Data Service Infrastructure for the Social Sciences and Humanities

Versioning of translations in the Translation Management Tool (TMT) and the Question Variable Database (QVDB)

Working document for the DASISH 3.2 project group

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Content

What is translation?

Translation is the communication of the meaning of a source-language text by means of an equivalent target-language text. In case of shared languages, survey question items are sometimes translated identically and sometimes differently across countries sharing the language. This happens because translations need to stay close to the everyday language in the country where the questions are fielded, and that some questions contain country-specific elements.

We are thus dealing with two types of translations:

- Translations that apply in a single country.
- Shared translations that apply in more than one country.

Both types are common.

Surveys with strong harmonization efforts like the ESS are likely to have more identical translations at the question item level than other surveys. Still, it is rare that a full questionnaire or module is translated identically in two or more countries.

1. Versioning of translations, possibilities

Translations will be versioned independently of questions from the source questionnaire. Translated questions will typically have a reference to the source question. Translated questions are based on the source question and will have a 'BasedOn' reference to the source (see for example fig. 4).

Regarding the versioning of translations there are two options: To version translations by language or by language and country, and the DDI provides possibilities for both.

As several country-specific variants of a translated question item into a shared language exist it would probably be too high level to version translated questions by language. Versioning by language and country is thus the approved alternative. A similar versioning system could, however, be implemented in different ways, depending on translation goals and workflows.

The recommended approach is to use the xml:lang attribute as a 'locale' (combination of a language and a region or country), for example using IETF language tags: http://en.wikipedia.org/wiki/IETF_language_tag. This will apply to any language differences in questions. Other country-specific differences in questions should be documented by other means (not xml:lang). Questions with national political parties or national educational programs as response categories would for example be versioned and maintained by each country as country-specific questions.

2. Translations, competing goals

The system should be designed to handle competing goals in the best possible way. These have been identified as:

- Quality for the region, local needs
- Comparison
- Minimize translation work

The system should also support documentation of the procedures and potential problems.

Quality for the region, local needs

TRAPD translation procedures – current workflow in the ESS

To achieve the best possible translation for every language fielded in a country, the ESS uses the TRAPD (Translation, Review, Adjudication, Pretesting, and Documentation) team translation model http://ccsg.isr.umich.edu/translation.cfm .

Figure 1. The TRAPD Team Translation Model

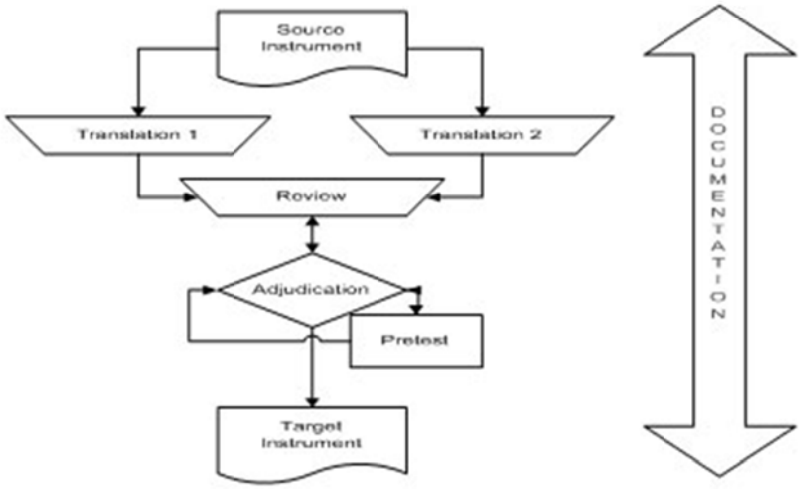
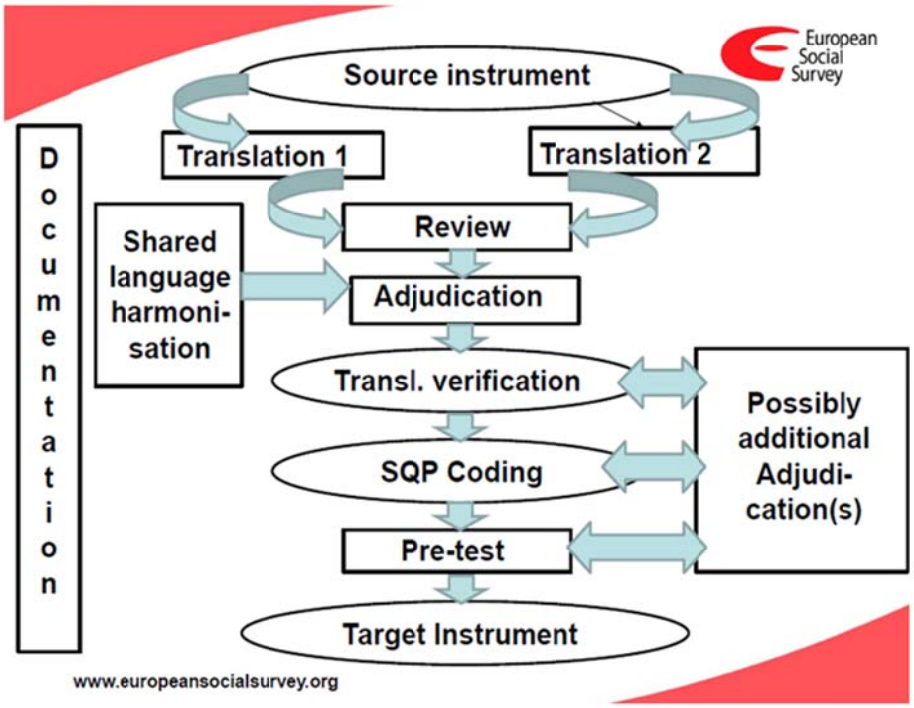


