L'interprète de conférence Bronwen Mekler

doctorante, Universiteit van Pretoria - RSA

Abstract

This study approaches simultaneous conference interpreting from a cognitive psychological perspective. The researcher aims to glance inside 'the black box', to shed some light on the intricate workings of the interpreter's mind while s/he is interpreting.

Three areas of neuropsychological skills are focused on: neuropsychological, linguistic and audiological. A test battery has been devised whereby a number of linguistic and recognised neuropsychological and audiological tests are administered on a group of subjects ranging from students of translation and interpreting to professional interpreters, in order to ascertain whether and, if so, in what way the cognitive skills targeted by these tests change over time.

As a pilot study applying a number of precepts from the related fields of linguistics, neuropsychology and audiology to the interpreting field for the first time, it is hoped that this study may pave the way for future research into this fascinating aspect of interpreting, in South Africa and perhaps even further afield.

Interpreting as a profession and an academic field of research generally remains a rather fuzzy concept in the minds of most people. Few make a distinction between translation and interpreting, and even fewer are aware of what it is an interpreter does, or of the context in which the interpreter works. The apparent lack of awareness is surprising. Given the prevailing political, economic and social climate in South Africa, where there is a great deal of opening up towards foreign countries, the incidence of international fora at which a number of different languages are spoken, is on the increase. So, too, is the presence of conference interpreters. Undoubtedly, conference interpreting as a profession should continue to grow as long as political, social and economic integration of different communities is taking place and as long as diplomatic, trade and investment ties continue to be forged between countries. This applies to the many different languages spoken on the African continent, as well as those spoken abroad. Thus, it is believed that awareness of interpreting should be raised, now more than ever.

The elusiveness of the concept of interpretation to most is not a phenomenon confined to the South Africa. It is widely acknowledged in the international interpreting community that after more than twenty years of investigation, the interpreting research and theory domain (IR) appears to be severely underdeveloped (Gile in Gran & Taylor (eds.), 1990: 38). More recently, however, great effort has been made to build a corpus for interpreting and raise its status significantly so that it may eventually stand as a fully-fledged, autonomous scientific discipline. During the course of conducting even this rather small-scale study, contact made with researchers and theorists from various interpreting schools and institutions abroad, as well as with a number of interpreters

practising in South Africa, has been met with an overwhelmingly positive response. Evidently, those in the field are, indeed, thirsty for new studies providing new insights into interpreting.

Interpreting viewed from a Cognitive Psychological Perspective

At an organic level, interpreting requires the performance of a number of different cognitive functions, including language comprehension, language production, memory, attention, visual/ auditory perception and decision-making, to name but a few (De Groot, 1997: 29). Spectacular scientific and technological advances made in the cognitive domain during the 1990s, labeled by some as 'the decade of the brain', have afforded researchers the opportunity to make the first solid inroads into the workings of the mind, a part of the human anatomy about which little was previously known. The development of more sophisticated methods and technology to measure aspects of cognitive functioning has clearly also had a significant effect on the interpreting research domain. Recently, a number of groundbreaking findings have emerged through the first few process-oriented investigations into the cognitive aspect of interpreting. These findings have shown that the act of simultaneous interpreting can provide fascinating insight into this enormously complex range of human intellectual processes.

Aim of this Study

This is a pilot study carried out according to parallel single case study methodology. The main aim is to administer a threefold test battery on a specific number of subjects¹ in order to measure specific cognitive skills in three different areas of their cognitive functioning: neuropsychological, audiological and linguistic, and so be in a position to answer the following three questions: 1. are there any particular linguistic, neuropsychological and audiological skills required by the simultaneous conference interpreter, 2. if so, what are they and 3. how do they relate to the amount of professional experience gained?

Linguistic Tests

For the linguistic component of this study, two linguistic tasks were administered to determine the level of both verbal and written linguistic competence of each of the subjects. All data collected from the linguistic component of this study is interpreted in the light of the linguistic background of each subject, ascertained by means of a linguistic history questionnaire.

