Chapter IV

TRANSLATION

CONTENTS

i) Members of the Translation Expert Panel[1]

- Janet Harkness (Centre for Survey Research and Methodology, Germany and University of Nebraska-Lincoln, USA)
- Hans Hönig[2] (University of Mainz at Germersheim, Germany)
- Paul Kussmaul (University of Mainz at Germersheim, Germany)
- Beth-Ellen Pennell (University of Michigan, USA)
- Alisú Schoua-Glusburg (Research Support Services, Chicago, Illinois)

ii) The translation Process

As in Round 1 of the European Social Survey (ESS), the specification for Work Package 4 in Round 2 was to assist countries to achieve the best possible translations of ESS questions. The Round 2 specifications referred National Co-ordinators to the same core task as in Round 1:

"The questionnaire will be collectively designed in 'British English'. At the end of the design stage, it will be signed off by the CCT. Each country will then translate its own version of the questionnaire. In countries in which any minority language is used as a first language by 5 per cent or more of the population, the questionnaire must be translated into that language too. Consultations about appropriate translation and adaptations of question wording will take place between countries who share the same language, but in the end each nation will be responsible for ensuring the functional equivalence of its own translation(s). The CCT, in conjunction with an expert panel, will provide detailed guidance on all translation procedures and assessment methods, none of which need necessarily involve professional translators. The translated questionnaires will then be pre-tested in each participating country in accordance with guidelines specified by the CTT on a quota-controlled, demographically-balanced sample of around 50 people. The costs of translation, assessment and pre-testing should be included in the Survey Organisation's budget, and the process will be overseen by the National Co-ordinator."

To achieve these specifications in Round 2 the Translation Work Package team performed the following tasks:

- set out and revised guidelines for translation procedures;
- defined certain key requirements for translations and translators;
- annotated questions in the Source Questionnaire to guide translation;
- outlined strategies to select and train translators and provided a queries help line for translators and National Co-ordinators;
- created a Frequently Asked Questions translation document on the ESS website;
- developed and tested a first basic teaching course on translation;
- reviewed selected translated questions from Rounds 1 and 2 in several languages;

[1] Short profiles of the Expert Panel can be found in Appendix 3.
[2] We regret to say that Hans Hönig died in July 2004.

iii) Translation requirements as set out in the Technical Annex[3]/ Specifications for participating countries for Round 2

Questionnaire translation, assessment and pre-testing

Detailed descriptions of procedures and requirements referred to here are available on the ESS web site (see the R2 Translation supplement available here: http://www.europeansocialsurvey.org/index.php?option=com_docman&task=doc_download&gid=209&Itemid=80). A single revised version of the guidelines and procedures which will be available for Round 3 is appended here as Appendix A.

The instructions given to national translation teams were as follows:

1. Materials to be translated:

For countries which participated in Round 1, a substantial part of the translation work will already have been carried out (core questionnaire, contact forms, fieldwork documents, etc). Only the rotating modules of the questionnaire plus any amendments to the core questionnaire etc. will remain to be translated.

2. Languages to be translated:

- Translations are required for each language used as a first language by 5 per cent or more of the population;
- Each country translates its own version(s) of the source questionnaire;
- Countries sharing languages (France/Switzerland, for example) will prepare harmonisation of question wording;
- In the end, however, each nation will be responsible for ensuring the functional equivalence of its own translation(s).

3. Procedures to be followed:

- National Co-ordinators are required to find suitable individuals to fulfil the three key roles in the approach: ***translators***, ***reviewer***, and ***adjudicator***;
- Translators are to translate out of English into their strongest language. (In most cases this is a person's 'first' language.);
- Two translators are required per translated draft questionnaire;
- Countries should budget for two independent draft translations, although countries sharing languages can use a 'split' translation approach, which reduces costs;
- Countries will be asked to document their translation/assessment procedures and provide files of this and their questionnaires to the CCT. It would be prudent to allow when budgeting for the same documentation procedures as those implemented in Round 1. In practice, however, the requirements may be reduced for Round 2.

[3] see http://www.europeansocialsurvey.org

4. Suitable personnel for the translation procedure:

- Translators should be skilled practitioners who have received training on translating questionnaires;
- Reviewers need to have at least as good translation skills as the translators but should be familiar with questionnaire design principles, as well as the study design and topic. One reviewing person with linguistic expertise, experience in translating, and survey knowledge is sufficient. If one person cannot be found with these skills, two could cover the different aspects;
- The adjudicator is responsible for the final decisions about which translation options to adopt, preferably in co-operation with reviewer and translators, but at least after discussion with a reviewer. Adjudicators must a) understand the research subject, b) know about the survey design, and c) be proficient in the languages involved. In the ESS context, the adjudicator may often be the National Co-ordinator or someone of senior standing who works closely with the National Co-ordinator. In some cases, the role of reviewer and adjudicator may be undertaken by the same person.

5. **Pre-testing**:

The translated questionnaires are to be pre-tested in each participating country in accordance with guidelines specified by the CCT on a quota-controlled, demographically-balanced sample of around **50** people.

In Round 2, the work package revised and elaborated certain aspects of the Guidelines and the Translation Specifications, as reflected in the Round 2 Specifications document. The revisions took into account the fact that Round 1 ESS participants had already translated a large part of the materials for the Round whilst there were also countries joining the ESS for the first time that would have to become familiar with all the specifications and procedures and would need to translate the entire questionnaire for Round 2. In addition, and in close co-operation with the Principal Investigator's office in London, the Work Package set out to provide assistance for participating countries on questions of interpretation and translation choice. Annotations were provided for the new questions in Round 2 much in the way they were for Round 1.

iv) Round 2 countries

1. Countries in Round 2 and the languages fielded

Many of the participating countries in Round 2 needed only to translate the three new rotating modules, since the core questionnaire and the Schwarz value questions in the Supplementary Questionnaire remained largely the same as in Round 1. In this way, they stood to benefit from their efforts to produce high quality translations the first time round. In the event that any country found something in the translation from Round 1 it felt necessary to change, National Co-ordinators were instructed to discuss any proposed changes with the Principal Investigator's office and the Translation Work Package team. The aim was to aid countries in rectifying any genuine mistakes that had been found while encouraging them not to "tinker" with wordings to make negligible improvements. In a time series it is vital to avoid changing questions as far as possible in order to permit comparison at the item level across waves. A few countries did indeed discuss proposed changes with the Principal Investigator's office and the Translation Work Package. Unless a major error was found in the Round 1 translations, formulations were generally not changed.

