Introduction

Why harmonize language?

In multinational, multicultural, or multiregional surveys, which we refer to as '3MC' surveys, multiple countries or communities may field surveys in the same language. Languages such as Russian, French, German, Spanish, and Chinese, for example, are spoken as a first language by populations in a number of countries. However, the regional standard of a language used in one country usually differs to varying degrees in vocabulary and structure from regional standard varieties of the same language used in other countries. For example, American English, British English, and Indian English differ systematically in many ways. Often differences relate to vocabulary and pronunciation, but differences in syntax and other grammatical features of the language are also found.

As a result, translations produced in different locations may differ considerably—not only because there is usually more than one way to translate a question (see Translation: Overview), but because of regional differences in language, society, and culture. Thus, differences in translation may reflect the given regional standard (e.g., Mexican Spanish vs. Castilian Spanish), the fact that there is more than one way to say and to translate the same source text, or different interpretations of what the source text intends to convey, or may stem from different social and cultural realities.

Which differences are ‘necessary’—and should thus be kept—or ‘unnecessary’—and should therefore be avoided—be defined within each study. In general, the following rule of thumb may be useful: any differences due to (a) factual differences (e.g. referring to different political, educational, or social security systems) or (b) different language use (boot/trunk, grill/broil or storm in a teacup/tempest in a teapot) should be kept. However, where representatives of each country sharing one language agree that a common version can be found, this common version should be used; often the case where the different national teams had—in their initial translations—synonyms or expressions that may equate in several countries using one language.

A further complicating factor is that the written regional standard variety of a language may differ systematically and markedly from the spoken form used by the same community in question. Spoken Swiss German, for example, differs notably from region to region, and there is no standard written Swiss German. What is normally used in survey instruments is written Standard German with some vocabulary and grammatical adaptations to get closer to a kind of 'least-common denominator' oral Swiss German so that oral adaptations are less complicated for the interviewer. The interviewer has to convert written Standard German to oral Swiss German, and additionally to the regional needs.
When there are shared languages across one or more countries, each country sharing a language with another is asked to produce and discuss its own initial translation (that is, to carry out the TRA steps of the TRAPD model at the national level and then to consult with other countries fielding in this language. 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 better translation that was made by country B but is also suitable for country A. Most importantly, unnecessary and potentially harmful 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.

Guidelines

1. Harmonize the wording of questionnaires in one language whenever possible.

**Rationale**

All else being equal, it is preferable to keep the wording consistent within a language across locations. If no policy of harmonization is followed, unnecessary differences may proliferate. Some of these, such as differences in translating response scales, may negatively affect measurement. **Procedural steps**

1.1 Decide upon the policy and procedures to be adopted on harmonization (obligatory or optional, full or opt for the top-down or bottom-up; see Appendix A), as well as whether a full or split translation procedure will be used case of a bottom-up procedure.

1.2 Decide on the tools to be used; these should include a documentation component.

1.3 Inform all locations sharing a language of the harmonization policy and procedures and related requirements.

1.4 Schedule and organize any translations so that harmonization is possible given the project’s overall schedule constraints. If working from a single translated questionnaire towards localized versions, prepare and distribute the single translation. If such a top-down approach is used, the single translated version should be produced in a translation approach that includes input for the different regional varieties of the languages that are to be accommodated.

**Lessons learned**

1.1 The increased effort, time, and outlay to undertake harmonization may be an obstacle to implementing it.

1.2 Without advance planning, the short time often available for translation may make harmonization preparation meetings to discuss versions difficult and make pretesting of alternatives unlikely.

1.3 Without clearly defined protocols and some training, the local teams asked to harmonize may have difficulty making informed decisions about harmonization. They may also not properly record their decisions and motivations.

1.4 When new locations join an ongoing study, new harmonization needs may arise in previously harmonized versions of questions. No research could be identified on whether it is better for the older harmonization decisions to be maintained and the new country to deviate, or for all to change. There is 'received wisdom' about changing as little as possible but this is always overruled when change becomes necessary. These will be case-by-case decisions, depending on the study and on the translation issue at hand.

1.5 Content management systems and localization software can aid identification of text requiring harmonization and provide a documentation option for differences retained (see Translation: Tools).
1.5.1 Keeping the words the same across questionnaires in different locations does not automatically mean that perceived meaning and intended measurement are retained across populations. Pragmatic meaning also needs to be considered (see ). At the same time, there is little research available that clarifies how to keep both semantic meaning and pragmatic meaning stable across surveys in different languages. Pragmatic considerations may also stand in conflict with retaining semantic meaning. It remains to be established how 'sameness' and comparability are best ascertained at the textual level (see , , and ).

