U.S. Courts, 2002). Many acknowledge that it is appropriate for certain limited purposes:

Interpreting by telephone is efficient when the sole purpose of the participants is to gather simple facts and to have some questions answered with the assistance of an interpreter. This style of interpreting is acceptable in situations involving an exchange of raw data, getting facts, communicating ideas and sending or receiving specific information. (Swaney, 1997).

Even Chandler Thompson, a federal court interpreter who participated in the first experiment in simultaneous telephone interpreting in the courts and has long advocated this method of serving remote courts, acknowledges that it is not a panacea and should not displace on-site interpreters where they are available (Thompson, 1993).

### **Simultaneous and Consecutive Interpreting**

The majority of telephone interpreting is done in the consecutive mode because of the limitations imposed by the technology. The lengthiness of consecutively interpreted communication is clearly a disadvantage, as noted by Oviatt and Cohen (1992). If simultaneous

interpreting can be provided, the interlocutors can communicate directly without waiting for the interpretation, thus saving precious time. It is possible to perform simultaneous interpreting with the right equipment, as a pilot project carried out in the federal courts of the United States has shown (Hofer, 1993). Other court systems have since conducted their own experiments with simultaneous telephone interpreting, with satisfactory results (Comstock, 2000; U.S. Courts, 2002).

A similar project took place in a hospital in Santa Clara, California, with doctor-patient interviews being interpreted by staff interpreters located in another part of the hospital. In this project, researchers compared remote simultaneous interpreting to proximate consecutive interpreting, and found that patients and physicians preferred the remote interpreting because they could understand each other better. They also found that doctors talked 10% more and patients 28% more when using simultaneous rather than consecutive interpreting; more explanations were provided, and more questions were asked by the patients (Hornberger et al, 1996).

### **Advantages of Telephone Interpreting**

As noted above, one of the first points cited in favor of telephone interpreting is cost savings, though it is in fact not always cheaper than on-site interpreting. Other advantages include:

1. Around-the-clock availability – medical emergencies and crimes do not always happen during business hours. Interpreters can be connected to the interlocutors quickly, preventing long waits for patients in emergency rooms or weekend jail stays for arrestees (Valentine, 1994; Mintz, 1998; Gracia-García, 2002).
2. Wider range of languages available – many telephone interpreting services boast that they can provide interpreting in dozens of languages at the press of a button, and for some languages of limited diffusion it may be difficult to find a qualified interpreter within hundreds of miles (Hewitt, 1995; Gracia-García, 2002).
3. Professionalization of interpreters – interpreters who do not live in a market where they can obtain full-time work must supplement their income by doing other kinds of work, which prevents them from developing and maintaining their skills and discourages them from making a firm commitment to the profession. Telephone interpreting provides an opportunity for interpreters, especially those in languages of limited diffusion, to devote themselves full-time to this profession (Heh & Qian, 1997; Hewitt, 2000).
4. Flexibility of working hours and location – interpreters can choose to work part-time if they desire, and can live in a location that may be desirable for climate, cost of living, or proximity to family members but is not necessarily a place where a lot of on-site interpreting assignments are available (Heh & Qian, 1997).
5. Confidentiality and impartiality – in situations that might be embarrassing to the parties, such as a medical examination or a police interrogation (especially in tight-knit ethnic communities), a remote interpreter can provide the communication link without being seen as an intruder (Hewitt, 1995; Wadensjö, 1999). The gender of the interpreter and the patient might be a significant factor in a medical evaluation, but matters much less over the telephone.
6. Professional distance – when the interpreter is not in the same room as the speakers, it may be easier to concentrate on the interpreting task and not become emotionally involved in what may be a traumatic and even physically shocking situation, as in the

case of a medical emergency (Gracia-García, 2002). Also, the interpreter may be better able to focus on the parties' speech exclusively, without being distracted by visual input (Mintz, 1998).

7. Lesser of two evils – As Hewitt (1995) points out, When a trial judge is faced with a choice between using a [telephone] interpreter and someone else whose skills are equally unknown, or who may be a friend, relative, police officer or even a jail inmate, [telephone interpreting] may be the lesser of two evils. (p. 184) Or, in the words of Gracia-García (2002), "a good interpreter at a distance is better than a bad one up close or none at all" (p. 200).