The tasks are based on two texts: both are United Nations Press Releases, one is French, the other English. The subject translates verbally the message played to him/her through headphones, in a situation simulating the natural interpreting one as closely as possible. The oral output is tape-recorded, timed and transcribed verbatim. A written translation of the text follows, from the subjects' mother tongue into his/her second language. For the purposes of this research, the subjects have been divided into three main categories:

Category A: French-English speakers with one year of interpreting experience and below.

Category B: French-English professional interpreters with 5 years of interpreting experience and above.

Category C: French-English professional 'gold standard' AIIC-qualified interpreters with 5 years of interpreting experience and above.

The linguistic assessment model posited by Anne Schjoldager from the Aarhus School of Business, Denmark (Schjoldager in Dollerup & Appel (eds.), 1995: 191) is used in this study to assess linguistic competency. The criteria in this model include those applicable

to both written and oral linguistic production.

Neuropsychological Tasks

The Complex/ Rey Figure Diagram Test - This test is used in psychometrics today primarily to investigate both perceptual organisation and visual memory (Lezak, 1995: 395). Here, the test is used to ascertain whether and, if so, in what way the subjects' perceptual organisation changes the more experienced s/he becomes in performing the simultaneous interpreting task. It also allows the researcher to determine whether memory, not for auditory, but for visually encoded information improves as the interpreter gains more experience. In Trial A, the subject is given an A4 size piece of blank paper, a number of different coloured pens and a second A4 size piece of paper with the Rey Figure printed on it. S/he copies the figure onto the blank piece of paper as quickly and accurately as possible. As the subject completes a particular section of the drawing, the researcher changes the colour of the pen. The order of the pens is noted, so that during evaluation stage, the order in which the figure is completed may be noted. The Rey Figure is evaluated qualitatively to measure the subject's structural approach to the task - does s/he copy portions of the figure at random, or does s/he approach the task in a methodical manner, proceeding from the main structural elements and moving towards the details, which would indicate good perceptual organisation? In Trial B, a recall trial, the subject copies down as much of the figure s/he remembers. Here, the subjects' memory for visually encoded information is tested.

Paragraph Recall - The recall of verbal information is one of the prime cognitive skills to be mastered by the simultaneous interpreter. This test measures both the subject's immediate and delayed memory span. Two paragraphs are read out to the subject at normal speaking speed, at specific intervals during the course of the test battery. Both paragraphs are tested first for immediate, then for delayed recall.

Digit Span Test - Forwards and Backwards - Memory functions are of utmost importance in the interpreting process. The immediate verbal recall of relatively short pieces of information is perhaps the most important skill for the simultaneous interpreter, as s/he usually lags only a few seconds behind the original speaker, retaining a small number of items in his/her immediate memory store until reformulation and articulation has taken place in the target language. In the Digit Span Test, the researcher reads out increasingly longer number sequences, the numbers being presented at a rate of one per second. The subject repeats these number sequences in the correct order, his/her digit span level being determined by the length of sequence he/she is able to repeat correctly from memory.

Trail-Making A & B Tests - During interpreting, the interpreter has to constantly shift his/her attention between the highly variable cognitive functions performed simultaneously, so that adequate mental resources may be allocated to each of the functions as needed. The cultivation of 'divided' or 'split attention' is seen as being of great benefit to the interpreter, as it enables him/her to keep mental track of several different cognitive functions being performed at one time. This test is used primarily as an indicator of mental motor speed and to measure the subjects' 'dual tracking' ability, or his/her ability to keep track of two mental stimuli presented to the brain concurrently. Both these tasks are strictly time controlled. In Part A, the subject connects circled numbers, from 1 - 15, with a pen or pencil, as fast as s/he can without lifting the pencil, in Part B, s/he connects circled numbers to circled letters in increasing order eg. 1 - A, 2 - B etc, ranging from 1 - A to 13 - L, as fast as s/he can without lifting the pencil.