Figure 2. ESS translation procedure



The steps in the current translation workflow in the ESS (see figure 2) is described in section 3.2 in the ESS translation guidelines at http://www.europeansocialsurvey.org/docs/round6/methods/ESS6_translation_guidelines.pdf

The first step for each country is to provide (at least) two independent translations (developed by independent translators) for each language variant that will be fielded in that country. From this a first, preliminary review version is agreed for each language variant fielded within each individual country. In some rare cases it could be relevant to have two independent translations also at later stages in the translation process, for example for the pretest.

In most cases, countries then 'exchange' translations with other countries translating the questionnaire into the same language(s) and make agreements regarding the harmonization of translations, which results in the adjudicated version for each language variant that will be subject to translation verification (by an external firm). After verification is completed, SQP coding of translated items is performed by each national team. After verification and SQP, countries with shared languages may need to discuss harmonization issues again before they agree on pretest versions for each country. The pretest versions can sometimes be identical for some of the countries with shared languages.

The policy in the ESS translation team is that national translations into a shared language should be as close as possible to each other but as different as necessary.

A problem arises when a country has started their fieldwork preparation at a different time than the others and cannot take part in the harmonization discussions between countries. This may easily be the case for the ISSP, for example.

Comparison

Comparison of translations is important for several reasons.
For producer users like national translation teams it is important to be able to compare steps in the development of a national translation into the same language in the TMT. It is also important to compare national translations to those of other countries as described above.

For a consumer user, such as a researcher interested in longitudinal analysis, it is important to know how translations into the same language change over time. Moreover, researchers interested in cross-national analyses might be interested to see how translations into the same language in different countries compare, for example, whether there have been errors in translation (e.g. typing error like 'health' replaced by 'wealth'), whether the meaning of the source question item has been misrepresented or misunderstood, or if a national variation has been required in a country to ensure that respondents understand the item.

Minimizing translation work

For surveys with comprehensive translation procedures like the ESS it would be useful to be able to reuse existing metadata elements from the system.

Reuse means in this context adding an existing translation in the TMT from the previous wave or round, or a finalized question item in the current round from another country for own use. So if country 1 after the harmonization discussions decides to use the translation of country 2 in the current round being translated, the same question item object in the system will be used in both countries.

This has two main advantages:

- It reduces work load, as typing or copy-pasting the content of identical metadata elements into the system is not needed.

- If translations are agreed to be identical, no unintended differences between these translations will be implemented, and they are comparable by definition.

For low budget surveys other than the ESS and SHARE using the TMT for translation, it could be of great help for the (possibly single) translator to be able to search, compare and use questions items in the same languages if these exist in the system already.

3. Implication for the system

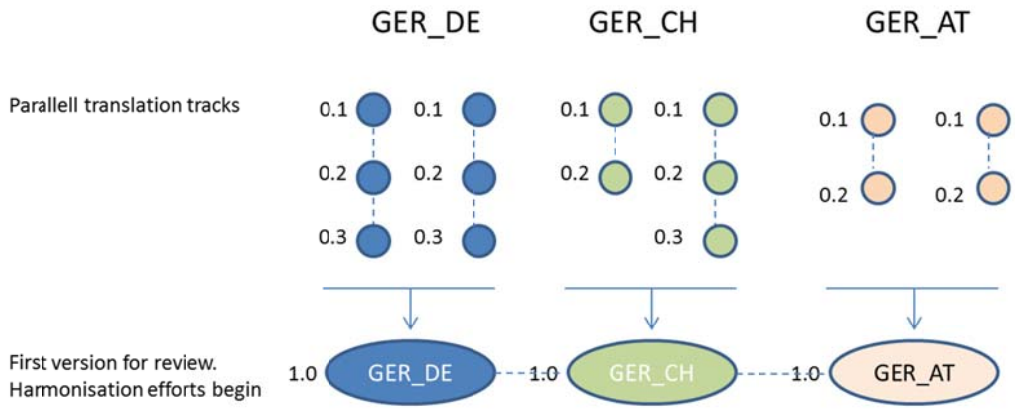
Ideally, the system should support all the above competing goals.

