

## VI. Translation: Translation Tools

### Introduction

This section discusses tools to aid survey translation, including:

- Standard reference sources
  - Dictionaries and other reference books and hardcopy materials
  - Web-based reference materials
- Standard aids
  - Checklists
  - Listservers and newsgroups
  - Translator procedures
- Templates for the translation process and translation output
- Technological support, such as translator software
  - Translation Memory (TM)
  - Terminology tools
  - Concordances

Increasingly, large-scale international survey translation efforts combine [source document](#) production with that of translated versions. That is, the source text is entered into a management system which anticipates the needs and documentation of later production steps in other languages [\[1\]](#). Our guidelines do not assume such a system; they do, however, include consideration of the technological components that would be available in an integrated [document production and management system](#).

Tools and aids for translation can be provided by the translation project coordinator or can be a normal part of a translator's own toolkit. Who provides what may vary by project. A project might, for example, require translators to provide their translations using project-specific software, as is the case with SHARE and PIAAC.

(See [Appendix A](#) for a list and description of various translation tools.)

### Guidelines

- 1. Identify relevant materials, provide them to translators, and instruct translation team members on their use.**

## ***Rationale***

The more relevant information that competent translators receive, the better they can meet the needs of the project.

## ***Procedural steps***

- Materials may include:
  - The website (intranet and/or internet) of the survey project providing background information and documentation of the project.
  - The entire questionnaire, even if only parts of it require translation. This enables translators to:
    - See the context in which the parts to be translated belong.
    - Plan for [consistency](#).
  - Any available sections already translated that have been vetted for quality.
    - This contributes to consistency.
    - Material not yet vetted for quality may also be provided but must be used with great caution.
  - A [bilingual glossary](#) for any terms or phrases whose translation has already been established.
    - This helps to ensure compliance and consistency.
    - It also benefits the review and copy editing phases.
  - A style sheet guide, if relevant, detailing how to treat standard components of the text (e.g., strategies for emphasis in the source text or exclamation marks).
  - [Tracking documents](#) that list major recurring elements and their location.
    - Ideally these are produced automatically as part of a content management system and can be begun during development of the source questionnaire. In this case, project coordinators set the parameters for what matches should be included.
    - They may also be part of translation software.
    - In many cases, usually in modestly funded projects, they may be developed manually.
    - Create [quality checklists](#) to be incorporated into each country's final copy editing effort. Include frequent or likely oversights in the list (e.g., "Check the order of answer categories").

## ***Lessons learned***

- If existing translated material that has not been vetted for quality is made available to translators for consideration in a new translation, coordinators must decide whether the translators will be able to accurately assess its quality. These issues may also arise when translators access "parallel texts" (e.g., texts from other surveys) in the

target language. They might include very similar questions, such as frequently translated health questions, or offer translations for standard components, such as answer scales. Surveys need to be aware that existing translations may not be appropriate for their new purposes.

- The purpose of various tools and procedures may not be self-evident to translators; the translation staff may need to be briefed regarding their purpose and implementation.

## **2. Provide translators with documentation tools and require the translators to use them.**

### ***Rationale***

Providing thorough documentation of decisions, ongoing problems, and adaptations at each step of the translation process guides and enhances subsequent steps. Documentation tools and specifications can ensure that each participating unit provides systematic, comparable documentation.

(Translation documentation may be part of the development of the source document if the project uses a text content management system.)

### ***Procedural steps***

- Clearly identify what requires translation and what does not.
  - Some work platforms allow the user to freeze sections that should not be translated.
- Produce translation templates that align source text segments, target text fields, and comments fields (see [Appendix B](#) for (1) an extract from an ESS Round 4 template and (2) an example of how a merged review template based on such a translation template might look).
  - Questions, instructions, and answer scales are examples of “natural” source text segments.
  - Subdivisions at least to sentence level are often useful.
  - A simple MS Word or Excel table, produced manually, may suffice.
  - Translation software and content management systems may produce templates automatically.
- Provide instructions for translators and any other users on how to use the templates and how to document. For example, clearly explain the kinds of information expected in the comments field.
- Since individual team members fill their templates, it is advisable to hold meetings to merge template inputs. In this way, people can

compare options, notes, or comments (see [Translation](#)). Final output from one phase can be passed on in a modified template to the next phase of work.