26 countries planned to participate in Round 2, fielding in a total of 24 languages. By November 2005, 24 data collections had been completed, involving 23 languages. Of the 24 languages expected in Round 2, nine of these were shared languages, that is, languages fielded in more than one country. The table overleaf lists the countries expected to participate in Round 2, alongside the languages fielded and shared.[4]

Table 4.1 Countries participating in Round Two (as of November 2005)

Country	Language(s)	Shared languages with	Participated in Round 1
Austria	German	Germany, Luxembourg Switzerland	✓
Belgium	Flemish French	(Netherlands) France, Switzerland, Luxembourg	✓
Czech Republic	Czech		✓
Denmark	Danish		✓
Estonia	Estonian Russian	 Ukraine	
Finland	Finnish Swedish	 Sweden	✓
France	French	Luxembourg, Switzerland Belgium	✓
Germany	German	Luxembourg, Switzerland Austria	✓
Hungary	Hungarian	Slovakia	✓
Italy	Italian	Not fielded yet	✓
Luxembourg	Luxembourgish German French Portuguese English	 Germany, Austria, Switzerland France, Belgium, Portugal UK, Ireland	✓
Netherlands	Dutch	(Belgium)	✓
Norway	Norwegian		✓
Poland	Polish		✓
Portugal	Portuguese	Luxembourg	✓
Slovak Republic	Slovakian Hungarian	 Hungary	
Slovenia	Slovene		✓
Spain	Spanish Catalan		✓
Sweden	Swedish	Finland	✓
Switzerland	Swiss German	Germany, Austria, Luxembourg	✓

[4] For practical purposes we consider Flemish and Dutch as one language.

	Swiss Italian Swiss French	Italy France, Belgium, Luxembourg	
Turkey	Turkish	Check if fielded	
United Kingdom	English	Ireland, Luxembourg	✓
Greece	Greek		✓
Iceland	Icelandic		
Ukraine	Russian Ukrainian	Estonia	

2. Language harmonisation in the ESS

The ESS does not follow a policy of strict harmonisation for countries fielding in the same language. A strict policy would require them to use the same wording for their questionnaires with only exceptional (and CCT sanctioned) differences At the same time, the ESS specifications do call on countries sharing languages to discuss their draft translations with one another in order to avoid unnecessary difference. As indicated in the guidelines, these discussions have the added advantage of enabling countries to benefit from one another's translation effort. Mistakes overlooked in one country's draft version, for example, are likely to be discovered in the course of discussion with other countries. In Round 2, reviews were undertaken of translations produced by countries sharing languages as discussed in sections v.1 and v.2 (see page 8).

3. Translations and Documentation

In Round 1 the Translation work package had transferred the source questionnaire to a template which provided columns for translators to enter both drafts. It also provided a column for reviewers to add comments.

Q 1 Response Categories	Source English	German Germany	German Switzerland	German Austria	Comments
	More than ½ hour, up to 1 hour	1/2 bis zu 1 Stunde	½ Stunde, bis zu 1 Stunde	Mehr als ½ Stunde, bis zu 1 Stunde	
	More than 1 hour, up to1½ hours	Mehr als 1, bis zu 1 1/2 Stunden	Mehr als 1 Stunde, bis zu 1 ½ Stunde	Mehr als 1 Stunde, bis zu 1 ½ Stunden	

This arrangement allowed those involved in the review process to look at alternative versions and comments all in one document. In this way countries were also able to produce their documentation of translation efforts without undue effort. ZUMA was among the first to use such simple tools to support translation. An increasing number of organisations are now using tables like this to aid translation efforts. The same kind of template was prepared for Round 2 as soon as the final questionnaire became available. However, the ESS translation situation in Round 2 was more complex. Some countries only had new modules to translate while other countries needed to translate all of the core and supplementary questionnaires. More importantly, a number of changes were made to both the core questionnaire and the new modules *after* the template had been distributed for Round 2.

This made it difficult for countries to stick with the template in producing their translations, since the numerous details of the updates to the questionnaire would have needed to be entered to the template. Not being able to use the template in turn complicated documentation for participating countries for Round 2.

There are solutions to this situation but they are neither quick nor inexpensive. Thus one of the research projects in the ESSi infrastructure project sets out to produce a design for a survey translation tool which will allow all countries to create and annotate translations within one electronic environment. The tool also aims to permit updates to versions to be made in easy steps and will permit documentation to be handled in a straightforward manner. In the interim, our goal for Round 3 is to have the questionnaires available in enough time to produce a template for the new modules that will require little emendation through changes called for in the source questionnaire.

v) Further Work Package Activities in Round 2

In Round 2, the core tasks originally envisaged for the work package were to update the translation guidelines, annotate new questions and consult with participating countries on queries they raised. A number of activities were added to these, partly in response to requests for help from participating countries. These activities are outlined here.

1. Reviews of languages shared

In the last third of Round Two, the translation work package undertook preliminary review work of some of the translations produced by countries sharing languages, focusing on questions in German and French.

The reviews suggest that countries sharing languages still have considerable variance in their translations beyond differences motivated by local linguistic or cultural needs. Countries officially sharing languages need to co-ordinate their translation efforts more stringently in future rounds. Steps will be taken in Round 3 to remind participants of this requirement and to alert them to the dangers resulting from failing to comply.

2. Review of Italian translation

Italy changed its co-ordinating team between Round 1 and Round 2 and submitted numerous questions to both the Co-ordinating and Work Package offices about points they wished to change in their translation from Round 1. A partial review of Italian translations was therefore undertaken; two university trained translators assisted the Work Package in the review. Most of Italy’s questions about what to change and what to retain between versions could be answered fairly easily.

However, the review revealed weaknesses in the Italian translations that were similar to weaknesses found in some of the French translations. This may be an indication that in the past some countries did not follow the ESS translation guidelines with sufficient care. Special efforts will be taken in Round 3 to work with countries to improve translation quality. For example, translations from earlier rounds will be reviewed for a number of languages in order to provide feedback on any general and specific weaknesses found. Where appropriate, this feedback will be made generally available to participating countries.

3. Teaching modules

In order to help participating countries to improve their translation efforts, the work package has been developing materials to train translation teams. A first course on translation basics was tried out in the form of a short course at the American Association of Public Opinion Research (AAPOR) in May 2005. AAPOR "short courses" are offered on various topics relevant for survey science by recognised experts in their field. It is an implicit recognition of the leading character of the translation work undertaken in the ESS that members of the work package (Janet Harkness and Alisú Shoua-Glusberg) were invited to produce a short course on translation for the AAPOR conference.

The course was divided into two parts: one module covered how to budget for and organise team translation units, and how to train, select, and brief translators. The second module focused on essentials in the theory and practice of survey translation. It covered, for example, the relationship between question design and translation, details of what necessarily changes in survey translation and what essentially needs to "remain the same". The Work Package hopes to develop these materials further within the framework of an ESSI infrastructure grant.

4. Tools to facilitate survey translation and documentation

From Round 2 onwards, the ESS replicates a large part of the core questionnaire and adds rotating question modules for each specific round. Although question texts thus remain the same in many cases, the multiple changes required between rounds make it difficult to retain the questionnaire or CAPI application from a previous round as a base electronic text. Changes across rounds include, for example, question numbering, filter directions, and other components related to changing the position of questions in the questionnaire.

Countries are currently sent a complete questionnaire for the round at hand and need to enter existing translations as well as new translations in their questionnaire file or document. They are also provided with a 'changes between rounds' document and a questionnaire that highlights exactly where these occur.

As outlined in section iv.2 (page 7), the Work Package created templates to make it easier for participating countries to compare their different versions from different translators and to add commentary to facilitate discussion of drafts. As indicated, the usefulness of the templates was limited as a result of changes to the questionnaire after the templates had been created. In the second half of Round 2, ZUMA and the Institute for Social Research at the University Michigan, represented on the translation expert by Beth-Ellen Pennell, collaborated on planning a research project to develop software tools to aid translation and documentation. The improved documentation that such tools provide will also be key to producing databases of translations to increase consistency and facilitate procedures for countries sharing languages.