1.5.2 Localized versions based on a single common translation may have fewer differences across versions shared language. This does not mean that the instruments are necessarily better than those with more differences. Careful testing should be carried out to make sure that each population understands the questions as intended.

1.5.3 In instances where there is a language shared across more than two countries—Russian, for example—following procedure may be applied: two of the affected countries in a 3MC project (e.g., Russia and Ukraine) agree on a common, de-centered ‘master’ translation. A de-centered translation is one that does not use precise, linguistic equivalence, but rather phrases that are more general and do not rely on a specific linguistic context (e.g., rather than using the English-specific phrase “every cloud has a silver lining”, use instead “something good comes from any misfortune”). This master version would then be used by all countries sharing this language as the 2nd initial translation in their ‘national’ TRAPD process, i.e. it should be used for both of the translations in the review session. Also with this option, care must be taken to keep up a communication between all countries involved in order to discuss any criticisms or questions arising during different review meetings and reconciliation efforts. There must be a thorough review meeting when using a de-centered master translation as the second translation in the TRAPD process in every country. Like in review meetings, the participation of both people with linguistic and/or translation expertise and people with survey knowledge is crucial; and it would be useful if a representative from one of the countries producing the master version could participate in the review meetings.

1.5.4 A ‘lighter’ approach along the line of a ‘de-centered master translation’ is acceptable in case it is not possible to create such a de-centered master translation in instances of shared language across more than two countries. The reason for this may be that schedules of the translation processes in the countries sharing language vary so much that it is not even possible to organize any reconciliation efforts between two countries. In this exceptional case, countries should be allowed to use the final translation from another country using the same ‘shared language’ as the 2nd initial translation in the national TRAPD process even if this translation has not been agreed upon with a second country. Again, in the Russian language, for example, this would probably be the final translation from Russia or Ukraine.

- However, some points need to be considered: (a) this option should only be applied in exceptional cases that is, if the translation schedules are so distant from each other that none of the other reconciliation methods detailed above are possible—in any case, reconciliation methods where all participating countries make a more active contribution to the final translation(s) will be more rewarding for all those participating; (b) there must be a thorough review meeting when using the final translation from another country as the second translation in the TRAPD process in every country—if possible, there should be a communication with the country producing this first translation, giving feedback and asking questions or providing comments in cases of criticism of this translation, and like in all review meetings, the participation of people with linguistic and/or translation expertise and those with survey knowledge is crucial; (c) the disadvantage of this option is that the country finalizing their translation first would normally not have the opportunity of discussing their translation with experienced native speakers from other countries.

1.5.5 Splitting a questionnaire between translators can save time and effort, particularly if a questionnaire is At least one translator from each country plus a reviewer and adjudicator (or reviewer-cum-adjudicator) needed. The translation is divided up between translators in the alternating fashion used to deal cards in games. The questionnaire should not, for example, be divided into a first half and a second half, nor di
1.5.6 Care is needed to ensure that consistency is maintained across the translation; ‘split’ questionnaires require particular care. Steps should be taken to ensure that material or terms which recur across the questionnaire are translated consistently. At the same time, it is important to remember that although the source language has one and the same expression in different contexts, target languages may need to choose different terms for different contexts (e.g., the term “government”).

2. Only keep necessary differences.

**Rationale**

There are often several ways to formulate a survey question, an explanation, or even instructions. Teams cooperating in harmonizing effort must try to lay aside personal preferences. Differences that are maintained across questionnaires must be considered genuinely necessary—and, preferably, demonstrated through testing to be so. It is also possible that commonalties may decide they need different versions. However, countries should try and follow the ‘as close as possible to each other, but as different as necessary’ principle. In all cases, the emphasis must be on better versions, not on ‘word level sameness.’ In such cases, countries should document changes made as a result of consultation with each other, as well as any differences across sharing countries which are necessary to keep, in a form such as the TV Translation: Overview, Appendix A and ). **Procedural steps**

*If harmonization takes place on the basis of individual translations made by each national or regional group (bot. approach):*

2.1 Organize templates to enable easy comparison of the initial translations to be reviewed for harmonization.

2.2 Organize the harmonization meeting(s).

2.2.1 These can be face-to-face, perhaps piggy-backing on another meeting. However, webcasting, webinar: 'skyping' may be the only affordable modes of meeting.