### ***Lessons learned***

- The following issues apply in particular to the manual production of templates:
  - The manual production of templates is labor-intensive and calls for care but, in many cases, may be the only option. As relevant, budget for the time and effort to produce translation templates manually. Involve at least two suitable people with adequate bilingual proficiency and proofreading skills for the final proofreading effort (one reading out, the other checking).
  - Remember to check layout and format issues, not just wording.
  - Although, ideally, template production should begin after the source text is finalized, this may not always be feasible. If production starts prior to finalization, a [tracking system](#) for version control is essential to check modifications at either the source or target text levels.
  - Remember that copy and paste mistakes occur frequently. Technology (e.g., use of [translation memory](#)) may or may not increase their likelihood.
  - Working between different source versions of a question and different translated versions within or across languages can be complicated. A tracking system is essential to identify which elements should or do differ across versions.
  - A procedure and protocol for alerting locations or different teams to changes in either source documents or translation requirements will be needed. For example, in a centrally organized project, the source text may be modified after templates have been sent out to translating locations (countries) and countries need to be able to recognize unambiguously what needs to be changed and then incorporate these changes into their templates (or at least into their translations). The ESS alert system, as an example, is accurate but not particularly user-friendly; it has to be produced manually and changes have to be manually transferred from source version to source version.

**3. Provide translators with appropriate task instructions and briefing** (see [Finding, Selecting, and Briefing Translators](#)).

**4. Consider networking translation teams within the project.**

This refers to different countries involved in one project conferring with one another on translation challenges. Networking sometimes occurs

unofficially. For example, some Scandinavian countries in the ISSP confer often on problems. Despite speaking and writing different languages, they find that, many times, there are similarities regarding the kinds of solutions open to them. In the ESS, on the other hand, countries sharing a language are officially encouraged to confer.

### ***Rationale***

Consultation within a language family can be helpful for all. It is equally possible that sharing across language families can also be of benefit, since some generic issues are shared by rather diverse languages and cultures. This is not a richly researched area in survey research, although past experience and some research suggest its usefulness. Harkness [\[2\]](#) found that a reasonably wide range of languages and cultures face similar translation challenges. Thus, information can be compiled to assist many different language translation efforts.

### ***Procedural steps***

- Decide whether collaboration is to be unofficial or official and whether or not it must be officially documented.
  - If it is to be documented, decide on the template and detail required.
  - Both official collaboration and official documentation help to unify practices across and within projects.
- Set up a protocol and schedule for sharing experiences or solutions and documenting these.

### ***Lessons learned***

- The publication of collaborative benefits, procedures and successful outputs experienced within one group may inspire other groups that have not have considered such collaboration. For example, the ISSP Scandinavian experiences, in which countries speaking similar languages confer on problems faced in translation, might inspire other collaborations. While Asian languages, for instance, differ considerably from one another, their common differences from the source language out of which they are translating (often English) may be far greater.
- If researchers fielding in different regional forms of a “shared” language do not collaborate, many differences across versions may result that could otherwise have been avoided.

## Appendix A

### A List and Description of Translation Tools

**Dictionaries:** Good use of dictionaries requires knowledge of their strengths and weaknesses, familiarity with the way in which dictionary entries are structured, and familiarity with the abbreviations and descriptive labels used in entries (i.e., knowing how to read and use the dictionary entries). There are many kinds of dictionaries and related textbooks. In all instances the translator ought to be familiar with the key relevant dictionaries for her/his area of work.

- *Monolingual dictionaries*
  - *Source language (SL) dictionaries*

Monolingual dictionaries list and explain the different meanings an SL word may have in different contexts. Translators may be able to check that a term does indeed fit the given context.
  - *Target language dictionaries*

Target language dictionaries may help clarify meaning in the target language and provide collocations (usual word combinations). They may also offer synonyms that can be used in target text production.
  