APPENDIX 1 ESS Translation Strategies and Procedures (as of November 2005)

1. The ESS Specifications on Translation

"The questionnaire will be collectively designed in 'British English'. At the end of the design stage, it will be signed off by the CCT. Each country will then translate its own version of the questionnaire. In countries in which any minority language is used as a first language by 5 per cent or more of the population, the questionnaire must be translated into that language too. Consultations about appropriate translation and adaptations of question wording will take place between countries who share the same language, but in the end each nation will be responsible for ensuring the functional equivalence of its own translation(s). The CCT, in conjunction with an expert panel, will provide detailed guidance on all translation procedures and assessment methods, none of which need necessarily involve professional translators. The translated questionnaires will then be pre-tested in each participating country in accordance with guidelines specified by the CCT on a quota-controlled, demographically-balanced sample of around 50 people. The costs of translation, assessment and pre-testing should be included in the Survey Organisation's budget, and the process will be overseen by the National Co-ordinator."

The ESS design is sequential, that is, a source questionnaire is developed and finalised before translation begins and is based on an Ask-the-Same-Question (ASQ) model. This model allows for the most extensive forms of analysis, but makes it both essential that the source questionnaire 'gets the questions right' and that the translations maintain the intended measurement properties (Harkness, van de Vijver and Johnson, forthcoming). An ESS expert panel drawn from relevant survey and translation fields (see Appendix 3) was set up to confer on the best and most viable approach first for translation in the multinational ESS context and second for assessment of the quality of the translations. Taking the quality expected for the ESS project into account, members of the panel identified a set of procedures based on strategies and methods which have proved to be effective in other contexts and which, in the ESS context, can accommodate a number of special requirements.

The special requirements for ESS translation and assessment include that:

1. countries will field in all languages spoken as first language by five percent or more of the population.
2. the core questionnaire is designed for regular replication.
3. two further modules on different topics accompany the core module each round.
4. there is an additional self-completion module which includes both substantial and methodological questions.
5. attitude, behaviour, and (reported) factual questions are involved.
6. the translation recommendations include innovative practical guidelines for each of the principal phases of translation and assessment.
7. countries that 'share' languages can (and should) consult with one another. They thus require guidelines on sharing procedures.
8. the duplicate character of the study and the 'sharing' of languages make documentation of the translation process and outcomes essential.

2. Translation and Assessment Framework and Rationale

Survey translation and survey translation problems are among the most frequently discussed topics in comparative survey research. Nonetheless, it is appropriate question *development* rather than question *translation* that is the real key to comparative measurement. Questions properly developed for the comparative context give us the chance to measure what we intend to measure and to ask respondents what we intend to ask. At the same time, poorly translated questions (**or** response categories, instructions, show cards, or explanations) can rob us of that chance – they can mean that respondents are not, in fact, asked what they should be asked.

The ESS translation and translation assessment work package has detailed a structured approach for the project which calls on participating countries to expend effort and funds. (Costs for translation were explicitly included in ESS specifications.) Seen against the costs and effort involved in developing and implementing a study such as the ESS, translation costs are low. On the other hand, the cost of inappropriate versions or mistakes in questionnaire translations can be very high.

The ESS framework sets out to take the best of available procedures, as proven through our own extensive experience and research and as documented in the literature. The aim is to combine these into an approach which figures among the most effective and best-tested available.

2.1 Five procedures for translation and assessment: TRAPD

TRAPD is an acronym for **T**ranslation, **R**eview, **A**djudication, **P**re-testing and **D**ocumentation, the five interrelated procedures which form the framework for ESS translation and assessment (Harkness, 2003). These cover the basic procedures involved in producing a final translated version of a questionnaire:

Translation
Review
Adjudication (deciding on a version) ⟷ **P**re-testing
Documentation

A committee-based approach using TRAPD has been chosen for the ESS as a deliberate strategy to:

a) counteract the subjective nature of translation and text-based translation assessment procedures.
b) provide participating countries with a combined approach which is qualitatively better than others (such as the much-cited 'back translation' approach) but is not more expensive or more complicated.
c) include documentation steps which make adjudication decisions easier, provide information needed for secondary analysis and can be used to inform versions for later fieldings.
d) allow considered but parsimonious production of translations which share a language with another country.

All or some of these procedures may need to be repeated at different stages. For example, pre-testing and debriefing sessions with fielding staff and respondents will lead to revisions; these then call for further testing of the revised translations.

The committee approach and the roles involved

The systematic integration of the TRAPD procedures and a team approach reflect cutting edge developments in survey questionnaire translation and assessment practice (cf. the dedicated session on translation at the AAPOR 2002 conference). At the same time, comparative researchers will be familiar with many of the principles and procedures employed. There is, for example, nothing new or surprising about the need to assess translations, nor (at least in some survey fields) about the need to document translations. Several decades of literature on survey translation moreover attest the need to pre-test questionnaires extensively.[5]

Team approaches to survey translation and assessment have been found to provide the richest output in terms of a) options to choose from for translation and b) a balanced critique of versions (Guillemin et al. 1993; Acquadro et al. 1996; McKay et al. 1996; Harkness and Schoua-Glusberg 1998). The team should bring together the mix of skills and disciplinary expertise needed to decide on optimal versions. Collectively, members of this team must supply knowledge of the study, of questionnaire design, of fielding processes (Van de Vijver, Hambleton 1996; Johnson et al. 1997). The team also requires the cultural and linguistic knowledge needed to translate appropriately in the required varieties of the target language (e.g., Acquadro et al. 1996; McKay et al. 1996).

In what Schoua-Glusberg (1992) calls the *committee approach* a good part of the work, apart from first translations, is done working in a group. The translators translate the work assigned and meet with a reviewer-cum-adjudicator (explained below) to discuss the draft versions and arrive at a final version.

In this model, three different sets of people (or actually roles) are involved in producing the final version of a translated questionnaire: *translators, reviewer, and adjudicator*.

Translators should be skilled practitioners who have received training on translating questionnaires. The ESS calls for two translators per questionnaire. Translators are to translate *out* of English *into* their strongest language. (In most cases this is a person's 'first' language.)

Reviewer*s* need to have at least as good translation skills as the translators but should be familiar with questionnaire design principles, as well as the study design and topic. One reviewing person with linguistic expertise, experience in translating, and survey knowledge is sufficient. If one person cannot be found with these skills, two could cover the different aspects.

The adjudicator is responsible for the final decisions about which translation options to adopt, preferably in co-operation with reviewer *and* translators, but at least after discussion with a reviewer. Adjudicators must a) understand the research subject, b) know about the survey design, and c) be proficient in the languages involved. In the ESS context, the adjudicator may often be the National Co-ordinator or someone of senior standing who works closely with the National Co-ordinator.

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[5] The translation work package does not deal with pre-test strategies for each participating country, but these are well described in the literature; see, for example, Hambleton, 2002; Harkness and Schoua-Glusberg, 1998 and further references there.

