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INTERPRETING FOR CROSS-CULTURAL RESEARCH: CHANGING WRITTEN ENGLISH TO AMERICAN SIGN LANGUAGE

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Abstract

The quality of cross-cultural research depends on the skills of the investigators and interpreters who participate in each study. This paper addresses sign language interpreters' participation in translating quantitative instruments from written English (source language) into American Sign Language (target language) for use in cross-cultural studies of people who are part of Deaf culture. First, research goals should be explicitly identified as either operational or comparative, and matched appropriately with an asymmetrical or symmetrical translation strategy. Next, interpreters often use a backtranslation process, with multiple checks on the conceptual integrity of the target language version of the instrument. Qualifications for a research interpreter are described in terms of language competencies and professional maturity. Data gathered through carefully translated instruments strengthens the validity of study findings, and avoids misrepresentation of the people from the culture under study.

Introduction

Contemporary recognition of the cultural dimensions of deafness, and of American Sign Language (ASL) as an integral part of Deaf culture virtually mandates utilization of ASL in studies which involve subjects who are part of the Deaf community (e.g. Higgins, 1980). Unfortunately, there are relatively few qualified researchers who are part of the deaf community, and fluent in ASL. Therefore, professional sign language interpreters are often an essential part of the research team for projects designed to gather data from members of the Deaf community.

The researcher and the interpreter rarely have experience working as a professional team and may have different expectations regarding the interpreter's role in the project. The researcher is likely concerned with consistency in administering research instruments, while the interpreter is ethically bound to individualize communication in most interpreting situations (Frishberg, 1986). Differences in role expectations can be minimized by explicitly defining the goals of the cross-cultural study, and discussing the corresponding translation strategies before beginning preparation of measures for use in the study.

This paper addresses sign language interpreters' participation in cross-cultural research which involves changing the language of quantitative instruments from written English into ASL. The term 'quantitative' refers to the use of scores from measurement tools such as questionnaires or attitude scales (Waltz, Strickland, & Lenz, 1984). The second broad category of research methodologies is termed 'qualitative' and refers to research methods such as ethnographic interviews (Spradley, 1979) or participant observation (Spradley, 1980) (Table 1).

Most sign language interpreters would find their role in qualitative studies more familiar than their role in interpreting for quantitative projects. Generally speaking, interpreting for a qualitative cross-cultural study would involve facilitating direct communication between the researcher and the subject during interviews. Most interpreters have minimal experience in the process of changing existing written assessment tools into ASL for use in a research project. The following sections discuss 1) matching research goals with the appropriate translation strategy 2) using a backtranslation process to change written English to ASL and 3) qualifications and role expectations for a research interpreter. Examples from the authors' own experience will be used to illustrate the importance of a collaborative relationship between researchers and

TABLE 1

Terms Relevant to Cross-Cultural Research

Cross-Cultural Research Goals

Comparative - when the goal of a study is to reference a construct or concept across cultures.

Operational - when the goal of a study aims at ascertaining the cultural distance between groups; or determining the degree of acculturation. One group is used as the criterion.

Cross-Cultural Research Methodologies

Qualitative Methods - Techniques such as Ethnographic interviews and face-to-face communication.

Quantitative Methods - Assigns numbers/scores, requires translation of an instrument from a source language (original) to the target language (second language).

Translation Strategy

Symmetrical - original and second language are both subject to modification during a translation process (AKA decentered translation)

Asymmetrical - loyalty to the source language dominates during translation (AKA unicentered translation)

interpreters in translating instruments for use in cross-cultural studies.

Matching Research Goals With Translation Strategy

One of the first steps in designing a cross-cultural study should be explicitly identifying the goal of the study as operational or comparative. The goal of the study will guide selection of the most appropriate strategy for translating quantitative instruments from their original (source) language into the second (target) language. The validity of cross-cultural study results has been severely compromised in the past when there was a mismatch between the goal of a cross-cultural study and the translation strategy utilized in developing target language versions of instruments. Irvine and Carroll (1980) wrote that:

> Self-report tests of achievement, aptitude, and personality have been used, in cultures other than those on which they were standardized, for almost as long as the history of mass testing itself. Moreover, such practices have, until the last ten years, disregarded the distinction between operational use (criterion-referenced meaning) and comparative use (construct-referenced meaning) of the test scores generated. (p.182).