### **Disadvantages of Telephone Interpreting**

Some of the drawbacks to telephone interpreting have already been pointed out, namely, the slow pace of consecutive interpreting when equipment is not available for simultaneous interpreting, and the lack of control on the interpreter's part. These disadvantages are examined in detail below:

1. Consecutive interpreting – not only does consecutive interpreting prolong the interaction (Hewitt, 1995); it also can result in inaccuracy if the interpreter fails to control turn-taking adequately, if the parties speak in long utterances that the interpreter cannot retain, or if the interpreter must constantly interrupt to request repetitions or clarifications (Lee & Newman, 1997; Wadensjö, 1999).
2. Lack of visual cues – many critics have emphasized the importance for the interpreter of being able to see the parties' facial expressions, gestures, and body language, as well as any objects they may point to while speaking (Oviatt & Cohen, 1992; Kurz, 1996; AICC, 1997; Wadensjö, 1998; Vidal, 1998). Whereas proponents of telephone interpreting say that skilled interpreters can compensate for these shortcomings (Nikolayeva-Stone, 2001), it is clear that interpreters themselves find it stressful to make this extra effort (Lee & Newman, 1997; Mintz, 1998).
3. Interpreter's absence – Wadensjö (1999) also points out that when the interpreter is not present, it is more difficult to develop a rhythm for turn-taking. Moreover, pauses can be very disconcerting as the interpreter, unable to see the interlocutors' faces, tries to figure out why the speaker stopped talking, and thinks maybe the connection has been severed (Lee & Newman, 1997). Oviatt and Cohen (1997) also remarked on the interpreter's need to interrupt repeatedly to confirm understanding and make sure the connection was still viable. Melani (2003) emphasizes that the interlocutors on the other end of the line also are at a disadvantage: "The patient's and caregiver's focus is turned toward the phone instead of each other, [a doctor] said. Answers might be abbreviated and lack the expressions and gestures that aid in diagnosis, because the patient is concentrating on holding the phone and hearing the stranger on the other end."
4. Poor acoustics due to bad connections or equipment – not every facility is equipped with speaker phones or high quality sound systems, and background noise that might not even be noticed by an on-site interpreter can seriously impede comprehension (Hewitt, 1995; Lee & Newman, 1997; Gracia-García, 2002).
5. Lack of preparation – telephone interpreters handle dozens of calls a day, and are not able to prepare ahead of each assignment by reading documentation the way on-site interpreters do (Heh & Qian, 1997). They also do not have the ability to specialize as much as on-site interpreters who limit themselves to court, conference, or medical assignments, for example (Heh & Qian, 1997; Gracia-García, 2002).

6. Identity of interpreter unknown – when the parties do not know the interpreter and have never worked with him/her before, they have no way of knowing whether he/she is qualified or trustworthy (Hewitt, 1995; Vidal, 1998).
7. Lack of privacy – although the anonymity of the interpreter can provide a greater sense of privacy, as noted above, the use of speaker phones means that everyone in the room can hear what is said. In some cases, such as attorney-client communications in court, this is a violation of due process (Hewitt, 1995).

Because of these disadvantages, almost everyone who has written about telephone interpreting, and even providers of telephone interpreting services, caution that it is not appropriate for every situation and should be used wisely (Gracia-García, 2002).

### **Prerequisites for Quality Telephone Interpreting**

The prerequisites for adequate telephone interpreting can be divided into two categories, training and technology.

#### **Training**

Many of the drawbacks to telephone interpreting noted above can be offset with proper training of all parties.

1. Interpreters need training in regulating turn-taking, compensating for the lack of visual cues, and alerting the parties to problems that arise. They also need to make sure their consecutive note-taking skills are highly developed. As with any type of interpreting, they also need training in the specialized terminology of the clients they interpret for, but this is particularly important for interpreting over the telephone when they are given assignments on short notice and have no access to documents for advance preparation (Hofer, 1993; Heh & Qian, 1997; Hewitt, 2000; Gracia-García, 2002).
2. Service providers (doctors, nurses, judges, attorneys, social workers, etc.) need training not only on working effectively with interpreters, which is necessary in any case, but also on the specific requirements of telephone communication: speaking in short phrases, allowing only one person to speak at a time, describing physical actions or references to objects, explaining silences, and so on (Wadensjö, 1999; Gracia-García, 2002). As the representative of the institution that employs them, service providers need to learn how to prepare for calls in advance in order to save time, and to put the patient/client/witness who does not speak their language at ease (Phelan, 2000). They also need to understand the limitations of telephone interpreting, and must learn to recognize situations when it is not appropriate (Grabau & Gibbons, 1996; Lee & Newman, 1997; Hewitt, 2000;).