Committee Application of TRAPD

There are two main ways to organise a committee translation team - parallel translations and split translations.

Parallel translations: Several translators make independent parallel translations of the same questionnaire. At a reconciliation meeting, translators and a translation reviewer go through the entire questionnaire discussing versions and agreeing on a final review version. The adjudicator may attend the review process or be a reviewer. Otherwise the version produced through discussion moves on to adjudication.

Parallel translation is the recommended procedure in the ESS. However, the split approach described next is offered as an option to those countries participating in the ESS that 'share' a language or languages with other participants, since these countries will have the benefit of input from other countries' translations. Details of sharing, the requirements, rationale, and steps involved are outlined on pages 5 and 6 (see, too, Appendix 2, a *CCT Information Note* to National Co-ordinators on 'sharing' languages).

Split translations: Countries sharing languages may opt for split translations. Information on this can be found in section 2.2 (page 14).

Care needs to be taken to ensure that consistency is maintained across the translation. This is true for any translation, whether produced in parallel fashion, using a split approach, or even when a translation is produced by just one translator. However, the modified 'split' committee approach may require particular care. For example, it is conceivable that two translators translate the same expression and come up with suitable but different translations that might then not be discussed as 'problems'. Consistency checks can ensure that one translator's translation of, say, "What is your occupation?" as something like "What work do you do?" can be harmonised with another translator's rendering as something more like "What job do you have?"

Review and adjudication

Committee approaches often merge review and adjudication wholly or in part, depending on the expertise of the team and practical considerations such as time schedules and locations. However, some participating countries are producing questionnaires in several languages. Thus the person officially responsible for 'signing off' a certain translated version is in some cases not personally proficient in that particular language. In such cases, he/she may wish to consult in depth with a senior reviewer before deciding on which version to adopt. In this situation, two committee rounds could be useful, one to review, and one to decide whether the reviewed version will be accepted (adjudication). If two rounds *are* used, the adjudication round needs to include documentation from the review round in order to benefit fully from insights already gained. (Please refer to diagrams in Appendices 1A and 1B).

Why a team and not just a translator?

Using one translator may appear to be cheaper and faster than using several translators and would also seem to eliminate the need to co-ordinate teamwork. However, relying on one person to provide a questionnaire translation is problematic, in particular if no team-based assessment is undertaken.

A translator working alone and simply 'handing over' the finished assignment has no opportunity to discuss and develop alternatives. Regional variance, idiosyncratic interpretations, and inevitable translator blind spots are better handled if several translators are involved and an exchange of versions and views is part of the review process. In addition, survey translations often call for words people say rather than words people write. Group discussion (including input from survey fielding people) is likely to highlight such problems. Team-based approaches include the translators in the *review* process. Thus the cost of using two translators to *translate* is offset by their participation in assessment. Since they are familiar with translation problems in the texts, the review is more effective.

2.2 Countries 'Sharing' Languages (as of November 2005)

A number of ESS countries produce questionnaires in the same language, i.e. 'share' languages.

English	Great Britain, Ireland, Luxembourg
French	Belgium, France, Luxembourg and Switzerland
German	Austria, Germany, Luxembourg and Switzerland
Hungarian	Hungary and Slovakia
Italian	Italy and Switzerland
Portuguese	Portugal and Luxembourg
Dutch/Flemish	Belgium and the Netherlands
Swedish	Sweden and Finland
Russian	Ukraine, Estonia, (Israel)

The ESS does not follow a deliberate policy of harmonisation (it would be a deliberate policy to insist countries or ethnic groups sharing a language use the same wordings *throughout*). However, it makes very good sense to have countries sharing languages consult with one another for several reasons, including that of helping to avoid unnecessary differences in translation. (Britain and Ireland may also wish to consult on country-specific differences.) Each country sharing a language with another will produce and discuss its own draft version and then have the benefit of seeing how another country has dealt with translation before having to decide on its final version.

Consultation may provide a fresh perspective on questions a given country may have 'struggled' with. In addition, it provides the opportunity for country A to benefit from a neater or better translation made by country B but also suitable for country A. Thirdly, and importantly, *unnecessary* differences in wording can be avoided. Comparing versions may sometimes lead both country A and country B to modify what they have and arrive at a better (perhaps) common version. It is also possible that countries decide they need *different* versions. In all cases, the emphasis must be on 'better' versions, not on 'word level sameness' for the sake of 'word level sameness'. In each case countries will be asked to document changes made as a result of consultation as well as any differences across sharing countries which it is necessary to keep. The translation work package will provide a template to help them do this.

2.3 Sharing and splitting questionnaires in the ESS

Splitting a questionnaire between translators can save time and effort, particularly if a questionnaire is long (Schoua-Glusberg, 1992). At least two translators plus a reviewer and adjudicator (or reviewer-cum-adjudicator) are needed. The translation is divided up between translators in the alternating fashion used to deal cards in card games. The questionnaire should *not*, for example, be divided into a first half and a second half, or divided by thematic module. By giving each translator material from the same sections, possible translator bias is avoided and translator input is maximised evenly across the material. Each translator translates his/her own section.

At reconciliation meeting, translators and the translation reviewer go through the questionnaire question by question discussing versions and agreeing on a common version. The adjudicator may attend the review process or already be involved as a reviewer. Alternatively, the reviewed version moves on to adjudication.

Care is needed to ensure that consistency is maintained across the translation. This is true for any translation. However, 'split' questionnaires may require particular care. Steps should be taken to ensure that material or terms which re-occur across the questionnaires are translated consistently. At the same time, it is important to remember that although English uses one and the same expression in different contexts, other languages may need to choose different terms for different contexts. (One example is the term *government.*)

Specific steps for sharing and comparing questionnaire translations

a) Each country uses 2 translators. Each translator translates either the full questionnaires or, if using the "split approach", one half of the questionnaires, following procedures on how to divide the translation between translators outlined above;
b) Each country does a *preliminary review* and revision of these translations (= first reviewed version);
c) Countries then deposit their translations with the translation work package. This should be done before receiving translations from other countries;
d) Countries then exchange translations with the other country or countries sharing a given language;
e) Countries review their own translation in the light of the translation(s) from their partners and decide points that require discussion. These points could be entered in the template which is exchanged and perhaps merged before the discussion begins. This should reduce the time and effort involved in the next step;
f) Countries consult together on the final version for each country. They "harmonise" and remove differences across countries as they decide is appropriate and take a common note (one document) of any differences retained. The work package provides a template for recording this;
g) Demographic questions which are country-specific anyway do not need commentary;
h) The group that comes together to discuss harmonisation will usually consist of one representative from each country. This person should be proficient on the language to be harmonised and understand questionnaires. As just indicated, time will be saved if the points are already listed before the discussion, perhaps in the template provided by the work package. Depending on the number of points to be discussed, an in-person meeting or a telephone conference call could be arranged;
i) Countries deposit their final versions with the work package along with one set of documentation on the co-operation process (differences kept, and, if it is not too much work, changes made).

An important point in this procedure is, obviously, that countries have finished their own versions and their first review in enough time to deposit their version with the work package, then exchange versions with other countries, review and decide on a version, then finally consult with the other countries to optimise the final version across countries. However, the crucial factor may be more a matter of good and timely communication between countries sharing languages. The translation work package (contact Janet Harkness) will be glad to assist wherever possible.