Studies with operational goals are designed with one cultural group serving as the criterion group for a second cultural group. Studies with comparative goals are designed to reference a construct (or concept) across cultures. An example from a study of Deaf parents' attitudes about child-rearing illustrates how differences in study goals relate to translation strategies. The researcher was interested in discovering whether Deaf parents differed from nondeaf parents in their views about childrearing. The Parent-As-A-Teacher Inventory (PAAT) (Strom, 1982) was selected to gather data from Deaf mothers and fathers who were bringing up 2-7 year old children with normal hearing (Strom, Daniels, Wurster, Jones, 1985). The PAAT is a composite attitude scale of 50-items divided into five subsets.

1. Creativity subset: parental acceptance of creative functioning in their child and desire to encourage or suppress its development.

2. Frustration subset: parent child-rearing frustration and focus of the frustration.
3. Control subset: parent feelings about control and the extent to which parental control of child behavior is deemed necessary.
4. Play subset: parental understanding of play and its influence on child development.
5. Teaching-learning subset: parental perception of their ability to facilitate the teaching-learning process for their child.

Items on the PAAT were derived from an extensive search of the literature regarding parent influence on child development among normally hearing parents and children. One item in the Frustration subset asks the parent to indicate his or her level of agreement with the statement, "My child should be able to make noise during play." Children's noisiness is a common source of frustration for nondeaf parents. However, nondeaf parents' tolerance for children's noise during play would be desirable and consistent with an understanding of the importance of play for normal growth and development among preschool age children.

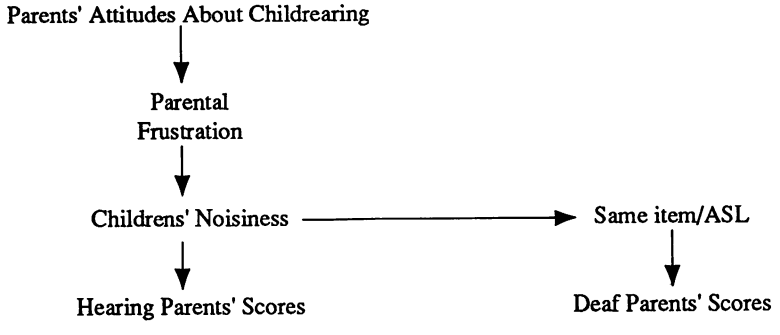
The relevance of this item for assessing Deaf parents' frustrations came into question immediately when we began translating the PAAT from written English (source language) into ASL (target language). The interpreter was a professional sign language interpreter, who was also the daughter of Deaf parents. She needed to know whether the study goals were operational or comparative before she decided whether to employ an asymmetrical or symmetrical translation strategy (Werner and Campbell, 1970) in changing the item into ASL.

The study goal was operational. That is, the researcher was interested in discovering how Deaf parents would respond to situations which nondeaf parents found frustrating. Therefore, the item was changed in ASL, using an asymmetrical translation strategy (Figure 1). In asymmetrical translation, there is a high priority on maintaining the original meaning of the item when it is changed into the target language, regardless of the item's conceptual relevance to the target culture. In fact, Werner and Campbell (1970) noted that the emphasis on faithfulness to the source language version of the instrument in asymmetrical translations often results in a target language version which seems awkward or exotic.

Predictably, Deaf parents' responses indicated that children's noisiness was not an important source of frustration for them. However, the question was not as pointless as it would appear, and did generate further questions for study. The validity of study results is always in question when an instrument developed with one population is utilized to gather data from people of a different cultural orientation (Irvine and Carroll, 1980). Because the PAAT was

Figure 1

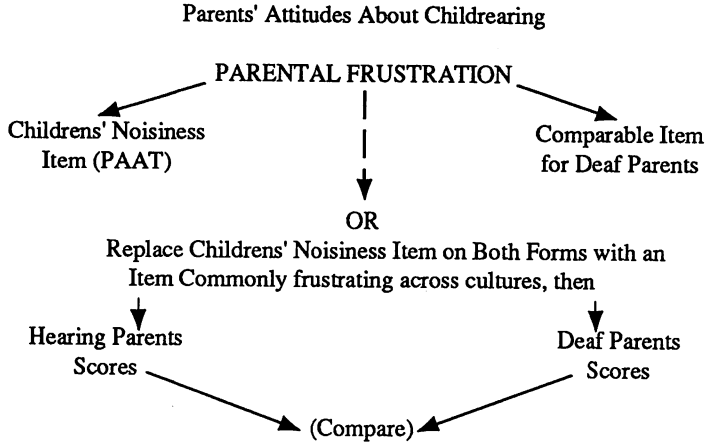
Asymmetrical Interpreting Strategy
When Cross-Cultural Research Goals are Operational



Hearing Parents' Scores are Used as Criterion for Interpretation of Deaf Parents' Scores