#### **Technology**

Virtually everyone who has studied and written about telephone interpreting has emphasized it is absolutely essential for the interpreter to have a clear connection for unimpeded audibility without background noise or other interference. Cellular phones should never be used by any of the parties. At a minimum, the room where the interlocutors are located should be equipped with a speaker phone so that the interpreter can hear everyone in the room, and the parties should be as close to the speaker as possible. Sound quality is often poor with speaker phones, however, and as noted above, privacy may be compromised. Teleconferencing units provide better sound quality and accommodate more parties (Hewitt, 2000). One alternative that allows for greater privacy is a dual handset phone that enables the parties to listen to the

interpretation individually without passing the handset back and forth (Hewitt, 2000; Dunn, 2003). Ideally, the interpreter should have a noise-cancelling headset to free his or her hands for taking notes or using reference materials, and to minimize background noise in the interpreter's office (Hofer, 1993; Hewitt, 2000)

If simultaneous interpreting is to be performed, what is required is a console with two phone connections and side-tone suppression so that the interpreter can listen to both interlocutors and interpret for one or the other by activating a toggle switch that mutes the interpreter's voice to the person speaking. The interlocutors themselves can be in the same location with a dual phone connection, or in two different locations using conventional telephones (Hewitt, 2000).

Another technological development that should compensate for the lack of visual input which is cited so frequently as an impediment in telephone interpreting is videoconferencing (Heh & Qian, 1997; Phelan, 2001; Gracia-García, 2002). Many hospitals and court systems are already using videoconferencing to save time and money and to enhance security (as in the case of video arraignments of jail inmates), and it seems only natural to include interpreters in these communications when the parties do not share a language. Sign language interpreters, in particular, are providing their services through videoconferencing ever more frequently (Phelan, 2001; Niska, 2003). While having a video connection does not solve all of the problems arising out of the interpreter's physical absence (Kurz, 1996; Swaney, 1997), it can make the interpreter's job less stressful.

The Association Internationale des Interprètes de Conférence (AIIC) has adopted guidelines for remote conference interpreting, cautioning against the notion that simply giving interpreters a video feed eliminates the impediments to quality. Gracia-García (2002) quotes an article on the AIIC website that asserts the need not only to see the movements, expressions, and gestures of all speakers, but also to "get the feel of the meeting" (p. 199). Mouzourakis (1996) points out that the interpreter is still under a great deal of stress even when he or she can see the speakers on a screen, because of the "capacity-intensive integration of different sources of information ... or simply with the absence of essential information if only a single image is transmitted" (p. 33).

### **Situations When Telephone Interpreting Is Inappropriate**

Even the most staunch advocates of telephone interpreting acknowledge that it is not appropriate for all situations. For example, Grabau and Gibbons (1996) note that AT&T Language Line's own materials state that telephone interpreting "is not appropriate for lengthy court proceedings or ones that involve a large number of participants or a jury" (p. 323). Among the circumstances under which telephone interpreting is considered inappropriate are:

1. When the communication will be lengthy – in one pilot study deemed successful the average length of interpreted proceedings was 11 minutes, and fewer than 5% of the calls lasted more than 30 minutes (Hewitt, 2000, p. 28).
2. When many different speakers will be participating (Hewitt, 2000)
3. Trials and other evidentiary hearings (Swaney, 1997)
4. When a qualified interpreter can be present on site within a reasonable period of time (Gracia-García, 2002)
5. Mental health evaluations and therapy (Wadensjö, 1999; Newman, 2003)

### **Research**

As Gracia-García (2002) points out, very little empirical research has been done on remote interpreting. Many of the assertions made by critics of telephone interpreting are based on anecdotal evidence or data that is not entirely germane. For example, several (Vidal, 1998; AIIIC, 1997; Gracia-García, 2002) cite varying percentages of communication that consists of non-verbal elements, when in fact not all of the non-verbal aspects of communication are relevant to the interpreter, and some might even be a needless distraction. Court interpreters are told that they should not attempt to represent any body language in their interpretation of witness testimony (Gonzalez et al, 1991); and some interpreters report that in some situations they find it easier not to look at the speaker even when they are present so that they will not be distracted by facial expressions or other visual input (Mintz, 1998; U.S. Courts, 2002). Moreover, when taking extensive notes, much of the interpreter's visual and mental focus is on the act of listening and taking notes rather than watching the speaker (Ilg & Lambert, 1996). Although it makes intuitive sense that it is better to have as much information as possible when interpreting, whether visual or not, it would be helpful to have empirical evidence to demonstrate exactly what visual information is essential for interpreting and what can be dispensed with.