Quality of the region, local needs

Parallel translation tracks by language and country should be allowed in the TMT to support the local needs at the first step of the TRAPD translation procedure.

This means that for example for the German language in ESS in a particular round there will in the first steps of the workflow be two independent parallel translations in Germany, as well as in Austria and Switzerland. All in all this results in a total of six parallel translations into German, and there will be six different questions with different IDs in the TMT. It is possible that some of them are identical. After this step a first review version of a translation for each country is agreed, and countries start to compare translations.

Figure 3. Example of parallel translation tracks by language (German) and country (Germany, Switzerland, Austria)



Comparison

In order to follow the development history of a translation, it will be useful to keep the translation tracks separate for each country until the translation process is final.

From an archive and QVDB point of view, however, it would be best if identical translations for different countries do not appear as multiple instances (with different IDs) in the database.

Users like researchers and translators might like to easily find out which countries/studies have used a particular question translation in which round. This would require that identical translations have the same ID and versioning. It will otherwise not always be the case that identical questions are equal in a technical sense. When storing duplicates we also increase the risk of versions with typos/errors (which might have consequences for the meaning of the question), or orthographical differences and other problems such as a space before the question mark, or writing an ellipsis as three dots versus one character and so on.

This can be achieved if final translations that are identical have the same ID and versioning in the TMT, where the translated objects are developed and maintained.

Accordingly it has been agreed that the TMT should support technical reuse of translated objects between countries and over time, so that identical translations get the same ID. This facilitates comparison, as objects are identical by default if the same object is used, and it will be easy for users to find out in which countries and in which waves/rounds of a study that a translation is used.

Implementing DDI comparison maps would also be useful in the TMT. These would allow documentation of similarity and differences between final translations of different countries into a shared language, and also between translations over time. We recommend that for example QuestionMap (see Appendix) is implemented in the tool, while their usage should be decided by each individual project using the tool. This needs to be looked further into.

Minimizing translation work

Reuse of metadata objects within and between countries would also be an advantage from the perspective of minimizing translation work (see above under point 2). It will reduce the risk of errors and reduce typing and copy-paste.

Comparison maps would also be useful for the purpose of minimizing translation work, as these can be helpful for the work.

4. Implication for the workflow of the ESS

For surveys following the TRAPD procedure parallel translation tracks are followed from the start as described above. For the ESS and SHARE the following has been discussed:

1) When should versioning of translated objects tick in?
2) Should reuse of identical translated objects between countries be part of the workflow and when should it tick in?
3) Should national teams take care of the administration of shared translations, or should this be left to an international administrator or adjudicator?

1) When should versioning of translated objects tick in?

It has been agreed that versioning of translations in the TMT could tick in as soon as a translation is entered in the TMT, and at latest as soon as a single review version of a question is available. If there are two different translations, for example at the very initial stage, these will be versioned separately as will be done two different persons.

2) Should reuse of identical translated objects between countries be part of the workflow, and when should it tick in?

For surveys like the ESS and most cross-sectional surveys it is, however, only at the end of the translation procedure it can be decided which of the final translations that will be identical. It's important to note that in order to capture the whole translation history for a country, it would be useful to keep the country tracks separate until the development of the national questionnaire items are actually finalized. In order for the workflow to support all the three competing goals, the workflow should include technical reuse of identical translations between countries. It could, however, be too early to reuse translated questions between countries at, say, the shared language harmonization step before pretesting, even if the hitherto translated questions are identical. This is because SQP coding can differ from country to country for identical questions (due to position in the questionnaire and social desirability in each country, a different name inserted in the question text for example), and changes can be made after pre-test of the questionnaire in countries where a pre-test is carried out as part of the translation procedure. Pretest results in different countries may also affect the source questionnaire development at the stage when the questionnaire is not finalized.

It has been agreed that reuse of translations between countries should make up part of the workflow. This is recommended to support comparison and could also minimize translation work.

It is recommended that reuse of translations between countries should tick in when translations for each country is final.