Figure 2

Symmetrical Interpreting Strategy
When Cross-Cultural Research Goals are Comparative



Items are designed to reference the concept, "Frustration," across cultures.

based on information about parent-child relationships among nondeaf parents and children, one could not confidently determine how deaf and nondeaf parents compared in their overall frustration. For example, did differences between Deaf and nondeaf parents scores on the PAAT item about children's noisiness mean that Deaf parents actually experienced less frustration, and fewer conflicts with their young children than nondeaf parents experienced with their preschoolers? Perhaps the main sources of frustration differ for Deaf parents as compared to nondeaf parents. For example, our qualitative data in a subsequent study (Jones, Strom, & Daniels, 1989) showed frustration among deaf parents when a hearing child did not sign, and instead, depended on siblings to interpret between the parent and the child. Deaf parents' scores on the PAAT Frustration subset may not accurately reflect their actual frustration in parenting their young children.

Valid comparisons of Deaf and nondeaf parents' frustration with raising preschool-age children would require a cross-cultural study with comparative goals, which used the concept of 'frustration' to guide translation of each item in the PAAT Frustration subset into ASL (Figure 2). If the goals of the study in the example had been comparative, the researcher and interpreter would have had two choices consistent with the comparative goals of the study:

1. replace the item about children's noisiness on Deaf parents' form with an item about an aspect of the parent-child relationship which is as frustrating to Deaf parents as noisiness is to nondeaf parents.
2. delete the item about children's noisiness on both the written English and ASL forms, and replace it with an item which addresses an aspect of the parent-child relationship that is equally frustrating to both Deaf and nondeaf parents.

A symmetrical translation strategy would be appropriate for translating an instrument for use in a study with a comparative goal, and would require that the researcher and interpreter attend to both the conceptual relevance of each item in the target culture, and the quality of the change in language during the translation process. Symmetrical translation aims for equal familiarity and colloquialness in both the source and target languages. In the case of ASL, the signed version should show a rhythm

and presentation that is not an exotic form.

Symmetrical translation is only possible when both the source and target language versions of the instrument are open to revision. If the researcher does modify the original instrument in the interest of maintaining conceptual relevance in the target culture, then he or she has effectively created a new instrument. Psychometric properties of the modified instrument would have to be re-established before it could be utilized in the research.

A mismatch between study goals and translation strategies compromises the validity of cross-cultural research findings. For example, the asymmetrical translation strategies may be employed in a study with a comparative goal, and subjects' scores interpreted as if the instrument had been translated symmetrically to reference a concept cross-culturally. If there had been a mismatch between goals and translation strategies in the example, the researcher would have defined the goal of research as comparative, the interpreter would have simply changed the item about children's noisiness (and the other PAAT items) into ASL using an asymmetrical strategy, and the researcher would have represented the resultant scores to mean that Deaf parents were less frustrated with raising young children than their nondeaf cohorts.

Utilization of an operational (criterion referenced) study design may evolve out of a medical pathology view of deafness, in contrast to an anthropological view of the cultural dimensions of the Deaf community. When scores of deaf subjects are compared against norms developed with hearing subjects, the Deaf subjects often appear deficient, consistent with the medical pathology view of deafness. However, utilization of a comparative study design, with symmetrical translations of instruments, provides a context for discovering differences between deaf and hearing from a crosscultural perspective.

One advantage of operational goals and asymmetrical translations is the greater likelihood that the target language version of the instrument will retain more of the psychometric properties of the original, source language version than in the symmetrical translations often required in comparative studies. Comparisons of subjects' scores across populations are more feasible when the source language version remains unchanged and the target language version is faithful to the original source language version. The conceptual validity of findings may be addressed, in part, through methodological triangulation, using qualitative data in conjunction with quantitative data (Duffy, 1987).

On the other hand, the researcher may give priority to achieving valid conceptual comparisons cross-culturally, though the necessary symmetrical instrument translation strategy may require considerable modifications of the original source language instrument. The resultant instruments may be essentially new source and target language versions of the original instruments, which have no established psychometric properties. If neither option is acceptable, the researcher and interpreter may choose to begin a research program to develop original instruments for exclusive use in the target culture.

After the study goal has been identified, with the appropriate companion translation strategy, the actual process of changing the quantitative instrument from its source language into the target language is initiated.