- *Bilingual dictionaries*
  - *General dictionaries*

Bilingual dictionaries list under a single entry all the associated terms in another language which correspond to the various meanings possible for that one term. Experienced translators may use these dictionaries as checking tools or to remind themselves of definitions they may have forgotten. Inexperienced translators may mistakenly think the dictionaries can provide them with the correct word to use when they do not already know it. Such behavior warns of poor translator quality; if a translator does not know a word, it is dangerous for her/him to just use a bilingual dictionary to try to find out what it means.
  - *Terminological dictionaries*

Bilingual dictionaries are especially useful when it comes to subject-specific terminology (e.g., medical terminology). However, languages differ in the extent to which they use technically correct terminology for subjects or more everyday familiar terms (compare “He has sugar” to “He has diabetes”). Translators should not use terms with which they are not familiar unless they have solid evidence that these are the right terms for their needs. They may need to consult experts on a final choice. The more information a dictionary offers on the context in which the suggested equivalents are embedded, the better for the translator.

- *Spelling Dictionary*  
Spelling dictionaries are useful at copy-editing stages. Poor spelling (and layout) can trip up interviewers reading questions. When respondents read the questions themselves, poor spelling may also lower their estimation of the professionalism of the project. Spell checks included in word processors are useful but manual proofreading remains a necessary final step to recognize errors a machine cannot (e.g., form/from, on/in, healthy/wealthy).
- *Online dictionaries*  
There are numerous online dictionaries and thesauri. See, for example, <http://www.yourdictionary.com/> or <http://www.lexicool.com/>

**Thesauri:** Thesauri group together words of similar or related meaning. They can be helpful for finding the most appropriate word (in the best case, by recognizing it from passive vocabulary) after looking up a related word that is not quite right. Since a thesaurus only offers synonyms and does not define words, extensive knowledge of the language is required to identify the starting place for a search and to decide whether a term offered is appropriate.

Word processors such as MS Word also offer the functions “Synonyms” and “Thesaurus” (possibly in only a limited number of languages).

**Internet:** The Internet offers a unique opportunity to verify words in context or to check how idiomatic they are. However, the Internet offers usage without quality assurance. If, for instance, a particular word only appears on translated websites or on websites from countries other than the target country, it may be language interference, and not something actually used in the target language or at the level of diction required for the survey. The Internet can be used to check:

- The frequency of occurrence of particular phrases or words.
- The contexts in which words appear.
- Official terminology versus everyday terminology, based on examples offered.

**Listservers and newsgroups:** Translators often use listservers and/or newsgroups to ask advice from colleagues involved in similar translation activities. While it might be difficult to get informed advice on surveys in listservers/newsgroups, questions about general usage (e.g., questions about regional terms or levels of vocabulary) will certainly be addressed. More common languages are likely to be better served than others. Sci.lang.translation is an example of a translation-related newsgroup.

**Translation software:** Demonstration versions of translation tools are usually available through the websites of the software producers. In addition, the firms usually offer to consult on prospective customers' needs. The feasibility of any of these tools for a given project depends on a multitude of factors, including the repetitive nature of the project, the scope of the project, the suitability of the tools given any special process features of the project, the willingness of those involved to work with such tools (especially if they have not been previously exposed to them), and the budget available.

- *Translation memory:* A translation memory is a database that stores translations, while the translators produce them, for future use. "Future use" should be understood as "use within the project" -- possibly only a few minutes after being produced for the first time or for an entirely new translation task a month later. Source text and corresponding target text segments that have been produced are saved as "translation units".

When available translation memory is used in a translation, it offers "100% matches" for completely identical previously translated source text segments and "fuzzy matches" for similar, but not identical source text segments previously translated. Depending on the software used, the degree of match required in order for it to be presented to the translator can be re-defined. Translators can accept or reject matches offered. Whatever a translator may produce as a new translation or revise by modifying an existing translation also becomes part of the dynamically created and expanding translation memory. Translation is, thus, aided by technology but driven by translator decisions. Please note that translation memory software simply presents existing translation options -- there is no quality component. All that happens is that what has been translated before is made available for consideration again.