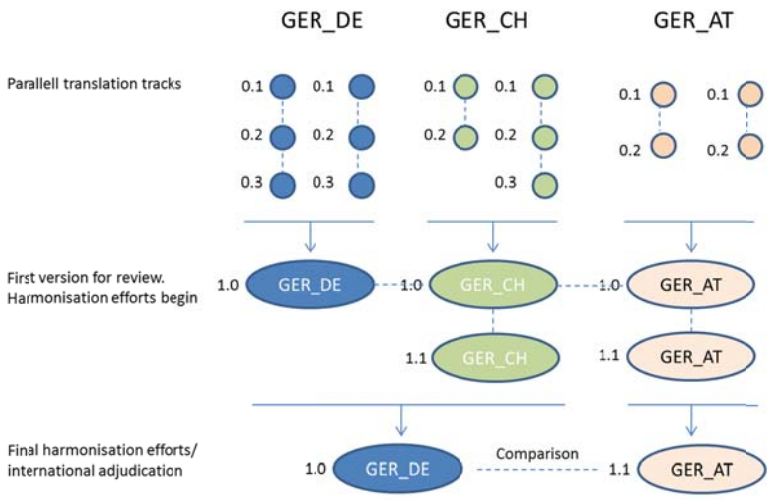
3)Should national teams take care of the administration of common objects, or should this be left to an international administrator?

It can be difficult to convince national teams to technically reuse translations developed and maintained by other countries even if they are agreed to be identical, and to do this in a correct and consistent way. However, from an archive (QVDB) point of view it would be preferable to include reuse of identical translations between countries in the translation workflow, as this procedure aims at reducing the amount of duplicate translation with different IDs in the system. If the administration of common objects is left to the National Teams, it needs to be decided how this best could be organized.

An alternative solution could be to appoint an international administrator (or team – one for each language) who could sort out which of the final translations are identical, which version of a common object should be used, which translations into the same language are functionally equivalent but not identical etc.

This international administrator (or administrator team) should have translation expertise and could for example take care of the handling of final objects (reuse, versioning) before the export of the final objects to the QVDB, and also develop ComparisonMaps for translations by different countries into the same language that are similar but not identical. Usage of DDI ComparisonMaps could display similarities and differences between translated objects, and, additionally, trigger the thinking around criteria for similarity and difference between translations into the same language.

Figure 4. Example of parallel translation tracks by language (German) and country (Germany, Switzerland, Austria) combined with international administrator of final translations.



We recommend that an international administrator (or team) takes care of the versioning of common objects. This should be done by persons close to the translation work.

For the ESS Brita and the translation team are willing to do the job. The ESSERIC HQ should clarify if this will be part of their regular job, or if it will be possible to provide some extra funding.

For the ISSP, for example, the body responsible could be the chair of the Translation Methods Group. Surveys which do not have resources for central administration may need other solutions. One possibility is that the national teams of shared languages agree that one of them acts as an administrator for that language and takes responsibility for this.

5. Implication for the versioning policy

It makes sense that the versioning could start when the first translation is entered in the tool, and at latest when the first review version of a question for a country into a particular language variant has been developed.

Reuse of translated object should be possible (at latest) when an object is final.

To balance competing goals the best policy would be to keep each country's translation track separate until the translated objects are final and ready for external export to the QVDB.

At the final shared language harmonization stages it should be decided which language-country object that will be used by all countries with identical translations into the same language. This could be an object developed in the current round or wave, or an object that exists in the system from a former round or wave. An international administrator or administrator team could decide and possibly implement this, and also make comparisons. Alternatively, national teams could for example agree that one of them acts as an administrator for each shared language.

This requires, as agreed, that the TMT allows reuse of objects between countries as well as over time.

Parallel translation tracks carried out throughout should be avoided as this will maximize the amount of duplicates in the QVDB. If this option is chosen it is vital that an international administrator or administrator team is making comparisons between objects in order to identify what is identical, what is functionally equivalent and what is possibly not comparable.

Additional suggestion: To aid an individual to do comparison maps, the TMT could possibly be able to detect which translations are 90-95% similar (just by comparing characters).

6. Summary

1. Versioning of translations, possibilities

- Translated versions will be versioned independently of questions from the source questionnaire. Translated objects will have a 'BasedOn' reference to the source question. ('Based on' will also be used to show if a translation is based on a previous, similar but not equivalent translation of the same source question version – the based-on reference to the source question version).
- Versioning by language and country will be preferred to versioning by language.