Kurz (1996) is one of the few scholars to have conducted empirical research on interpreting, and her study did confirm that interpreters performed better with video input than without it. Students at the University of Vienna interpreted a 20-minute speech. They had both picture and sound for 5 minutes, sound only for 5 minutes, picture and sound again for 5 minutes, and the final 5 minutes with sound only. Students then filled out questionnaires about their performance. It should be noted that no error analysis was conducted on the interpretation itself, so all we have is the subjective impression of the interpreters (which is not to be discounted entirely, of course). It is also significant that the source speech was not live but videotaped, something that AIIIC frowns upon for conference interpreters. Kurz does state in her conclusions that even videoconference interpreting should be confined to short periods due to excessive fatigue on the part of the interpreter (p. 8).

Kurz's findings comport with those of Hornberger and his colleagues (1996), who studied remote interpreting in a hospital setting. They, too, found that the interpreters themselves felt they did a better job when they were present with doctor and patient performing consecutive interpreting. The doctors and patients, however, preferred the remote interpreting because it was done simultaneously. It is not clear whether it was the absence of the interpreter or the fact that the interpreting was done simultaneously that influenced these opinions; or perhaps it was a combination of both. This question warrants further research.

Another study (Oviatt & Cohen, 1992) looked specifically at consecutive telephone interpreting, but it compared interpreted calls with monolingual calls. Although the findings of this research are important for analyzing the strategies employed by interpreters for managing chunks of information and controlling turn-taking, it does not yield evidence that helps us compare remote to on-site interpreting.

Wadensjö's (1999) research provides just such a comparison. She was able to study a case in which the same interpreter provided services both on the telephone and in person in a police interrogation. She started out with an objective viewpoint, assuming that the presence or absence of the interpreter was not necessarily decisive for the quality of performance. Her specific focus was turn-taking, or the "synchronization of talk," and she found that the dialogue was much smoother when the interpreter was present than when she was on the telephone. Like Kurz (1996) and Hornberger et al (1996), Wadensjö surveyed interpreters and their clients to find out how they felt about telephone interpreting, and again the interpreters expressed a preference for being on site. She went further, however, performing a detailed linguistic analysis

of the statements that were interpreted in one encounter. Wadensjö's conclusion is worthy of an extensive quote:

Provided the interpreter's task in face-to-face interaction is seen as involving both translation and the coordination of other's talk (Wadensjö 1998), on-site interpreting, I would argue, offers a clear advantage when it comes to performing the coordination function. One implication is that in a telephone interpreted encounter interlocutors would be well advised to make a special effort to express themselves clearly and verbalize any non-verbal activities that may have an impact on the ongoing interaction. This would partly make up for the loss of visual impressions, which – under normal circumstances – can help and guide the interpreter, in translating as well as in coordinating the talk exchange. But what cannot be compensated for is the sense of immediacy inherent to face-to-face interaction, which is essential for coordinating talk. With an interpreter on-site then – an interpreter with enough integrity, language and interpreting skills and sense of timing – the participants stand a better chance of synchronizing talk, and thus experiencing a 'normal' (i.e. direct-talk-like) fluency, than with an interpreter working over the phone. (p. 262)

Clearly more research of this nature is needed so that solid evidence can be gathered regarding appropriate and inappropriate uses of remote interpreting, the impact on all parties to the communication, how technology can be deployed to maximize quality, and what kind of training is necessary to ensure optimum use of interpreting resources. Questions for research include:

1. Does the lack of visual cues have a quantifiable impact on the quality of interpreting? A study should be designed to isolate this factor from variables such as interpreter competence and the nature of the interaction so that meaningful data can be obtained.
2. Does the length of the interpreted event have a quantifiable impact on the quality of interpreting? One study has been done on this subject with conference interpreters (Moser-Mercer et al, 1998); a similar one should be conducted with telephone interpreters to see if the results are the same.
3. What impact does user training have on the quality of telephone interpreting? Some of the pilot studies conducted by court systems cited here (Hofer, 1993; Lee and Newman, 1997; Hewitt, 2000) mention the importance of training judges, attorneys, and court personnel on the use of telephone interpreting, but it is not clear how much training was done before the studies were done.
4. What is the best use of current technology in remote interpreting, and how feasible is its implementation in public service agencies such as courts and hospitals?