Properly vetted translation memories can be very useful for texts that are highly repetitive and where consistency of repetitive elements is a crucial issue. Obviously they are only useful if the memory consists of good translations. They can also be of value with texts that are repeatedly used at different times with slight modifications. A useful feature is that they display source and target text segments alongside each other and thus facilitate review. In addition, they support quality checks because they can indicate if all segments have been translated.

- *Terminology tool:* While a translation memory stores translation units which are made up of segments such as sentences or paragraphs, a terminology tool stores multilingual terms alongside additional

information on these terms, such as definition, synonyms, and context examples. Usually, a terminology tool is used alongside a translation memory as a source of richer information.

- *Alignment tools:* Alignment tools compare a source text and its translation and match the corresponding segments. Translations that have been produced without a translation memory can be aligned alongside the source text “after the fact” with the aid of an alignment tool. The aligned text can then also be imported into a translation memory and be used for future translations.
- *Translation memory versus machine translation:* Translation memories are built upon the basis of human translation. Machine translation, on the other hand, is a fully automatized process. Quality translations never rely on machine translation alone and there is currently little place for machine translation in survey research.
- *Concordance function:* This feature allows the translator to search for terms within the translation memory: the contextual usage of a given word is displayed.
- *Concordances:* A concordance is an alphabetical list of the words or major words used in a body of work (a “corpus”) alongside their immediate contexts. For translators, they can reveal the contexts in which certain words are usually used. Depending on funds it is possible to buy large corpora (collections of spoken and/or written language) and apply a concordance tool to these. However, neither collections of survey questions nor collections of survey question translations figure among available corpora. As with translation memory, the building of such corpora would entail checking the quality of the question formulation or the translation of any given question. However, in terms of research goals, the question banks of survey questions that exist in various places could constitute a place to begin on creating survey question and survey translation corpora.
- *Translation management:* In addition to facilitating translation, tools are available that facilitate project management. Most of the commercial packages provided in [Further Reading](#) also offer such management tools.

## Appendix B

### Extract from a translation template from the ESS Round 4 (core module A)

	Source English Section A	Routing	Draft Translation 1	Comments
<b>I above A1</b>	<b>INTERVIEWER ENTER START DATE:</b>			
	(dd/mm/yy)			
<b>I above A1</b>	<b>INTERVIEWER ENTER START TIME:</b>			
	(Use 24 hour clock)			
<b>A1</b>	<b>CARD 1</b>			
	On an average weekday, how much time, in total, do you spend watching television?			
	Please use this card to answer.			
<b>RC</b>	No time at all	<b>GO TO A3</b>		
	Less than ½ hour	<b>ASK A2</b>		
	½ hour to 1 hour	<b>ASK A2</b>		
	More than 1 hour, up to 1½ hours	<b>ASK A2</b>		
	More than 1½ hours, up to 2 hours	<b>ASK A2</b>		
	More than 2 hours, up to 2½ hours	<b>ASK A2</b>		
	More than 2½ hours, up to 3 hours	<b>ASK A2</b>		
	More than 3 hours	<b>ASK A2</b>		
	(Don't know)	<b>ASK A2</b>		

B = Bridge; CI = Coding / Design Instruction; I = Interviewer Instruction; RC = Response Category; RI = Respondent Instruction

	Source English Section B	Routing	Draft Translation 1	Comments
<b>B above B1</b>	<b>Now we want to ask a few questions about politics and government</b>			
<b>B1</b>	How interested would you say you are in politics – are you...			
<b>I in B1</b>	<b>READ OUT...</b>			
<b>RC</b>	very interested,			
	quite interested,			
	hardly interested,			
	or, not at all interested?			
	(Don't know)			
<b>B2</b>	<b>CARD 6</b>			
	How often does politics seem so complicated that you can't really understand what is going on?			
	Please use this card.			
<b>RC</b>	Never			
	Seldom			
	Occasionally			
	Regularly			
	Frequently			
	(Don't know)			
<b>B3</b>	<b>CARD 7</b>			