Stroop Colour Word Test - Mental flexibility and the ability to resist interference are key skills for the successful performance of simultaneous interpreting. Interference between two different language systems operating simultaneously, and difficulty in shifting attention mentally between the concurrent interpreting cognitive processes involved in the SI task, have been cited as two common problems in interpreting. The subject's threshhold in coping with these problems is measured with accuracy by this test, as the higher his/her interference threshhold is found to be, generally the more flexible the subject is mentally. The test is administered by means of three separate sheets of printed A4 size paper: Sheet 1 contains the words 'RED', 'GREEN' and 'BLUE', printed in black ink, in 5 vertical columns of 20 words each; Sheet 2 contains rows of 'X's' printed in red, blue and green ink, in the same format; Sheet 3 contains the words 'RED', 'GREEN' and 'BLUE' printed in red, green and blue ink, where the colour of the ink differs from the colour it names, again in the same format. The subject reads out the words on Sheet 1, the colour of the printed X's on Sheet 2 and the colour of the ink the word is printed in on Sheet 3, as fast as possible. The researcher allows the subject 45 seconds for each page.

Vigilance (Letter Cancellation) Test - The interpreter's ability to sustain his/her attention span for relatively long periods of time is undoubtedly an important skill to be mastered, to ensure that accuracy is not compromised by mental fatigue or concentration problems. This test measures the subject's accuracy, precision and attention to detail during the course of a long, monotonous task. The test consists of an A4 size sheet of paper on which 18 horizontal rows of 50 randomised letters of the alphabet are printed, interspersed with the designated target letters. In this case, the subject crosses out all the 'C's' and 'E's' on the sheet with a pencil, working from left to right and from top to bottom. The task is time-controlled.

Audiological Tests

Pure Tone Audiogram - The interpreter's ears are perhaps his/her most valuable possession, as all incoming material is presented in a verbal form. It is therefore surprising that in the literature so little emphasis is placed on the pure audiological aspect of interpreting. A basic audiogram or 'hearing screening test' is included in this test battery as a tool for determining the subject's overall hearing ability.

Masking Level Difference (MLD) Test - A factor which can raise the interpreter's processing requirements significantly is the quality of sound coming through the interpreter's headphones. It has been stated that in reality the technical equipment and soundproofing used in interpreting booths is often not of superior quality and that noisy channels and other sources of interference can be common occurrences in the interpreting situation (Gile, 1995: 173). The interpreter must be able to cope with adverse conditions of this kind, albeit only to a reasonable extent. The ability to 'block out' interfering sounds and distinguish them from the speech sounds of the incoming discourse which require processing may be an important skill for the interpreter to possess. This test measures the subjects' acuity in distinguishing actual sounds from environmental 'blanket' noise, also referred to as 'white speech'.

Staggered Spondaic Word (SSW) Test - In order to keep track of the two concurrent phonological streams, the interpreter is constantly shifting his/her attention between the sounds received by each ear. The SSW Test measures the subject's efficiency in performing this task. This test, together with instructions, has been recorded onto a tape which is played to the subject. The subject is sent two different spondaic² words through headphones, one to each ear, these words being partially overlapped in time.

Synthetic Sentence Identification (SSI) Test - The SSI Test measures the subject's ability to perceive a target stimulus by distinguishing it from interfering input received by the other ear, and to transmit this stimulus to higher auditory centres for processing. The subject's ability to 'block out' interfering noise to focus on a target signal at sentence level is tested here. This is a dichotic³ listening task in which a number of tape-recorded synthetic sentences is played through headphones to one ear, while a different, competing message is played to the other ear. The subject is given a numbered list of the ten synthetic

sentences used. S/he calls out the number of the sentence s/he hears.

Linguistic Findings

Overall Linguistic Performance

Of all three cognitive skill areas examined in this study, the greatest disparity in performance between the inexperienced subjects and the more experienced interpreter subjects emerged in the linguistic domain. Not surprisingly, a strong trend is evident where the more highly experienced the subject, the better his/her performance in the linguistic tasks, both in terms of the finer grammatical points of the languages involved, as well as the overall impression one forms listening to the subjects' target-language output.

In the oral tasks, the main aim was to measure the subject's oral linguistic proficiency, and not his/her ability to perform the simultaneous interpreting task. The same vast discrepancy between the linguistic performance of the more experienced subjects and the less experienced subjects is as evident for the written task as it is for the oral tasks, suggesting that the poorer linguistic performance of the latter group cannot only be attributed to the difficulty encountered by the uninitiated individual in having to perform the interpreting task - it appears to be more an issue of overall language proficiency.

