Context in translation: Definition, access and teamwork

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Abstract: It is generally agreed that when translating, context is essential. An individual word, such as 'key' (to a door? on a keyboard?) cannot be translated in isolation, unless the target language happens to maintain the same ambiguity as the source language. However, there is a lesser degree of consensus on the full extent of what *comprises* context in the world of translation and who is responsible for providing it.

After a brief survey of prior discussion of context in translation, this article derives a five-aspect, translation-specific definition of context from one general description. Section 2 of this paper then describes these five aspects of context, termed *co-text*, *rel-text*, *chron-text*, *bi-text,* and *non-text*. Three of these aspects are monolingual: portions of a text (co-text), versions of a text (chron-text), and related text (rel-text). The fourth aspect (bi-text) covers bi-lingual resources. And the fifth aspect (non-text) is beyond text. Section 3 demonstrates, through real-life examples, that each of the five aspects is indeed relevant to the work of a translator and that translators thus need access to all aspects of context. Section 4 asks a broader question: "How can everyone in the multilingual communication industry work together to improve translations through providing and using needed context?"

This article is directed at a broad audience that reaches beyond those who conduct research in Translation Studies and includes translators, translation project managers, buyers of translation services, and those responsible for the authoring of texts that will be translated. Hopefully, an increased understanding of the importance of context will help everyone involved in multilingual communication to better cooperate in providing appropriate, efficient, and effective translations.

Keywords: translation; context; co-text; bi-text; Levinas

1. Introduction

As Mona Baker (2006, p.321) observes, "The notion of context has been extensively invoked but rarely critiqued and elaborated in the study of translation and interpreting." Context also lacks a definition that can be applied in the everyday work of a professional translator. For example, Virgilio discusses "the dynamics of context in translation" (1984, pp.115-116) (with a focus on the need for context in a sense-for-sense translation as opposed to a word-for-word translation), but does not formally define context. It is certainly important to establish that context is needed in a sense-for-sense translation. A subsequent step is to characterise specific aspects of this needed context; however, this is not trivial. More recently than Virgilio, Andler (2000, p.281), in an article on the normativity of context, laments:

> Context, I claim, is infinite in some sense. As I am not willing to commit myself to a precise definition of context, I would be hard put to prove that context is infinite in the sense of being composed of infinitely many elements – elements of what?

That is the question: what is context? In the field of Human-Computer

Interaction (HCI), Dourish admits:

> 'Context' is a slippery notion. Perhaps appropriately, it is a concept that keeps to the periphery, and slips away when one attempts to define it. The goal here has not been to define it, but rather to ask what 'work' the term is doing as it is used in contemporary research in HCI (Dourish, 2004, p.29).

We will attempt to both define context and describe how it affects translation.

This article is addressed to multiple audiences. A translation buyer or project manager may want to focus initially on Figure 1 and sections 3 and 4 to see how context affects translation projects. An academic will probably be most interested in the following review of literature and the formal definition of context in section 1, as well as the on-line appendices. We hope that a professional translator will find the entire article relevant.

Even though context is difficult to define, it has been treated in Translation Studies because it is impossible to ignore. See Pause (1983), Nida (2001), and Cusin-Berche (2003), among many others. In a special issue of the *Journal of Pragmatics* dedicated to the notion of context in translation and interpreting, Mona Baker and Juliane House provide an extensive review of approaches to the study of context. Baker (2006) identifies the major issues in how context is approached by discussing three contrasts:

- Context as an abstract cognitive construct within the mind vs. a concrete set of real-world entities that guide social interaction
- Context as static vs. dynamic
- Context as neutral vs. power-sensitive

House (2006) reviews the various traditions that have dealt with context:

- Philosophy
- Psychology
- Pragmatics
- Sociolinguistics/anthropology
- Functional linguistics

These two perspectives (contrasts and traditions) are each useful in categorising various approaches to context. The fact that a particular approach to context falls on one side of a major issue or another, as identified by Baker, does not always determine which tradition it came from. For example, relevance theory comes from the pragmatics tradition and has been applied to translation, especially by Gutt (2000). Baker (2006, p.323) classifies relevance theory as taking the cognitive construct side of her first major issue. Relevance theory could also have come from a tradition within philosophy, linguistics, or even social psychology. The functional linguistic tradition described by House is categorised by Baker as dealing with context as social interaction rather than cognition. Functional linguistics could also have come (probably with a different name) from anthropology. Baker's first issue helps distinguish between approaches within Translation Studies. For example, Baker takes the position that both translation and interpreting are dynamic activities, while House argues that translation is a static activity. Baker's distinction between neutral and power-sensitive approaches to translation highlights the role of the "sometimes conflicting agendas" that readers apply when reading a translation. House's list of traditions is useful in tracing the origin of ideas in Translation Studies.