	<b>Source English Section B</b>	<b>Routing</b>	<b>Draft Translation 1</b>	<b>Comments</b>
	How difficult or easy do you find it to make your mind up <sup>1</sup> about political issues <sup>2</sup> ?			
	Please use this card.			
<b>RC</b>	Very difficult			
	Difficult			
	Neither difficult nor easy			
	Easy			
	Very easy			
	(Don't know)			
<b>B4-B10</b>	<b>CARD 8:</b>			
	Using this card, please tell me on a score of 0-10 how much you <u>personally</u> trust each of the institutions I read out.			
	0 means you do not trust an institution at all, and 10 means you have complete trust.			
	Firstly...			
<b>I in B4-B10</b>	<b>READ OUT...</b>			
<b>B4</b>	...[country]'s parliament?			
<b>B5</b>	...the legal system?			
<b>B6</b>	...the police?			
<b>B7</b>	...politicians?			

<sup>1</sup> Forming an opinion

<sup>2</sup> "Political issues" in this context refer to political debates, policies, controversies etc.

	<b>Source English Section B</b>	<b>Routing</b>	<b>Draft Translation 1</b>	<b>Comments</b>
<b>B8</b>	...political parties?			
<b>B9</b>	...the European Parliament?			
<b>B10</b>	...the United Nations?			
<b>RC, B4-B10</b>	<b>No trust at all</b>			
	<b>Complete trust</b>			
	<b>(Don't know)</b>			

**Possible outcome of a review template, based on the ESS Round 4 questionnaire (core module B)**

	Source English Section B	Routing	Draft Translation 1	Comments	Draft Translation 2	Comments	Review version	Comments from review meeting
<b>B above B1</b>	<b>Now we want to ask a few questions about politics and government</b>							
<b>B1</b>	How interested would you say you are in politics – are you...							
<b>I in B1</b>	<b>READ OUT...</b>							
<b>RC</b>	very interested,							
	quite interested,							
	hardly interested,							
	or, not at all interested?							
	(Don't know)							
<b>B2</b>	<b>CARD 6</b>							
	How often does politics seem so complicated that you can't really understand what is going on?							
	Please use this card.							
<b>RC</b>	Never							
	Seldom							
	Occasionally							
	Regularly							
	Frequently							
	(Don't know)							
<b>B3</b>	<b>CARD 7</b>							

	Source English Section B	Routing	Draft Translation 1	Comments	Draft Translation 2	Comments	Review version	Comments from review meeting
	How difficult or easy do you find it to make your mind up <sup>3</sup> about political issues <sup>4</sup> ?							
	Please use this card.							
<b>RC</b>	Very difficult							
	Difficult							
	Neither difficult nor easy							
	Easy							
	Very easy							
	(Don't know)							
<b>B4-B10</b>	<b>CARD 8:</b>							
	Using this card, please tell me on a score of 0-10 how much you <u>personally</u> trust each of the institutions I read out.							
	0 means you do not trust an institution at all, and 10 means you have complete trust.							
	Firstly...							
<b>I in B4-B10</b>	<b>READ OUT...</b>							
<b>B4</b>	...[country]'s parliament?							
<b>B5</b>	...the legal system?							
<b>B6</b>	...the police?							
<b>B7</b>	...politicians?							

<sup>3</sup> Forming an opinion

<sup>4</sup> "Political issues" in this context refer to political debates, policies, controversies etc.

	Source English Section B	Routing	Draft Translation 1	Comments	Draft Translation 2	Comments	Review version	Comments from review meeting
<b>B8</b>	...political parties?							
<b>B9</b>	...the European Parliament?							
<b>B10</b>	...the United Nations?							
<b>RC, B4-B10</b>	<b>No trust at all</b>							
	<b>Complete trust</b>							
	<b>(Don't know)</b>							

## Glossary

### **Bilingual glossary**

A glossary as used in translation studies is a list of words or phrases used in a particular field with their definitions. Glossaries are often found at the back of a specialist or academic book as an appendix to the text. A bilingual glossary covers the terms used in a particular field in two languages. It may happen that a key notion or concept present in one language for a given field does not have a ready match in a given other language.