The above findings emerged primarily through a relatively objective model-based evaluation of the subjects' linguistic output. Yet some of the most interesting findings in the linguistic domain emerged when the focus was shifted to the subjects themselves and to the problems they perceived while performing the linguistic tasks⁴.

It is interesting to note in this study that across all the groups, and in every specified case, difficulties relating to: 1. the speed at which the discourse was presented to the subject, 2. the style in which the texts were written and 3. the quality of sound of the recorded discourse were encountered only for the texts presented in the subjects' non-mother-tongue language, and not for those presented in their mother tongue. This suggests that the difficulties are not to be attributed as much to irregularities in the material itself, or the way in which it was presented to the subjects, but rather to the subjects' own *perception* of this material. It is surprising that a factor seemingly as mechanical in nature as sound recording quality appears to have this significant an effect on the subjects' perception of the material, and particularly as the phenomenon appears to be influenced solely by the mother-tongue factor. The audiologist consulted for the audiological component of this research has pointed out that the overwhelming incidence of inferior quality input being perceived only in the subjects' foreign language indicates that having to interpret non-mother-tongue discourse has almost the same effect on the subject as if they had a hearing deficit in this language!

The finding feeds into the issue of language direction (working into as opposed to out of one's mother tongue). One possible explanation is that during the listening and analysing phase of the SI process, a great deal of mental stress is placed on the subject when the incoming discourse is in the subjects' foreign language. The subject may become aware of some processing difficulty which s/he, whether consciously or subconsciously, attributes to the poor quality of the incoming material. The plausibility of this explanation is upheld by Gile⁵, who explains that the listening and analysis phase of the SI task requires more processing capacity in the subjects' non-mother-tongue language than in his/her mother tongue and in the case of a processing capacity shortage, interpreters may become aware of comprehension problems in their non-mother-tongue language more than in their mother-tongue language. This theorist explains further that if the source-language speech is lexically and/or grammatically complicated, the interpreter attributes any problems perceived to comprehension problems, whereas if the source-language speech is lexically and grammatically simple, s/he may resist the idea

that s/he finds it difficult to understand such simple sentences, and therefore start to shift the blame to sound quality.

Interpreting Experience versus Interpreting Qualifications

Statistical analysis of the linguistic results has brought to light another finding of some significance. It has been noted that for both the French into English and the English into French oral tasks, the 'experience' variable, where subjects were divided according to the number of years experience s/he has in the interpreting field, seems to have less of an impact on the subjects' performance than the 'quality' variable, where the subjects were divided on the basis of their interpreting training and qualifications. There appears to be a strong correlation between the subjects' gradually improving interpreting performance the higher his/her level of training and experience in interpreting, but not necessarily as a result of increasing number of years practising as an interpreter.

There are a number of possible explanations for this finding. The first one fuels the argument that training in interpreting is not only important, but also necessary for prospective interpreters, as their interpreting skill does not appear to improve simply through years of practising as a professional interpreter and through simple repetition of the interpreting task. A number of the subjects in this study with over ten years of experience in the field performed more poorly in the oral tasks in comparison to those with substantially fewer years of interpreting experience, but who hold higher interpreting qualifications. If the scores are, indeed, an accurate reflection of linguistic performance as against the above two variables, without having been distorted by other factors, then those who enter the profession with no formal training, but simply as a result of being proficient in one or more foreign languages, may not be performing particularly well.

Another explanation for the finding that the interpreters' linguistic performance does not necessarily improve over time relates to the interpreters' lack of critical selfevaluation. In the translation task, the translator's performance is clearly evident in the concrete form of a written product, and consequently it is open to both self-evaluation and criticism from others. In contrast, the spoken word underpinning the interpreting task is transient, usually forgotten a few seconds after it has been uttered. An overall impression of an interpreter's performance can certainly be formed, but unless the conference proceedings are tape-recorded, there is no concrete evidence of the interpreters' targetlanguage output. As a result, the same type of evaluation cannot take place, particularly weak areas may pass unnoticed, and, consequently, may not be improved on.