2.2.2 Share versions prior to the meeting and produce a central document aligning them side-by-side; use a tool that also allows each user to see the source and target questions easily (see Appendix B).

2.2.3 If possible, appoint someone to identify types of differences (or just the differences themselves) ahead of the meeting, both on the basis of any past experience and by checking the translations to be harmonized. If that person is someone who also attends the meeting, they might usefully introduce each question, summarizing points noticed.

2.2.4 Appoint a meeting chair and determine how group/location decisions will be made, ensuring fair representation of each group/location.

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

*If common wording in the form of a single translated version is the starting point (top-down approach):*

2.3 Organize templates to enable easy comparison of the suggested localizations.

2.4 Have each local team propose modifications it considers necessary to the common version.
2.5 Organize the reconciliation meeting(s).

2.5.1 These can be face-to-face if possible, perhaps piggy-backing on another meeting. However, webcasting webinars, or 'skyping' may be the only affordable modes of meeting.

2.5.2 Define the goals of this meeting (e.g., to review suggested changes, to try to find new shared alternatives share questions about the single translation).

2.5.3 Share localization suggestions prior to the meeting and produce a central document aligning them side by side; use a format that also allows the users to see the source questions easily.

2.5.4 If possible, appoint someone to identify the types of localization proposed ahead of the meeting, both basis of any past experience and by checking the localizations proposed. If this person is someone who attends the meeting, they might usefully introduce each question, summarizing the suggestions made and questions raised.

2.5.5 Appoint a meeting chair and determine how decisions will be made, ensuring a fair representation of group/location.

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

Lessons learned

2.1 Personal language perception and usage can be mistaken for generic language usage. It would be mistaken to assume that because one or more speakers make a distinction, these are then distinctions made by all speakers given speech community.

2.2 It may not serve the study's purpose to make decisions on the principle of a 'majority' vote. The aim is ultimately allow necessary difference in any given version.

2.3 Harmonization is not limited to the choice of words or phrases; it can include decisions, for example, about sentences are structured and response scales organized.

2.4 Sometimes harmonization takes the form of adding a term or an example to whatever is common with other language versions. Thus, if a question about tobacco use does not cover a special form that is only relevant (b important) for one population, mention of it could be added for that population alongside the other forms of tobacco use mentioned in the other versions of the question. This strategy of keeping what is common but adding a local requirement is frequently found in adaptations (see Adaptation).

2.5 If the top-down localization model is used, teams may spend more time discussing the single translation than their localizations. This has advantages and disadvantages. One benefit in discussing the available translation the group may have new ideas about a possible common version or a common version with occasional 'add-on' just described. One possible disadvantage is that consideration of the range of localized suggestions is reduced each team member ultimately focusing more on resolving what to choose for their own version.

3. Schedule harmonization at an appropriate time.

Rationale
Harmonization efforts can result in changes in one or all national questionnaires. The harmonization decisions need made when each questionnaire version (or the single translation) is at an advanced stage of development. Although desirable, iterative rounds of pretesting are not likely to be feasible. Thus, if a team translation procedure (document translation review, adjudication, and pretesting) is followed, harmonization should precede pretesting and thus final adjudication (see Appendix A and Translation: Overview; in particular, Figure 2: European Social Survey Translation Process). Pretesting can be used to check harmonization decisions. It may also indicate that further changes are required or more versions.

**Procedural steps**

3.1 Identify the time at which a well-developed version of each questionnaire to be harmonized will be pretested (single common version is well advanced) and arrange for harmonization before that time. In cases where expert assessment, such as verification or survey quality predictor (SQP) software, is part of the translation process, language harmonization might intervene at different points in time: before submitting national translations to verification, and after receiving back the expert checks from verification and SQP software coding (see also Translation: Overview, Figure 2). Before harmonization occurs, each country should complete the initial translation process as outlined in Translation: Overview as well as a preliminary review and revision of these translations.

3.2 Countries then exchange translations with the other country or countries sharing a given language; the arrangement between these countries will be decided on by the countries themselves, and the procedure chosen and the different steps should be documented accordingly.

3.3 Countries consult together on the final version for each country. They 'harmonize' and remove differences across countries as appropriate and comment on any difference retained, and document every decision accordingly.

3.4 Schedule in-person reconciliation meetings whenever possible. Representatives from all countries involved in the project need to discuss all newly translated or adapted questions. At least one person per country must participate in this meeting—ideally this would be the person acting as reviewer/adjudicator from each country. It is recommended that at least one translation expert also participates in the meeting (e.g., from the host country of the meeting where there are no further travel expenses), and additional people can participate as well, such as translators or technical experts. The outcomes of these reconciliation meetings must also be documented (e.g., in the appropriate column in the TVFF called ‘Shared Languages Discussion’) (see Figure 3 in Translation: Overview, Appendix A).