Using Backtranslation to Change Written English To ASL

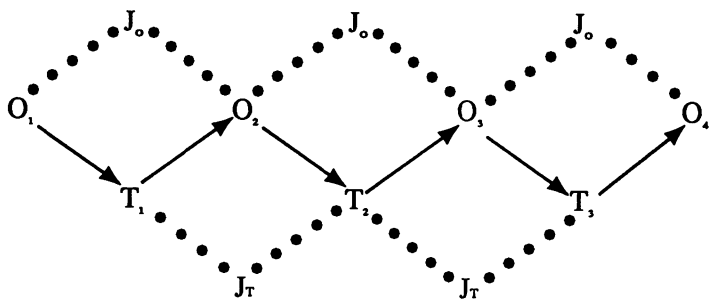
The most common and highly recommended procedure for translating/interpreting an instrument from the source language to the target language is backtranslation (Brislin, 1970; Chapman & Carter, 1979) (Figure 3). Werner & Campbell (1970) described backtranslation this way:

> the researcher "set two interpreters to work, one translating the first half into the local target language, the other the second half. This completed, each then works with the translated local-language versions of the other, translating these back into English...The investigator thus ends up with two versions in his language, and through them a triangulation on to the local language version, which almost certainly must be adequate if the two English versions are" (p. 412).

The authors adapted this process in changing a written English instrument into ASL for use in a study of deaf parents (Jones, Strom, & Daniels, 1989). Two sign language interpreters were each assigned to translate half the items from written English into ASL. Each interpreter was videotaped signing her ASL version of the instrument. The interpreters then exchanged videotapes, and changed one another's ASL videotapes back into written English, without seeing one another's original, written English items. The new English versions, which resulted from the backtranslations, were then compared against the original English items to discover possible problem areas. As Werner and

Figure 3

Back-translation Process: From Werner and Campbell (1970) page 415; An iterative sequence of back-translations



O_1, O_2 etc: Original Language Versions 1, 2, etc. (English)

T_1, T_2 etc: Target Language Versions 1, 2, etc. (ASL)

——— Translations

• • • • Comparison of Two Same - Language Versions

J_o, J_T Monolingual Judges in 0 and T Language

J_o – Monolingual English

J_T – Monolingual ASL

Campbell (1970) noted,"...the results of such first round backtranslations are usually distressingly poor" (p. 412).

After the investigator and the interpreters had discussed the items which did not seem equivalent on both the English and sign-language versions, changes were planned, and the backtranslation processes repeated until the investigator and the interpreters were satisfied that the English and signed versions were equivalent.

We solicited critiques from bilingual Deaf parents who reviewed both the English and ASL versions of the instruments, and made suggestions for improvements. For example, we had difficulty changing the following written English item from the PAAT into ASL:

It's alright for my child
to have an imaginary friend.

Parents are asked to respond on a Likert scale to indicate their relative agreement or disagreement with each statement on the PAAT. We considered using signs for 'FANTASY' or 'PRETEND' to represent the idea of an 'imaginary friend,' and found that the signs didn't make sense to Deaf parents who were native signers. One of the parents suggested using a compound sign 'NOT-REAL' for the word 'imaginary.' Other Deaf parents understood the question better with that change. However, when the ASL item was changed back into English during the next round of backtranslation, it read, "It's ok if my child doesn't have any real friends." Currently, we will have incorporated a sign for 'IMAGINE+ENVISION+FRIEND' with an explanation using mimectic description and role shifting in administering this item. Clearly, a number of checks are essential to ensuring conceptual accuracy of any interpretation, and even with multiple checks for translation quality, the ASL versions of the quantitative instruments must be pilot tested prior to use in the actual cross-cultural study. A discussion of statistical analyses of scores from pilot testing of translated instruments is outside the focus of this paper (See Chapman & Carter, 1979; Jones, 1987).

Qualifications of the Research Interpreter

The most important qualifications for a research interpreter are related to language competencies, familiarity with Deaf culture, and professional maturity. The interpreter must be fluent in both ASL and English as he or she will function as a living thesaurus. This is particularly true during the backtranslation process when the interpreter is working with the investigator to identify either a lexical or syntactical mismatch between the source and target language versions of the instrument, and to develop necessary changes in one or the other versions. Translations of activities and/or intentions may be present in Deaf culture, and not easily described in written or spoken English. ASL is often very specific and is one of the few languages which uses classifiers and size and shape specifiers (SASSes). In addition to interpreting from one language to another, the interpreter must strive to maintain equivalent levels of sophistication across languages.

The interpreter should be familiar with Deaf culture in order to act as a culture broker when the researcher is a hearing professional engaging in research about people in the Deaf community. The role of culture broker will emerge both during the translation portion of the research project, and later during data collection. The interpreter may be expected to continue educating the researcher about deaf culture and sign language, and explaining the research project to Deaf subjects.