Thirdly, Gile has pointed out that one cannot discount the possibility that this finding may be attributed not so much to the actual interpreting training received by the best performing subjects in the linguistic tasks, as to the fact that the training institutions naturally select the best students. These students may embark on the training programme with certain cognitive abilities, some of which may be well-developed prior to training.

Neuropsychological Findings

Unlike the linguistic component, the neuropsychological component of this research did not bring to light a blanket trend concerning the performance of the less experienced subjects as opposed to their more experienced counterparts. Rather, different trends emerged for each of the six tasks, which has allowed the researcher to ascertain the degree to which each specific cognitive skill(s) targeted by each test is developed through interpreting experience.

Mental Speed and Memory Skills

The two cognitive skill areas where there appears to be the greatest discrepancy between the performance of the least experienced subjects and the more experienced ones are 1. memory skills and 2. mental speed. In both cases, there is a strong positive correlation between improving performance the more experience the subject has in interpreting.⁶ In this study, the Digit Span Test revealed that the more experienced the interpreter, the higher the number of items can be stored in the STM and thus, the greater his/her STM skills appear to be. In addition, the more experienced subjects demonstrated particularly rapid mental speed⁷, which may indicate a strong ability to load and unload information rapidly into and out of their STMs.

'Translator' versus 'Interpreter' Cognitive Profiles

This study has seen the emergence of distinct 'translator' and 'interpreter' neuropsychological profiles. The former group appears to have been more meticulous in the neuropsychological tests requiring mental precision, such as in the Vigilance Test and the Rey Complex Figure Task. The translator-oriented subjects paid greater attention to detail when copying the figure and as stated in the qualitative evaluation of the drawings, they appeared generally to have adopted structurally more logical approaches to the copying of the figure, which also allowed them to recall more detail during the time-delayed trial. In contrast to some of the figures produced by the translator-oriented subjects, which scored near-perfect scores, those produced by some of the interpreters were generally completed in haste, often at the cost of sacrificing accuracy and being able to recall very little of the figure after the prescribed time delay.

As with the Trail-Making and Stroop Tasks discussed above, the Rey Complex Figure Task places emphasis on the visual, rather than the auditory stimulus. This may be a factor explaining why the subjects who practise the written translation task tended to perform better in the task than those who are interpreters by profession. The phenomenon may also be explained on the grounds that translators are, owing to the very nature of their work, required to be precise; often a great deal of time is spent choosing a specific word for a specific context, whereas the time constraint in simultaneous interpreting is so great, the interpreter is often not afforded this opportunity. The researcher would not like to predict to what extent the practice of the translation task has sharpened the translator's skills in precision and accuracy, and to what extent translating as a course or a profession naturally attracts people who tend to be more precise; in all probability it is a combination of both factors.

Audiological Findings

The audiological component of this test battery yielded particularly interesting results, as it is the area in which the most experienced interpreter subjects generally performed the most poorly in comparison to the younger, less experienced subjects.

Ability to Cope with Background Noise

On average, the more experienced interpreter subjects appeared to have particular difficulty processing speech signals in the presence of competing background noise, as well as in being able to shift their attention to receive signals from one or other ear. However, although still substantially below the performance of the youngest, least experienced subjects, the two most highly qualified interpreters in this study did perform better in most of the audiological tasks than the less highly qualified interpreter subjects, suggesting that they may have a slightly better ability to block out background noise in order to perceive a target signal, and attend to speech signals being presented to one or other ear.

The most highly qualified interpreter in this study obtained a higher score than the group average score in the MLD test, in spite of the fact that he suffers quite severe hearing loss. This suggests that the interpreter may be able to adopt specific strategies, either through training or experience gained in the field, which allow him/her to cope

with the sometimes adverse audiological conditions, such as background noise, of simultaneous interpreting.

Bilingualism and Ear-Of-Information Reception

A second significant finding to emerge in the audiological domain concerns the bilingualism variable; that is, the age at which the subject acquired his/her foreign language. In this study, the late bilinguals made fewer mistakes when processing language input directed to the left ear than the early bilingual subjects did. Words presented to the subjects' right ear did not produce the same significant results.