Answering these and other questions will enable us to ensure that remote interpreting, which is now a fact of life in most countries, is carried out with the highest possible standards of quality. In conclusion, it is clear that telephone interpreting is too complex a process to be characterized as either boon or bane. It is a bane when used inappropriately, merely for purposes of saving money in the short run or for displacing qualified on-site interpreters, by untrained interpreters and service providers, without proper equipment. It can be a boon when its use is targeted carefully, with the proper equipment and training of all parties.

## References

Association Internationale des Interprètes de Conférence (AIIC) (1997). "Code d'utilisation des nouvelles technologies en matière d'interprétation de conférence." *Konferenzdolmetscher*, April-May 1997, pp. 10-11.

CBC News (2003). "Census shows Canada truly multicultural." 22 January 2003. Obtained from <http://www.cbc.ca/stories/2003/01/21/census030121> on 13 April 2003.

Comstock, James (2000). "Telephonic interpreting access." Grant application report written for the Oregon Judiciary.

Department of Immigration and Multicultural and Indigenous Affairs (2002). Australian Immigration Consolidated Statistics No. 21 1999-2000 . Canberra: Commonwealth of Australia.

Dunn, Julie (2003). "Saying 'Ah' In Any Tongue." *The New York Times*, March 16, 2003, Sect. 3, p. 2.

European Council on Refugees and Exiles (ECRE) <http://www.ecre.org/factfile/realfacts.shtml>, downloaded on April 13, 2003.

Fors, Jennie (2003). "Perspectives on remote public service interpreting." Obtained from <http://lisa.tolk.su.se/remote-fors.html>, downloaded on February 17, 2003.

Gonzalez, Roseann, Victoria Vazquez, and Holly Mikkelson (1991). *Fundamentals of Court Interpreting: Theory, Policy, and Practice*. Durham, NC: Carolina Academic Press.

Grabau, Charles M. and Gibbons, Llewellyn J. (1996) "Protecting the rights of linguistic minorities: Challenges to court interpretation." *New England Law Review*, Vol. 30 No. 2, Winter 1996, pp. 227-374.

Gracia-García, Roberto A. (2002). "Telephone interpreting: A review of pros and cons," in Brennan, Scott (Ed.) *Proceedings of the 43rd Annual Conference*, pp. 195-216. Alexandria, Virginia: American Translators Association.

Heh, Yung-Chung and Qian, Hu (1997). "Over-the-phone interpretation: A new way of communication between speech communities" in Jérôme-O'Keeffe, Muriel (Ed.) *Proceedings of the 38th Annual Conference*, pp. 51-62. Alexandria, Virginia: American Translators Association.

Hewitt, William E. (1995). *Court interpretation: Model guides for policy and practice in the state courts*. Williamsburg, Virginia: National Center for State Courts.

Hewitt, William E. (2000). "Language interpreting over the telephone: A primer for court policy makers and managers." Research paper published by the National Center for State Courts, Williamsburg, Virginia.

Hofer, Paul J. (1993). "Evaluation of telephonic court interpretation." Memorandum to the Committee on Court Administration and Case Management, Federal Judicial Center Research Division, November 4, 1993.

Hornberger, J.C.; Gibson, C.D., Jr.; Wood, W.; Deguelde, C.; Corso, I.; Palla, B.; Bloch, D.A. (1996). "Eliminating language barriers for non-English-speaking patients." *Medical Care*, Aug. 1996, 34 (8) pp. 845-856.

Ilg, Gérard and Lambert, Sylvie (1996). "Teaching consecutive interpreting." *Interpreting*.

*International journal of research and practice in interpreting*. Vol. 1, No. 1, 1996, pp. 69-99.

International Organization for Migration (2003) *Migration Policy Issues* No. 2 March 2003. Geneva: International Organization for Migration.