Appendix 2 of the present article complements Baker and House with a

discussion of context in generative grammar and philosophy of language, showing that context is largely ignored in generative grammar and that major philosophers take opposing positions on the importance of context. Generative grammar is a tradition not covered by any of the traditions listed by House, except that it is connected with philosophy. The material in Appendix 2 is too detailed to be included in this survey of the literature. It is included in an on-line appendix to this article because its content is not readily available in the Translation Studies literature.

Together, Baker and House provide a substantial overview of the literature about context and make it clear that most discussion of context is from outside of Translation Studies. Baker goes so far as to claim that "translation scholars have so far largely ignored the obvious centrality of the notion of context to their own discipline." She suggests that instead of treating context as a constraint, "a set of restrictions on what we can or cannot achieve in translation and other communicative events," it might be more productive to "recognize context as a resource." Although it may not be exactly what Baker had in mind, the present article indeed treats context as a set of resources that need to be available to translators.

In addition to the dimension of contrasts discussed by Baker and the dimension of traditions discussed by House, we also add a third dimension: purpose. Purpose indicates why one is interested in context. For example, one could study context in translation either for the purpose of analysing existing translations or for the purpose of improving the production of new translations. The most explicit breakdowns of context into components in the Translation Studies literature are borrowed from functional approaches to linguistics: the 'context of situation' from Systemic Functional Linguistics, consisting of field, tenor, and mode (Halliday, 2004 & 2007; Manfredi, 2008), and the SPEAKING model of communicative competence from Hymes (1996), consisting of setting, participants, ends, act sequence, key, instrumentalities, norms, and genre. These components of context are primarily intended to provide a framework for the purpose of scholarly *analysis* of texts, including translations. We will now present a breakdown of context into components primarily intended to provide support for the *production* of (target) texts. From this perspective, context is related to the specifications from which a translator works. The notion of translation specifications is related to the notion of the translation brief in the Functionalist stream of translation theory (Nord, 1997 & 2007), which originated with *skopos* theory (Vermeer, 1978) but has moved beyond it. Translation specifications are elaborated in the ASTM International translation quality assurance standard (ASTM-2575, 2006). ASTM (no expansion) is a large standards body (www.astm.org) accredited by ANSI (the American National Standards Institute: http://www.ansi.org/).

2. Five-part definition

We will propose that context, for the purposes of practical translation in the commercial and government sectors, consists of the following five factors relevant to the understanding of source text and the production of target text: *co-text*, *rel-text*, *chron-text*, *bi-text,* and *non-text*. This definition of context may also be useful in analysing existing translations, but this question is beyond the scope of the present article.

We will begin our analysis by showing that the five-part definition of context can be derived from a general understanding of the notion of context. This derivation will show that our categories are exhaustive.

It is important that our starting-point description of context be as general

and non-controversial as possible (in that way our derivation is not tied to any particular understanding of the concept). One such general description of context is: "The interrelated conditions in which something exists or occurs: environment, setting" (http://www.merriam-webster.com/dictionary/context).