A how to do a bilingual glossary is at <http://www.translatum.gr/journal/3/translator-glossary-en.htm>

### **Consistency**

Consistency in translation refers to the consistent use of the same words or terms in the target language to translate the same words or terms in the source language. Technical terms and repeated questionnaire instructions or answer scales are simple examples. The source document should also be consistent. In English, for example, you could say “sheet”, or “piece of paper” to mean roughly the same thing. Targeting consistency would mean that one or the other term was maintained throughout. Software is also available to check consistency. An exception to using the same words in the target language is if a reoccurring word or term is being used to refer to different entities at different times. In this case it would be necessary to identify what is referred to each time and choose the relevant target terms for each. Consistency also refers to consistency of style and presentation, not just vocabulary. Translation style guides and conventions for source and target languages are a key to ensuring translation consistency.

### **Document production and management system**

A document management system (DMS) is a computer system (or set of computer programs) used to track and store electronic documents and/or images of paper documents. The term has some overlap with the concepts of Content Management Systems and is often viewed as a component of Enterprise Content Management Systems (ECM) and related to Digital Asset Management, Document imaging, Workflow systems and Records Management systems. Contract Management and Contract Lifecycle Management (CLM) can be viewed as either components or implementations of ECM.

<b>Quality checklist</b>	<p>An example of a quality management checklist can be found at :</p> <p><a href="http://it.toolbox.com/blogs/enterprise-solutions/managing-project-quality-checklist-8499">http://it.toolbox.com/blogs/enterprise-solutions/managing-project-quality-checklist-8499</a></p> <p>A checklist for quality identifies all the steps, procedures, controls and tests you want to undertake and monitor in order to control that the standard procedures have been followed and their goals met.</p>
<b>Source document/source instrument</b>	<p>The original instrument from which other (target) instruments are translated or adapted as necessary.</p>
<b>Tracking documents/tracking system</b>	<p>Tracking means keeping information that enables you to locate whatever is being tracked. A tracking system can be manually created or managed with software. The basic idea in electronic tracking is that for every document stored in a database, regardless of type of document, the system keeps track of their version number. For a multilingual project, the system would track the version of the documents separately for every language that the content of the document is translated to. It is possible for a single source document to have a different version in different languages. When the document is first created it. Whenever a document is saved it is automatically generated a new version number (version 1.01. would become 1.02, the third save would be 1.03, etc.)</p>
<b>Translation memory</b>	<p>A translation memory is a database that stores translations as translators produce them for future use. Future use should be understood as use within the project, possibly only a few minutes after being produced for the first time, or also for an entirely new translation task a month later. Source text and corresponding target text segments that have been produced are saved as so-called “translation units”.</p>

## References

- [1] Bowker, L. (2002). *Computer-Aided Translation Technology: A Practical Introduction*. Ottawa: University of Ottawa Press.
- [2] Harkness, J. et al (2005). ISSP Translation Work Group Report to the ISSP General Assembly.

## Further Reading

Austermühl, F. (2001). *Electronic Tools for Translators*. Manchester: St. Jerome.

Kussmaul, P. (1995). "Text analysis and the use of dictionaries." In P. Kussmaul (Ed.), *Training the Translator* (pp. 105-126). Amsterdam: Benjamins.

Mossop, B. (2007). *Revising and Editing for Translators*. Manchester: St. Jerome.

"Translation memory". Retrieved September 19, 2008 from  
<http://www.translationzone.com/en/Products/translation-memory/default.asp>

For information on concordances see: <http://www.nsknet.or.jp/~peterr-s/concordancing>

For examples of CAT (computer-aided translation) tools:

- *Across*: <http://www.across.net/en/index.html>
- *Déjà Vu*: <http://www.atril.com/>
- *MetaTaxis*: <http://www.metataxis.com/>
- *MultiTrans*: <http://www.multicorpora.ca/>
- *SDL Trados*: <http://www.sdl.com/en/>
- *Transit*: <http://www.star-group.net/star-www/description/transit/star-group/eng/star.html>
- *Wordfast*: <http://www.wordfast.net/>