- Use xml:lang attribute as 'locale' (combination of a language and a region or a country) for example using IETF language tags: http://en.wikipedia.org/wiki/IETF_language_tag

2. Translations, competing goals

These have been defined as:

- Quality for the region, local needs
- Comparison
- Minimize translation work

The system, workflow and translation policy should be put up to handle these competing goals in the best possible way.

3. Implication for the system

Quality for the region, local needs:

- The system should allow parallel translation tracks by language and country to support the local needs at the first steps of the TRAPD procedure.

Comparison/minimizing translation work:

- The TMT should allow technical reuse of translated objects between countries and over time, so that identical translations get the same ID. This would facilitate comparison, as objects are identical by default if the same object is used, and it would be easy for users to find out by which countries and in which waves/rounds of a study that a translation is used.

- DDI comparison maps should also usefully be implemented in the TMT. These can add to the quality of the documentation as they allow documentation of similarity and differences between final translations of different countries into a shared language, and also between translations over time.

4. Implication for the workflow of the ESS

For surveys like the ESS, following the TRAPD procedure, parallel translation tracks are followed from the start as described above. 1) Versioning of objects

1) When should versioning of translated objects tick in?

Translations can be versioned as soon as they are entered into the tool, from the very first translation draft, and at latest when the first review version of a translation is available.

2) Should reuse of identical translated objects be part of the workflow and when should it tick in?

- Reuse of identical translations between countries should make up part of the work-flow. This is recommended to support comparison and could also minimize translation work.

- It is recommended that reuse of translations between countries should start when translations for each country are final.

3) Should national teams take care of the administration of common objects, or should this be left to and international administrator?

It is recommended that an international administrator or administration team takes care of the versioning of common objects. This should be done by persons close to translation work. For the ESS, the translation team has agreed to take care of this. Surveys which do not have resources for central administration may need other solutions. One possibility is that the national teams of a shared language agree that one of them acts as an administrator for that language and takes the responsibility for this.

5. Implication for the versioning policy

- Versioning could start when the first translation is entered in the tool, and should tick in as soon as a common review version of a question is available.
- Reuse of translated object should be possible (at latest) when an object is final.
- To balance competing goals the best policy would be to keep each country's translation tracks separate until the translated objects are final and ready for external export to the QVDB.
- At the final shared language harmonization stages it should be decided which language-country object that will be used by all countries with identical translations into the same language. An international administrator or administrator team could decide and possibly implement this. Alternatively, national teams could for example agree that one of them acts as an administrator for each shared language.
- Parallel translation tracks carried out throughout should be avoided as this will maximize the amount of duplicates in the QVDB.

Appendix

QuestionMap in DDI

Definition: Maps the content of two different question schemes of objects of the same type providing detail for the comparable items within those two schemes.

We could look upon comparable elements as elements for which you would like to document something about their similarities and differences.

It is useful to have this in the QDDT and TMT, for example, to express differences in QuestionSchemes and QuestionItems over time. For translations, it could be useful to document changes in translations over rounds, for example, as well as to document similarities and differences in translations into the same language. Therefore, it would be beneficial for the tools to allow QuestionMaps, though it would be up to each project to decide whether to use them

For this case it is recommended that one translation into the same language (for example for a particular round) is chosen as the standard or target to which the other translations into the same language are compared. Differences and similarities between this translation and the other translations into the same language could thus be described. For example the if police is referred to as 'gendarme' in a German translation for Switzerland and 'polizei' is used in the German translation for Germany, it could be useful to document this difference between the German for Germany and the Swiss German translation. For Austrian German a difference could be something else. From the described differences and similarities between the target translation chosen and the other translations into the same language, it would be possible to say something about the relationship between all translations into this language.

A hope is that with a system that allows for technical reuse, there will reduce the amount of 'unnecessary' differences between translations, and then comparison makes sense for translations into the same language that are different by purpose.

NB: We would not need to use all of the elements described in QuestionMap, only those that we would find useful. This will need to be looked further into.

QuestionMap:

Content: (r:URN | (r:Agency, r:ID, r:Version))[1..2], r:UserID*, r:UserAttributePair*, (r:VersionResponsibility | r:VersionResponsibilityReference)?, r:VersionRationale?, r:BasedOnObject?, r:MaintainableObject?, MapName*, r:Label*, r:Description?, SourceSchemeReference, TargetSchemeReference, Correspondence?, ItemMap*

ItemMap:

Content: (r:URN | (r:Agency, r:ID, r:Version))[1..2], r:UserID*, r:MaintainableObject?, SourceItem, TargetItem, Correspondence?, RelatedMapReference*

Correspondence:

Content: Commonality?, r:Difference?, CommonalityTypeCoded?, CommonalityWeight?, r:UserDefinedCorrespondenceProperty*