3. Selecting and Training Translators

Your individual needs determine whether you require finding translators, translators and reviewers, or also perhaps an adjudicator.

If a national co-ordinator is not to be the adjudicator for a given translation, a person of senior standing with the appropriate qualities is required. (For obvious reasons we do not discuss how to find such people).

In looking for translators, you may also find someone suitable to act as reviewer. The reviewer's language skills and understanding of translation issues should be at least as good as those of the translators.

It is useful to have a number of applicants or possible translators. Even if some ESS members feel they have suitable people already, we suggest these people be 'put to the test' along with new recruits. In this way, for example, it is easier to decide who might be better suited as reviewer and who as a translator or which of two possible translators would be better for the task at hand.

Where several different translated questionnaires are to be produced, translation begins in each case from the English source questionnaire, not from a translated questionnaire (e.g. Catalan from English, not Catalan from Spanish). Thus in every case translators are needed who habitually work *from* English *into* another language (and into their 'strongest' language).

Finding translators

The first step is to find likely people (the next to select from among them).
The appropriate places to look are official channels (translation associations and the like); places of instruction, e.g., translating colleges; your own network channels; the ESS translation work package network channel; possibly within your institution; and through other institutions likely to use translators.

Using translation bureaux will in most cases not be a viable option, since, for example, translators may work long distance or not be allowed to interact directly with ESS members as 'clients' or, indeed, with each other. Translation bureaux are also unlikely to accommodate the selection procedures outlined below. Apart from this, translation bureaux are usually more expensive than individual translators are. Fielding agencies are unlikely to be able to accommodate this requirement either.

Selecting Translators

Survey literature advocates that translators should be 'bilinguals,' 'professional translators,' people who understand empirical social science research, or combinations of all of these. The most important factors for deciding on which translators to use is whether they are experienced translators and whether (in the interview we recommend), they demonstrate their suitability. Official credentials are relevant but decisions should certainly not be based primarily on these.

In selecting translators, it is wise to look at

a) *Performance* in tasks presented at the interview (outlined under training and in Appendix D).
b) *Past performance*: samples of work, although these can be misleading on many accounts. If poor, forget the candidate.
c) *Experience*: a novice is not recommended.
d) *Type of work*: someone who has worked on different text types and not just on one type contracts, commercial correspondence–may be better equipped to tackle a new text type.
e) *Personal background and education*: someone with social sciences training could have an advantage over someone from a pure science background, while a language background could be indicative of a general (and relevant) interest in language.
f) *Degree of cultural embedding* in the context for which they are translating: this may be less of a problem for the ESS, but national co-ordinators should be aware of the kind of problems arising from using translators, who do not know or no longer know the culture for which they are translating. Translators used for minority languages should know this minority culture and not just the language.
g) *Official credentials*: these indicate a career choice, unlikely for those who end up translating by virtue of the fact that they speak a foreign language and need employment. At the same time, credentials differ greatly within and across countries. In addition, the number of people entering serious translation training differs across countries. It is not necessary to insist on official credentials, other things being equal.
h) *Openness to the approach* your country plans to employ: people who 'bristle' in the interview at discussion of their 'version' of a test task are not natural choices for a team approach.
i) Their *views on translation and their job*: translators who are convinced there is some single 'correct' or 'best' translation, for example, and seem unaware of pragmatic meaning and the fact that people construct meaning are not likely to be suitable.

Training

The people most likely to be good questionnaire translators are people who are already good translators and who learn/are trained to become questionnaire translators. The procedures suggested for training include procedures which can be used to assess the suitability of applicants. Training materials can readily be developed from available questionnaire translations; old questionnaires can be used for training and practice.

Both applicants and translators being trained can, for example, be asked to identify problems in question formulations in either English or the target language, to provide translations, comment on translations already available (old, prepared questionnaires), to correct translations, to make questions more suitable for a specified target population, to explain what questions are asking, and so forth. This gives some impression of their ability to work with the materials as well as their 'ear' for suitable language for different modes and target audiences. Their flexibility in impromptu generation of versions (alongside the quality of these versions) is a good indicator of likely suitability. Good translators, aware of the constraints, tend to recognise good translation solutions when they see them.

The ESS training will include familiarisation with the annotated questionnaire and with the documentation required for the translation-review process.

Given the scarcity of training opportunities for survey translation, not many translators will have been trained to translate questionnaires adequately. Thus, in many cases, proven translating skills will be more important than survey translation experience. Translators who have had experience in translating questionnaires but were never actually trained to handle this kind of text may, indeed, prove difficult to (re-)train. At all events translators with experience in translating survey questions should also be interviewed and assessed carefully.

Check your Choice

Even once translators have been appointed, decisions sometimes need to be reversed. The first 10 per cent of the first assignment should be delivered for monitoring *as soon as it is completed*. It is unlikely that *serious deficiencies* can be remedied by pointing out or discussing problems. If the translation quality is not already reasonable, it is probably better to start again with a new translator.

If translators are not good team members, remember that an individual translation is only the first step in a team approach. You can expect to have many of the draft translations improved in the review discussion. Therefore someone who does not function well in the team weakens the input you have during the review session(s).

Task Specifications and Support Materials

Equipping translators properly for the task helps them perform better. Translators need to understand the function of target and source text to see the best possible translation options. What they produce as a translation depends not only on their ability and training but on the quality of the material they are asked to translate and on the task specifications they receive.
If not given job specifications, translators mentally decide their own, since they cannot translate in a vacuum. Task specifications must thus indicate the intended audience, level of literacy and tone of text (e.g., official or more casual tone), the function of the text (e.g., a questionnaire for fielding or a gloss to describe the contents of a questionnaire), and the degree of freedom permitted in translation. Since the ESS follows an ASQ model, functionally equivalent (but different) components are not envisaged. Translators need to be informed of how close or free the translation is required to be.

Translators informed about the measurement components of questions and trained to be sensitive to design requirements as well as target audience requirements are in an optimal position to produce good versions. They are also more likely to be able to point out when a requirement cannot be met and to recognise problems (Hulin 1987; Hambleton 1993; Borg 1998). It is thus strongly recommended that translators are given support materials, example texts, and the information relevant for their part in producing instruments. The annotated questionnaire and the documentation required are likely to be new to many translators.

4. Documentation of Translation Process and Outcome

Translation and review decisions need to be documented in the ESS for four main reasons.
First, those reviewing and adjudicating need notes on options discarded or problems noted

in order to decide better on the 'final' choices. *Second*, the ESS is an ongoing biennial survey. Documentation of problems helps inform later versions of the study. In addition, if changes are made over time, records need to be available of the chain of changes (or their absence) across translations. *Third*, secondary analysts can benefit from records of unavoidable differences or adaptations and from notes on mistakes found after a questionnaire was fielded. *Fourth*, countries sharing languages need to indicate, for example, where they do differ in formulation. New members joining in the future that share languages with countries already involved will also benefit from this documentation.