The 'ear-of-information reception' issue is brought up here, which has been highlighted by the observation that a number of interpreters place the headphones over only one ear during SI (Lambert in *The Interpreters' Newsletter* 2, 1989: 13). Which ear do they choose, and why? The question must be considered in the light of the fact that left-ear information is sent to the right side of the brain for processing and right-ear information is sent to the left. The SSW finding shows that in this study, the late bilinguals perceived information more effectively in their right cerebral hemisphere (via the left ear) than their early bilingual counterparts.

Electroencephalograph (EEG) experiments have revealed that early bilinguals have a left-hemisphere preference for language processing, whereas late bilinguals have a right-hemisphere preference (Lambert in Gerver & Sinaiko (eds.), 1978: 141). Lambert explains the phenomenon in the light of the fact that early bilinguals employ a more analytic, semantic approach to processing verbal information, more left-hemisphere dominant (right ear), whereas the later bilinguals rely more extensively on the extralinguistic features of the language, such as the physical features of the linguistic stimuli, more 'right-brain'oriented (left-ear preference) (Lambert in *The Interpreters' Newsletter* 2, 1989: 13).

The fact that the SSW finding in this study supports the literature on the point suggests that this test could be used in future research for compiling a neurolinguistic profile of interpreters or potential interpreters, by ascertaining how effectively information is processed by one ear or the other, and, consequently, which hemisphere is dominant in processing linguistic information in that particular individual.

Loss of Hearing

The incidence of loss of hearing among this subject pool was one of the most startling audiological findings. Hearing level graphs plotted from the audiological screening test, originally included simply to obtain a hearing baseline against which each subjects' performance in the other audiological tests could be measured, revealed a remarkable incidence of hearing loss among the experienced interpreters. In fact, it was shown that of the twelve subjects included in this study, only five produced audiogram results ranking within normal clinical levels. The subjects with hearing loss are concentrated in Categories B & C, containing the more experienced interpreter subjects of the entire subject pool.

The audiologist involved in this study has commented that the high incidence of hearing loss among subjects is certainly an issue worthy of further investigation. Generally, the audiological aspect of interpreting seems to have been largely relegated to the background by the interpreting research community, with only a handful of studies being conducted in this domain thus far. Yet there are strong indications, some emerging even in this rather small-scale pilot study, that many of the audiological aspects of SI still need to be addressed. Cooperation and interdisciplinary research conducted between IR researchers and audiologists could well lead to a better understanding of the simultaneous interpreter's audiological functioning.

Conclusion

To refer back to the essential questions put forward at the beginning of this article, it has been shown that there are, indeed, specific cognitive skills to be mastered by the simultaneous conference interpreter. Many of these skills extend far beyond the linguistic domain, to include memory skills, the ability to control attention, mental flexibility, mental speed, the ability to control language interference, automatise mental processes, as well as a number of specific auditory skills. Of the three skill areas focused on in this study, the most significant effect of training and/or experience gained in the interpreting field was felt in the linguistic domain. Although certain skills targeted in the neuropsychological and audiological domains undoubtedly also do appear to improve with increasing experience in the interpreting field, particularly memory skills and mental speed, the researcher would not like to suggest what precise effect training or experience has on these skills, owing in part to the small subject pool in this study where individual differences are magnified to a large extent, owing in part to the fact that there is no skill baseline from which to measure development of these cognitive skills in each individual.

Future Research Directions

The next step in taking this study further would be, firstly, to administer these tests on a larger scale and on a larger subject population. As all of the neuropsychological and audiological tests are English-language based, the test battery could be administered on interpreters working not only with the English-French combination, but with other European languages, as well as with African languages, an interpreting language area currently undergoing substantial development in South Africa. Statistical analysis of the results of this much larger subject population would be more indicative of each tests' reliability in targeting and measuring cognitive skill performance in the simultaneous interpreter. It is accepted that following further testing, some of the tests may prove not to be reliable tools for this purpose, in which case they would have to be discarded.