- Kurz, Ingrid (1996). "Interpreting: Sound vs. sound and picture." *The Jerome Quarterly*, Vol. 12, Issue 1, 1996, pp. 5-14.
- Lee, Robert Joe and Newman, Jeffrey A. (1997). "Pilot test of telephone court interpreting in Atlantic/Cape May-Essex-Hudson: Final report." Trenton, New Jersey: Administrative Office of the Courts, CN-988, April 18, 1997.
- Melani, Debra (2003). "Better connections; doctors, non-English-speaking patients reaching an understanding." *Rocky Mountain News*, February 25, 2003, p. 3D.
- Mikkelson, Holly and Neumann Solow, Sharon (2002). "Report from the front lines: Multilingual training-of-trainers for refugee interpreters." *Proceedings of the 14th National CIT Convention*, pp. 57-78. Conference of Interpreter Trainers.
- Mintz, David (1997). "Message from the Board." *Proteus*, Vol. 6, No. 2, Spring 1997, pp. 1-3.
- Mintz, David (1998). "Hold the phone: Telephone interpreting scrutinized." *Proteus*, Vol. 7 No. 1, Winter 1998, pp. 1-5.
- Moser-Mercer, Barbara, Künzli, Alexander, and Korac, Marina (1998). "Prolonged turns in interpreting: Effects on quality, physiological and psychological stress" (Pilot study). *Interpreting. International journal of research and practice in interpreting*. Vol. 3, No. 1, 1998, pp. 47-64.
- Mouzourakis, Panayotis (1996). "Videoconferencing: Techniques and challenges." *Interpreting. International journal of research and practice in interpreting*. Vol. 1, No. 1, 1996, pp. 21-38.
- Newman, Barry (2003). "Doctors' orders can get lost in translation for immigrants." *Wall Street Journal*, January 9, 2003.
- Nikolayeva-Stone, Irena (2001). "If you cannot see it, how can you tell? The meaning and significance of voice in telephone interpreting." *ATA Chronicle*, Vol. 30, No. 10, October 2001, pp. 28-29, 39.
- Niska, Helge (2003). "What is remote interpreting?" <http://lisa.tolk.su.se/remote-niska.html>, downloaded on February 17, 2003.
- Orme, Gloria and Bautista, Terry (2001). "Videoconferencing Medical Interpretation" *CHIA Newsletter* Fall 2001.
- Oviatt, Sharon and Cohen, Philip (1992). "Spoken language in interpreted telephone dialogues." *Computer Speech and Language*, Vol. 6, 1992, pp. 277-302.
- Oviatt, Sharon and Cohen, Philip (1997). "Discourse structure and performance efficiency in interactive and noninteractive spoken modalities." SRI International, SRI Technical Note 454.
- Ozolins, Uldis (1998). *Interpreting & translating in Australia: Current issues and international comparisons*. Melbourne: The National Languages and Literacy Institute of Australia.
- Phelan, Mary (2001). *The interpreter's resource*. Clevedon, Buffalo, Toronto, Sydney: Multilingual Matters.
- Sanders, Jim (2003). "Bill would keep children from interpreting for parents." *Sacramento Bee*, April 7, 2003, obtained from <http://www.shns.com>, downloaded on April 9, 2003.
- Swaney, Ines (1997). "Thoughts on live vs. telephone and video interpretation." *Proteus*, Vol. 6, No. 2, Spring 1997, pp. 5-6.

Thompson, Chandler (1993). *A short guide to court interpreting by telephone*. Federal Judicial Center Research Division, U.S. Court Telephone Interpreting Project.

U.S. Committee for Refugees (2002). [http://www.refugees.org/downloads/rr01\\_v12\\_ceilings.pdf](http://www.refugees.org/downloads/rr01_v12_ceilings.pdf); [http://www.refugees.org/world/articles/initial\\_rr01\\_12.cfm](http://www.refugees.org/world/articles/initial_rr01_12.cfm); and [http://www.refugees.org/world/articles/referred\\_rr00\\_12.cfm](http://www.refugees.org/world/articles/referred_rr00_12.cfm), downloaded on July 26, 2002.

U.S. Courts (2002). "Successful telephone interpreting program to expand to all District Courts." *The Third Branch*, May 2002. <http://www.uscourts.gov/ttb/may02ttb/telephone.html>

Valentine, Paul W. (1994). "Suspects get phone access to interpreters; phone service aims shorten detentions after arrest." *The Washington Post*, April 7, 1994.

Vidal, Mirta (1998). "Telephone interpreting: Technological advance or due process impediment?" *Proteus*, Vol. 7, No. 3, Summer 1998, pp. 1-6.

Wadensjö, Cecilia (1999). "Telephone interpreting and the synchronization of talk in social interaction." *The Translator*, Vol. 5, No. 2, 1999, pp. 247-264.

Wadensjö, Cecilia (1998). *Interpreting as interaction*. London and New York: Longman.