In social science survey projects, documentation of translation decisions and difficulties is, to date, rare. Experience gained from collecting information on translation procedures used in the International Social Survey Programme (ISSP; Harkness, Langfeldt and Scholz, 2001) indicates that records should be kept while the work is being done. At a later stage, problems and decisions have been forgotten. (For more information on documentation see Appendix 2).

5. Using the Annotations

Questionnaires lead a double life: they often look quite simple but in fact are rather complex. They consist of (hopefully) simple questions and response options and are, at the same time, crafted tools of measurement.

This is one reason why, in some well-known studies, standard questions such as "How many people, including children, live in this household?" are accompanied by definitions of what counts as a 'household' and what counts as 'live in' or being a member of the household, and what does not. This information helps interviewers inform respondents not about what the household composition question means *on a literal level* but about what (and who) respondents should consider and count in providing an answer.

Annotations on source questionnaires for translators serve somewhat similar purposes. They are not intended as crutches for translators to explain what English words of phrases mean *in ordinary terms*. Thus we would not expect to have to gloss that *be white* (from an immigration item from Round 1) refers to racial characteristics and not to individual colour of skin.

Instead, the goal is to provide information which allows ESS translators and those supervising their work, to focus on what is meant in survey measurement terms in order to do a better job. In some cultures, to stay with the example for interviewers above, 'household' might be automatically associated with 'home' and hence 'family'. If the annotation notes point out that the focus is on a dwelling unit (however variously defined via 'shared cooking pot' or 'shared finances', etc.) the intended and necessary focus becomes clear to the translator. At the same time, a number of ESS questions use idiomatic expressions and where we felt it was necessary, we have added notes to help clarify the intended sense.

From Round 3 onwards, participating countries are explicitly invited to point out in advance where they would like clarification notes. They are also encouraged to contact the work package with any questions or problems they may have. If unable to answer queries directly, we can, for example, pass on queries to those responsible for designing the questions.

6. Deliverables for Translation

Preferably using a template provided by the work package, NCs are required to:

- inform the work package about all languages that the survey will be fielded in;
- provide information on the translation team;
- provide information on the translation time schedule;
- send files of draft and final translations including show card translations;
- provide documentation of national translation discussions, including any remaining difficulties;
- provide documentation of any discussions with countries sharing a language;
- name the files in the manner requested by the translation work package. File names will be distributed again before translation work begins.
  - Draft versions:
    - i. language_country_main questionnaire_draft and draft number_translator's initials_round number
    - ii. language_country_supplementary questionnaire_draft and draft number_translator's initials_round number
    - iii. language_country_showcards_draft and draft number_translator's initials_round number
  - Final versions
    - i. language_country_main questionnaire_final _round number
    - ii. language_country_supplementary questionnaire_final _round number
    - iii. language_country_showcards_final _round number
  - Documentation
    - i. National doc_language_country_round number[6]
    - ii. Sharing doc_language_country_round number

[6] We leave it open to countries whether they have one documentation file or a separate one for each questionnaire – main and supplementary. Similarly, countries sharing can deliver one file with all the comments on their discussion or deliver a file on the main questionnaire and one on the supplementary, whichever is easiest.

References

Acquadro, C., Jambon, B., Ellis, D., Marquis, P., (1996). Language and Translation Issues. *In: Quality Life and Pharmacoeconomics in Clinical Trials*. Spilker, B. (eds). 2nd edition. Philadelphia: Lippincott-Raven, 575-585.

Guillemin, F., Bombardier, C., Beaton, D., (1993). Cross-Cultural Adaptation of Health-Related Quality of Life Measures: Literature Review and Proposed Guidelines. *Journal of Clinical Epidemiology,* **46**(12), 1417-1432.

Hambleton, R.K (2002). Issues, Designs, and Technical Guidelines for Adapting Tests in Multiple Languages and Cultures. *In: Adapting Educational and Psychological Tests in Cross-Cultural Assessment*. Hambleton, R.K., Merenda, P., Spielberger, C.D. (eds). Hillsdale: Erlbaum.

Harkness, J. A., (2003). Questionnaire Translation. *In:* Cross-cultural Survey Methods: Harkness, J.A., van de Vijver, F. and Mohler, P. Ph. (eds), New York, John Wiley and Sons.

Harkness, J.A., van de Vijver, F. and Johnson, C. (2003). Questionnaire Design in Comparative Research. *In:* Cross-cultural Survey Methods: Harkness, J.A., van de Vijver, F. and Mohler, P. Ph. (eds), New York, John Wiley and Sons.

Harkness, J.A, Schoua-Glusberg, A., (1998). Questionnaires in Translation. *In: ZUMA-Nachrichten Spezial No.3. Cross-Cultural Survey Equivalence*. Harkness JA (ed.). Mannheim: ZUMA.

Harkness, J.A., Langfeldt, B., Scholz, E., (2001). *ISSP Study Monitoring 1996-1998. Reports to the ISSP General Assembly on Monitoring Work Undertaken for the ISSP by ZUMA, Germany*.

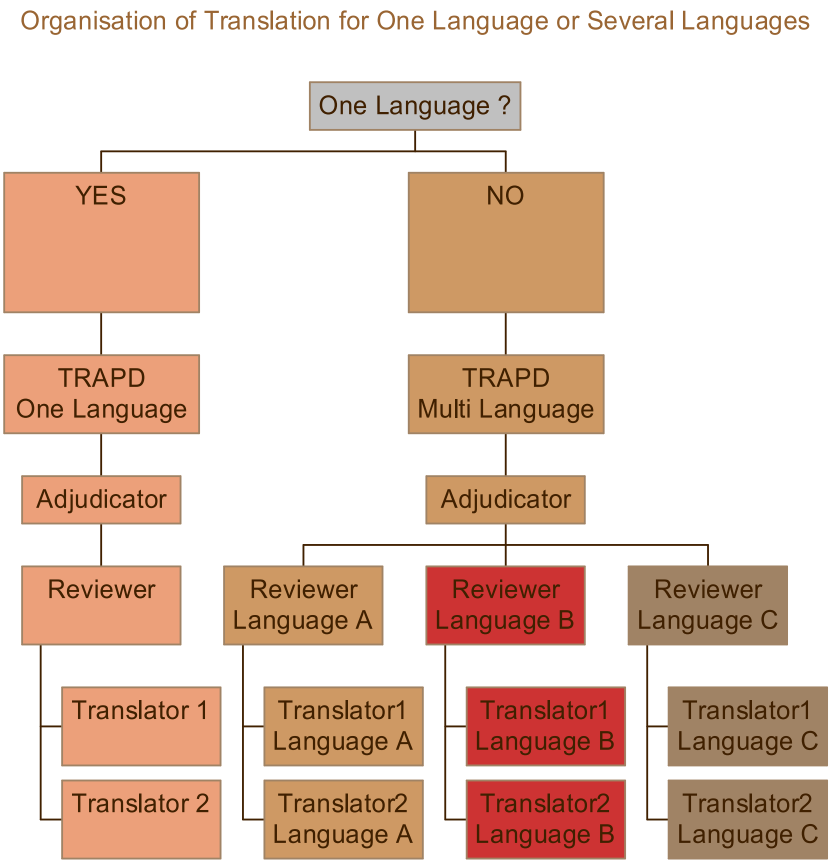
Kussmaul, P. (1995). *Training the Translator*. Amsterdam: John Benjamins.