3.5 If in-person meetings are not possible, plan to exchange translated questionnaires via email and/or telephone. In cases involving critical issues or discussions about the outcomes of their deliberations, discussions can be held in the form of a Web- or telephone-based conference, which may require higher financial and organizational efforts.

3.6 Demographic questions which are country-specific or questions that require national consultation processes do not need commentary on differences between national versions (country-specific education variables, alcoholic drinks and quantities common in each country).

**Lessons learned**

3.1 If countries are fielding at different times, a group fielding much later than others may have trouble carrying out harmonization preparations in time for groups fielding earlier. The sooner harmonization is organized scheduled, the greater the chances are of successful schedule coordination between countries or locations.

3.1.1 In practice, recommending harmonization rather than requiring it may not be sufficient to motivate countries or locations to engage in the extra effort. The European Social Survey (ESS) has been aiming for optimization of harmonization and recommending it to participating countries. Since harmonization is not a requirement for ESS, countries are left with considerable freedom as to whether they harmonize or not. Historically, the countries' various time schedules also did not always easily accommodate a harmonization step. Harmonization
has further been complicated by countries with shared languages joining the project at different times. E
7th round of the ESS, there were harmonization steps for almost all shared languages. Even ex-post com
of other versions of the same language—that is, no proper ‘harmonization’ effort, but a mere comparison
be rewarding in terms of enhanced harmonization and similarity of shared language versions.

3.1.2 Without harmonization, the differences that may arise across different regional versions of questionn
shared language can be considerable and may often be unnecessary.

3.2 The differences in regional varieties of languages, at least in terms of what needs to be captured in question
may sometimes also be overestimated.

3.3 While recognizing and emphasizing that the same wording does not mean the same meaning or comparable
measurement, differences across questionnaires may introduce unnecessary and potentially serious measurem
It is, therefore, important to include harmonization procedures in the study design.

4. Determine and stipulate documentation requirements and tools for the process and outcomes.

Rationale
Those undertaking documentation should have a clear understanding of what is required and should be provided wit
that enable them to maintain documentation without undue burden. Documentation templates play an essential role
deliberating on harmonization as described above. Documentation also provides the evidence examined in quality
monitoring and assurance steps for any coordination of harmonization efforts that may exist in a project, and provid
secondary analysts and other users of data with information about differences across instruments. Procedural steps

4.1 Determine documentation needs and create stipulations to be followed by those involved in harmonization i
to achieve these needs.

4.2 Develop templates for the language harmonization process and the harmonization outcomes (see Appendix

4.3 Distribute templates and specifications to all those involved well in advance, and ensure they are familiar w
purpose and how to use them.

4.4 Provide examples of what is sufficient documentation and what is not.

4.5 Differences should be documented (e.g., in the TVFF) (see Translation: Overview, Appendix A).

Lessons learned

4.1 Good and accessible documentation is essential to shared language harmonization efforts. It enables teams t
compare options more easily while making decisions and also to record clearly the decisions taken. Users of c
benefit from documentation on differences across instruments.

5. Undertake shared language harmonization within a quality assurance and control framework as that relat
translation quality.

Rationale
Language harmonization is undertaken to reduce unnecessary variance across versions of a questionnaire in one lan
that may negatively affect measurement in any of a variety of ways. The purpose of harmonization is, thus, to enhar
measurement quality. *Procedural steps*

5.1 Plan and undertake harmonization in controlled procedures as described above.

5.2 Plan to follow harmonization with a pretesting phase.

5.3 Develop the relevant materials needed as described above.

5.4 Identify and engage suitable people to be involved in harmonization as described above.

5.5 Brief team members on the materials, purpose, and strategies used in harmonization.

5.6 Complete the main harmonization process.

5.7 Pretest and then modify instruments as relevant.

5.8 Share findings in a well-documented and timely fashion with any coordinating center, as relevant.

*Lessons learned*

5.1 The more rigorous the translation procedures and the various sub-activities such as harmonization and pretesting become, the more important scheduling, budgeting, and briefing are.

5.2 Long-term, the benefits of having and being able to share well-developed, well-translated, and well-tested instruments can be very considerable.

5.3 It may be more effective to *require* locations to engage in harmonization than to *recommend* that they do.

*References*