The research interpreter will be called on to work collaboratively with other interpreters and with the researcher. One issue for the interpreter will be how to maintain consistency in interpreting the quantitative instrument for the researcher and still be faithful to the Code of Ethics mandate to provide the language most readily understood by the individual deaf client. Researchers are schooled in the importance of reliability in study design, particularly in administering quantitative instruments. The interpreter may be acutely aware that individual deaf clients will differ in their ability to understand a particular question (Rudser, 1986). Many of the principles embodied in the Interpreters' Code of Ethics, such as confidentiality and professional decorum, parallel ethics of research. Resolving the opposing goals of the researcher and the interpreter requires an honesty and respect for one another's areas of expertise, and creativity. The role of research interpreter is relatively new, and there are no formal guidelines for the research interpreter who is attempting to reconcile the difference in the interpreter's role in usual interpreting situations versus in research. However, conceptualization of the Code of Ethics in three layers supports the interpreter's efforts to use professional judgment in developing an ethical approach to his or her role in cross-cultural research.

Working with other interpreters to change a written document into ASL is an unusual experience for most interpreters, who usually work alone in situations with an individual deaf client. Participation of at least two interpreters is essential to developing a sound target language instrument. The lead research interpreter may be asked to select other interpreters to work on the research team. One must take into account the relative skills, professional attitudes, and ability to work closely and positively with other interpreters. Conflicts can be minimized if all team members adopt an open, respectful attitude, and remember that there is no one correct translation (interpretation) of a sentence into another language (Werner & Campbell, 1970, p. 402). Unfortunately, some interpreters behave as if there is a single proper way to voice an ASL concept, or interpret an English phrase into ASL. Use of the backtranslation process, flexibility, and professional skills are essential to the ultimate success of the project.

In summary, the ideal research interpreter would be 1) a native, bilingual, ASL user with the highest certification level possible, knowledgeable about the linguistic constructs of both ASL and English, 2) familiar with Deaf culture, 3) able to participate in a mature, professional manner on the research team.

Conclusion

We hope that the information contained in this article will be useful to researchers and interpreters working together on research projects. The ultimate purpose of cross-cultural research is to build a research foundation which is not riddled with errors, misconceptions, or misinterpretation of study findings. Clarification of research goals and appropriate interpreting strategies using back-translation processes can contribute to meaningful results, stronger research validity and reliability, and to an improved understanding of people of various cultures.

References

Brislin, R.W. (1970). Back-translation for cross-cultural research. Journal of Cross-Cultural Psychology, 1(3), 185-216.

Chapman, D.W. and Carter, J.F. (1979). Translation procedures for cross-cultural use of measurement. Educational Evaluation and Policy Analysis, 1(3): 71-76.

Duffy, M.E. (1987). Methodological triangulation: A vehicle for merging quantitative research methods. IMAGE, 19(3): 130-133.

Frishberg, N. (1986). Interpreting: An Introduction. Rockville, MD: RID Publications.

Higgins, P.C. (1980) Outsiders in a Hearing World. Beverly Hills: Sage.

Irvine, S.H. and Carroll, W.K. (1980). Ch 5: Testing and assessment across cultures: issues in methodology and theory. In H.C. Triandis and J.W. Berry (Eds.). Handbook of Cross-Cultural Psychology: Methodology, Vol. 2.

Jones, E. (1987). Translation of quantitative measures for use in cross-cultural research. Nursing Research, 36(5): 324-7.

Jones, E., Strom, R., and Daniels, S. (1989). Evaluating the success of deaf parents. American Annals of the Deaf, pp. 332-336.

Rudser, S.F. (1986, June). The RID code of ethics, confidentiality, and supervision. Journal of Interpretation, Vol. III: p. 47-52.

Spradley, J.P. (1979). The Ethnographic Interview. New York: Holt, Rinehart, and Winston.

Spradley, J.P. (1980). Participant Observation. New York: Holt, Rinehart, and Winston.

Strom, R., Daniels, S., Wurster, S., Jones, E. (1985). Deaf parents of normal hearing children. Journal of Instructional Psychology, 12(3): 121-126.

Strom, R. (1982). Parent-As-A-Teacher Inventory Manual. Chicago: Scholastic Testing Services, Inc.

Waltz, C.E., Strickland, O.L. and Lenz, E.R. (1984). Measurement in Nursing Research. Philadelphia: FA Davis.

Werner, O. and Campbell, D.T. (1970). Ch. 22: Translating, working through interpreters, and the problem of decentering. In (eds.) Naroll, R. and Cohen, R. Handbook of Method in Cultural Anthropology, pp. 398-420. Garden City: Natural History Press.