McKay, R.B., Breslow, M.J., Sangster, R.L, Gabbard, S.M., Reynolds, R.W., Nakamoto, J.M, Tarnai, J., (1996). Translating Survey Questionnaires: Lessons Learned. *New Directions for Evaluation,* **70**, 93-105.

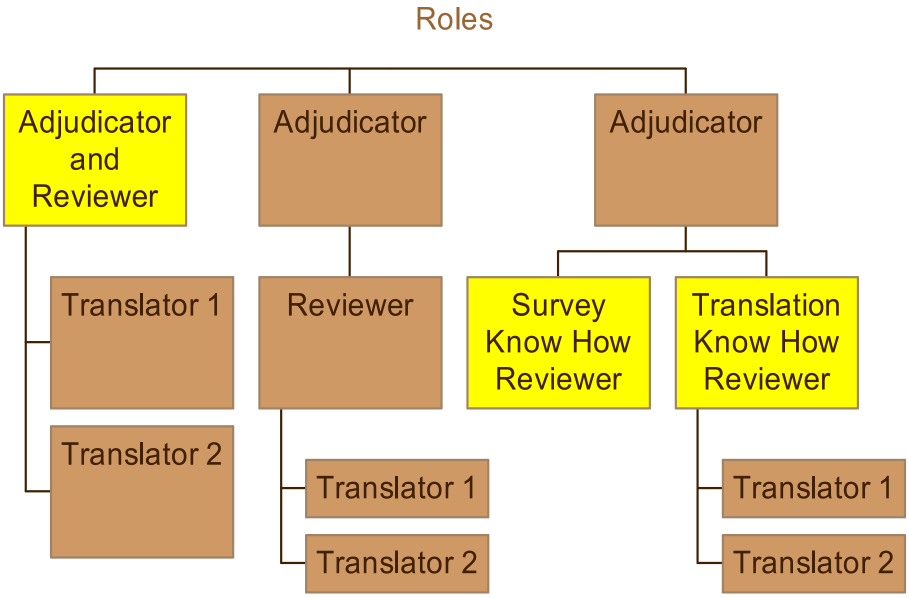
Van de Vijver, F.J.R., Hambleton, P.M, (1996). Translating Tests: Some Practical Guidelines. *European Psychologist,* **1** (2) 89-99.

Warnecke, R., Johnson, T.P., Chavez, N., Sudman, S., O`Rourke, D., Lacey, L., Horm, J., (1997). Improving Question Wording in Surveys of Culturally Diverse Populations. *Annals of Epidemiology,* **7**, 334-342.

Appendix 1 A: Organisation of Translation



Appendix 1 B: Roles



Appendix 2: Full description of documentation in relation to translated questionnaires currently available, written by three members of the ESS Translation Expert Panel.

From: Harkness, J., Pennell, B.-E., Schoua-Glusberg, A. (in press): *Survey Questionnaire Translation and Assessment. In:* Stanley Presser, Jennifer Rothgeb, Michael Couper, Judith Lessler, Elizabeth Martin and Eleanor Singer (eds.): Questionnaire Development Evaluation and Testing Methods, Wiley Series in Survey Methodology. New Jersey: John Wiley & Sons Inc.

Survey documentation as related to translation

In a multiple language context, documentation is as critical to the translation process as it is to the final product. Several different stages and types of documentation are required, including documents for translator instructions, documents to ensure consistency across translations/translators, and documents that record the translation decision-making process. If the source questionnaire is still under development while translations are proceeding, documents are needed to track changes. Further documents are needed if the survey is computerised in order to integrate translations into the computer code. The final translation also needs to be documented for end-users. We discuss each of these forms of documentation below.

Background documentation for translators: Questionnaires look simple but are carefully crafted tools of measurement. This is one reason why fairly short questions such as "*How many people, including children, live in this household?"* are often accompanied by definitions of what counts as a 'household' and what counts as 'live in' or being a member of the household. In similar fashion, translators making a French translation would benefit from knowing whether the household definition centres on shared cooking and/or financial arrangements or has more to do with shared rooms and accommodation. The choice between different French terms (such as 'ménage' and 'foyer') could lead to a different household composition count.

Annotations for translators in source questionnaires serve similar purposes to notes for interviewers. They are not intended to explain what words or phrases mean in ordinary terms but to provide information on what is meant in survey measurement terms. The ESS 2002 questionnaires carry modest annotations of this kind. Much of this information for translators could be produced as part of the design procedure and added to source questionnaires the way notes are provided for interviewers in a monolingual questionnaire in so-called question-by-question or QxQ specifications.

Translation process documents: In social science survey projects, documentation of translation decisions and difficulties is, to date, rare. One exception is the study documentation for the International Social Survey Programme (ISSP), which includes a short description of translation procedures and problems (e.g., Harkness, Langfeldt, Scholz and Klein, 2001). ISSP documentation is produced after the study has been completed. Experience with ISSP translation documentation indicates that records should be kept while the work is being done so that report writers do not need to rely on recollected accounts. With this in mind, translation protocol templates were developed for the ESS to facilitate *concurrent* translation documentation. Apart from the need to document for end-users, reviewers and adjudicators may need to consult such notes in order to decide on the 'final' or ‘best’ choices. This documentation process can initially be time-consuming, but will make the review and adjudication process more efficient.

Monolingual and multilingual diagnostic instruments of long standing are frequently documented. For example, WHO's World Mental Health Initiative uses an expanded version of WHO's Composite International Diagnostic Interview (CIDI 2.1). The translated versions of the questionnaire are archived along with documentation of all the country-specific changes that occurred in the source document as a result of the translation process or other feedback. Harmonisation decisions are also recorded across questionnaires for different versions of the same language.

Tracking changes: It is important for consistency to track reoccurring sections across an instrument. Tracking documents generally start by first listing all reoccurring phrases and words and their location in the questionnaire. As the translation proceeds, translation alternatives and then final translations are recorded. Once the final version is approved, it is a simple task to check that all instances of an item or section have been translated (or updated) consistently. Translator software tools can help automate this process.

In survey translation, the received wisdom has been to finish the source questionnaire before undertaking any translation activities in order to minimise version control and, presumably, costs (but see ‘advance translation’; Harkness, 2003). However, following this advice limits how the translation process can inform or improve the source document. Increasingly, major cross-national surveys are building in formal translation-testing mechanisms. In order to do so, a mechanism is needed to track and flag changes to the source questionnaire. Widely available document-sharing software can be used for this. In the World Mental Health initiative, instrument development occurred over a four-year period. Each of the more than 27 participating countries fielded at different points in time over this period. Using a commercial Web-based product called ‘e-room,’ documents were created that tracked every change to the source questionnaire by date, time, and the individual making the change.

Documentation for computerised instruments: Translation documentation takes on another level of complexity if the instrument is computerised. Various approaches can be used to incorporate the translation, but ultimately it needs to be integrated with the computer code. When the integration step is undertaken, ‘hidden’ phrases may need to be updated and translated. These hidden items include ‘fills’ such as he/she/they, interviewer instructions, error messages, and the like. These are generally translated after code integration and pose a new set of issues with regard to consistency across the questionnaire. Anticipating this material while constructing the source instrument can facilitate the process considerably.