The neuropsychological tests in this study could also be used to ascertain the extent to which the specific skills targeted by each of the tests develop as the interpreter undergoes training or gains experience as an interpreter. Perhaps the most natural way to monitor cognitive skill development would be to use, as a subject pool, a number of interpreters about to embark on interpreting training programmes at various universities and training institutions in South Africa. In this way, the researcher could obtain a cognitive skill baseline, before any training is received or experience gained, from which the subjects' subsequent cognitive skill development could be gauged. The tests would be administered at the outset of the training programme, at various intervals throughout the programme and ideally at certain stages during the first few years of the subjects' professional interpreting career. This testing procedure would answer many of the questions raised concerning the extent to which the specific skills involved in the interpreting process are capable of being formed, on a large scale where statistically valid results could be obtained. Skills identified as being important for the successful performance of the interpreter, but which do not appear to develop to any significant extent over time, should ultimately be well-developed in the prospective interpreting student before interpreting is considered as a suitable career. The implications of this type of finding for the future of aptitude testing in interpreting schools are far-reaching.

This study seems to have thrown up almost as many questions as it has set out to answer. Yet despite it's relatively small-scale magnitude and some of the methodological obstacles which undoubtedly accompany any study conducted in unchartered territory, it is hoped that it has provided the first few steps into a research domain as yet largely unexplored in South Africa.

It is hoped that we shall soon see the emergence of solid and reliable aptitude test

batteries to test potential interpreter skill - test batteries which extend far beyond the linguistic-oriented ones existing today. More discerning selection processes should lead to the selection of more suitable interpreter candidates, who, once qualified, will contribute significantly to raising both interpreting standards and perception of the profession. This, coupled with continued research efforts into this fascinating cross-language and cross-culture task, should hopefully soon see interpreting as a profession and an academic field of research reach the scientific status to which it aspires and the recognition it greatly deserves - particularly in South Africa, but also further afield.

Bibliographie

- Danks, J, Shreve, G, Fountain, S, McBeath, M (eds.). 1997. *Cognitive Processes in Translation and Interpreting*. London and New Delhi: Thousand Oaks, Sage Publications.
- De Groot, A. 1995. The Cognitive Study of Translation and Interpreting: Three Approaches. In Danks *et al* (eds.), 1995: 25 56.
- Dollerup, C & Appel, V (eds.). 1995. *Teaching Translation and Interpreting 3: New Horizons*. Amsterdam and Philadelphia: John Benjamins Publishing Company.
- Gerver, D & Sinaiko, H (eds.). 1978. Language Interpretation and Communication. New York: Plenum Press.
- Gile, D. 1995. *Basic Concepts and Models for Interpreter and Translator Training*. Amsterdam and Philadelphia: John Benjamins Publishing Company.
- Lambert, S. 1989. Simultaneous Interpreters: One Ear May Be Better Than Two. In *The Interpreters'* Newsletter 2: 11-16.
- Lezak, M. 1995. Third Edition. *Neuropsychological Assessment*. New York and Oxford: Oxford University Press.
- Schjoldager, A. 1995. Assessment of Simultaneous Interpreting. In Dollerup, C & Appel, V (eds.). 1995: 187 195.

Notes

¹The author tested five translation/ interpreting students, five professional interpreters and two 'gold standard' professional interpreters. All of these subjects are working with English and French as their mother tongue and second language respectively.

² Spondaic word - a two-syllable word, with each syllable stressed equally in pronunciation.

³ Dichotic - a different sound is sent to each ear simultaneously.

⁴This was ascertained by means of a post-task linguistic questionnaire and through observations made by the researcher during the linguistic testing stage.

⁵These quotes were extracted from an e-mail communication with Dr Gile, received on 05.07.2000.

⁶Here, the word 'experience' refers to the amount of experience the subject has in the interpreting field. It does not necessarily relate to formal interpreting training or qualifications, although generally the subjects who obtained the highest scores in the memory tasks - the Digit Span and the Logical Memory Tasks - are also those who hold the highest interpreting qualifications.

⁷This is evidenced particularly in the Trail Making, Stroop Word Trial and Letter Cancellation Tests.