Documenting final versions: Documentation of problems helps inform later versions of a study. In addition, if changes are made over time, records need to be available of the series of changes (or their absence) across translations. Secondary analysts can benefit from records of unavoidable differences or adaptations and from notes on mistakes found after a questionnaire was fielded. Countries sharing languages and harmonising need to indicate, for example, where they do differ in formulation. Moreover, countries joining a project at a later date that share languages with countries already involved can also benefit from this documentation.

Appendix 3: The ESS Translation Expert Panel

Janet Harkness - Convenor
ZUMA and University of Nebraska-Lincoln, USA

Janet A. Harkness is a cross-cultural survey methodologist with particular expertise in instrument design, adaptation, and implementation. She has a multi-disciplinary academic background and training – comparative medieval studies (M.A.); linguistics, cultural anthropology (Ph.D.); survey methods and cross-national survey research (ZUMA). At ZUMA, she was Director of the International Social Survey Programme for Germany from 1991-2005. She now holds the Donald and Shirley Chair in Survey Science at the University of Nebraska-Lincoln and retains her affiliation with ZUMA as a Senior Research Scientist. She is a member of the Central Co-ordinating Team of the European Social Survey and heads the Translation Work Package and Translation Expert Panel in the ESS. She has been involved in large-scale cross-national survey research for over 15 years, also acting as a senior researcher in cross-national methods research projects on comparative background variables, answer scales, translation assessment, and on modes across ISSP countries. Professor Harkness has also served as special advisor to a number of international surveys on translation procedures and was a member of the Expert Panel who helped develop best practice guidelines on translation for the US Bureau of the Census. She has published, presented, and taught on numerous aspects of cross-cultural survey research and communication. Her first degree (Edinburgh, MA Hons.) was in Comparative Medieval Studies. She received her doctorate in linguistics from Freiburg University, Germany, where she taught applied linguistics and translation theory and practice before coming to ZUMA.

Beth-Ellen Pennell
University of Michigan, Ann Arbor

Beth-Ellen Pennell is the Director of Data Collection and Processing Services and Associate Director for Operations and Planning for the Division of Surveys and Technologies at the Survey Research Centre, Institute for Social Research, University of Michigan. In these roles, Ms. Pennell oversees project development and planning, production sampling, data collection and processing, and data collection system development for the Division. Ms. Pennell is also a member of the Centre's Survey Methods Program and a frequent contributor to the Centre's training programs in survey methods. Ms. Pennell also serves as a special advisor to the World Health Organization and Harvard University on the World Mental Health 2000 Project (WMH2000).Ms. Pennell co-ordinates the developmental activities and oversees the implementation of the WMH200 project which involves the conduct of general population epidemiological studies in 25 developed and developing countries world-wide. In this role, she provides ongoing technical assistance on sample design, computer assisted application programming and testing, translation protocols, the development of study materials and training manuals, and quality assurance procedures and practices. Ms. Pennell is also the co-principal investigator for the WMH2000 study in the United States. Ms. Pennell has more than 25 years of experience in survey research co-operations and methods. She has been at the University of Michigan for the past 12 years. Ms. Pennell received her Masters Degree in Applied Social Research at the University of Michigan in 1997.

Alisú Schoua-Glusberg
Research Support Services, Evanston, Illinois

Dr. Alisú Schoua-Glusberg is a Cultural/Linguistic Anthropologist who began her studies at the University of Buenos Aires and completed her first degree at Roosevelt University and her Ph.D. at Northwestern University, both in Chicago. She began her work in survey operations at the National Opinion Research Centre at the University of Chicago in 1984, becoming Director of the Survey Operations Centre at NORC and Translations' Co-ordinator for all of NORC's translated surveys. In the early 1990s she pioneered translation methodologies for surveys, including committee translations combined with assessments via focus groups, and the Modified Committee Approach (Schoua-Glusberg, 1992). She has also presented and trained extensively on survey translation. She was a Research Associate at Harvard Medical School, working as Director of Survey Operations for the Project on Human Development in Chicago Neighbourhoods, a large-scale longitudinal study of children and primary caregivers in the city of Chicago. She founded the consulting firm Research Support Services in 1996. This provides qualitative and quantitative research services to client organisations and specialises in work with Hispanic populations, working primarily on survey translations and qualitative data collection (cognitive interviews and focus groups to aid the questionnaire design process). She was commissioned by the US Census Bureau 2001/2002 to help draft best practices and guidelines on survey translations.

Paul Kussmaul

Paul Kussmaul, Ph.D. (Bristol), who retired from his position as Head of the General Translation Section and a Senior Lecturer at the Department of Applied Linguistics and Cultural Studies of the Johannes Gutenberg University in Mainz (Germany) in spring 2005, has trained translators and been publishing research on the translation process for over thirty years. He and Hans Hönig are major representatives of the functional approach to translation, first set out at length in their co-authored book Strategie der Übersetzung. Ein Lehr und Arbeitsbuch (Narr, (5th edition) 1999). Kussmaul applies models from different sub-disciplines of linguistics (speech act theory, semantics, and descriptive stylistics) to translation. More recently he has focused on applying cognitive research methods to investigating the translation process. In Training the Translator (John Benjamins, 1995) he investigates how think-alouds during translation can be used to improve translation competence. Kreatives Übersetzen, (Stauffenburg, 2000) investigates creative translation from a cognitive point of view. He is co-editor of and multiple contributor to the first encyclopaedia of translation studies to appear in German (Handbuch Translation, Stauffenburg, 2000) and author of some 50 articles on translation and translation teaching. He has guest lectured in Argentina, Austria, China, the Czech Republic, Denmark, England, Finland, Greece, India, Indonesia, Jordan, Spain, Thailand and Turkey. Kussmaul was a founding board member (1992-1995) of the European Society for Translation Studies and is on the advisory board of the influential German series on translation Studien zur Translation. He has translated scholarly books and articles, poetry, and social science surveys.

Hans Hönig

Dr. Hans G. Hönig was head of the Interpreting Department at the Faculty of Applied Linguistics and Cultural Studies at Mainz University (Germany) until his untimely death in summer 2004. He had thirty years of experience as a university trainer of both translators and interpreters and worked - together with his wife - as a freelance translator into both German and English. Hönig published three books and over thirty articles in the fields of translation didactics, translation process analysis and translation evaluation. Strategie der Übersetzung (1982), a textbook on translator training he wrote together with Paul Kussmaul, has become a classic in Germany (reprinted five times); Konstruktives Übersetzen (1995) is a study of translation processes based on cognitive linguistics, and Handbuch Translation (1997), which he co-edited, is a comprehensive survey of methods, tasks and tools used by professional translators. Hans G. Hönig acted as an expert adviser for the development of university-based degree courses for translators and interpreters in Istanbul (Turkey), Ljubljana (Slovenia) and Skopje (Macedonia). He also taught intensive courses for translator trainers in Slovakia, Spain and Hungary and was involved in partner programs with training institutes in Belgium, Spain and Poland. He lectured and gave seminars in China and India and in many European countries.