From this description, the following question arises: what specific aspects of context (environment, setting) are most significant for the purposes of translation? The most obvious answer seems to be that one is concerned with those features of context that influence meaning. Professional translators do not limit their contextual focus to the text surrounding a word or phrase. This article will therefore explore other possible aspects of context and demonstrate why there is potentially important information about meaning within each.
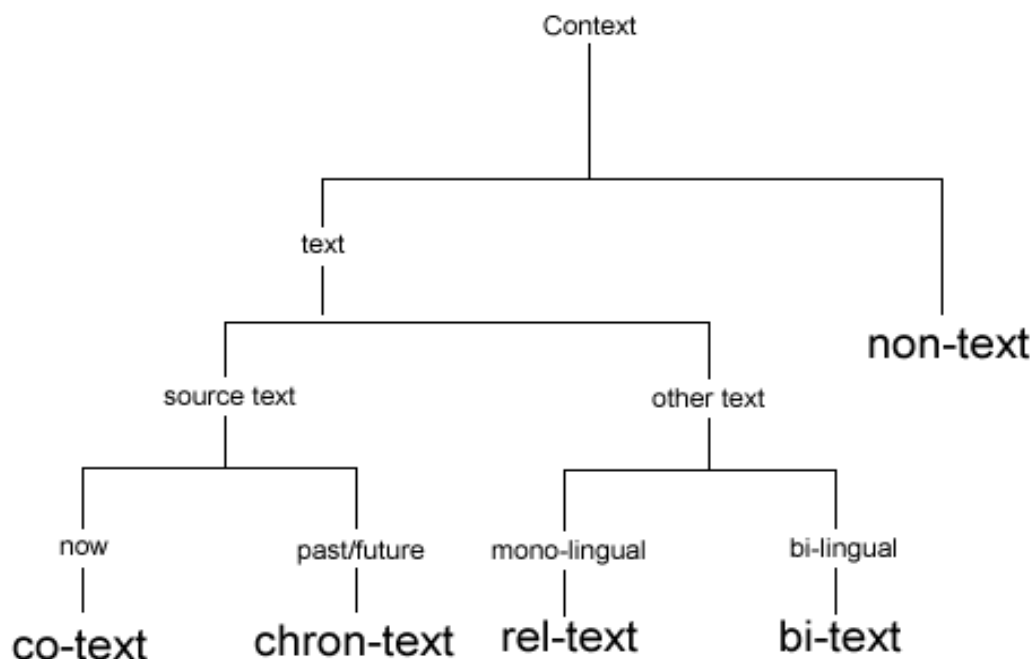
Confidence that the categories below are exhaustive can be achieved by making simple distinctions within the relevant aspects of the context.

The most general distinction to be made is between *text* and *non-text*. When assigning meaning to a source text, one must not limit one's focus to only those aspects of the situation that are linguistic in nature. Many non-linguistic variables can help determine the meaning of source materials, including who wrote the material, what situation that person was in, and surrounding cultural events that may clarify the intentions of the writer. Some might argue that the distinction between text and non-text is faulty, arguing that all aspects of human communication can be reduced to text. However, in this article, the distinction between the "saying" and the "said" proposed by Levinas (1978) is assumed to be valid. Note that the "said" in Levinas can be a written text. See Critchley (2002) and Smith (2005) for discussions of Levinas that include the "saying"/"said" distinction. The "saying", which is an active interaction between humans, cannot be fully represented in the "said", no matter what form it takes. The "saying" remains **non-text**. See the on-line Appendix 3 for an exploration of the "saying"/"said" distinction too detailed to include here.

The category of *text* can then be subdivided into the text at hand (the *source text*) and *other text*. Often translators are only provided with the source text, even when understanding other texts could be essential to providing an acceptable translation. Such other texts could include other works in the same field that explain the meanings of technical terms or could include other works by the same author that help explain how certain passages should be understood.

Within the category of *other text*, one can distinguish between (a) *mono-lingual* documents relevant to understanding the source material and producing the target text and (b) *bi-lingual* documents, e.g. texts and their translations, side by side. Both mono-lingual and bi-lingual resources can be especially relevant to creating translations that are both accurate and consistent with other translations of similar documents. Mono-lingual resources of various kinds will be called **rel-text**, and bilingual texts and information derived from them are dubbed **bi-text**, a term already established in translation practice but used here with a slightly expanded scope. In the five types of context, the suffix 'text' should be considered more as a placeholder for textual relatedness. For example, rel-text may include more than just a text, as in a traditional document.

We now return to the *source text*. The source text, which may be a traditional document or message and menu strings from the user interface of a device, is the most commonly utilized form of context. A phrase is usually understood in light of the text that surrounds it. This surrounding text is often called **co-text**. Within the category of the text at hand, there is a final distinction, contrasting the present version and other versions of the source text. Also important to producing the best translation are earlier and later

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                        Context
                    _____|_____
                   |                 |
                  text            non-text
            _____|_____
           |               |
      source text      other text
       ____|____         ____|____
      |         |       |         |
     now    past/future mono-   bi-
                        lingual  lingual
      |         |       |         |
   co-text  chron-text rel-text bi-text
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versions of the same source-text document. When available, these other versions shed light on how a text reached its current version and, therefore, can elucidate the intended meanings of the text at hand. These other versions can be called **chron-text**.

Figure 1. Derivation of the five aspects of context.

Figure 1 summarizes the results of the above derivation. Every type of context should logically fall into one of these five aspects. Note that the target text is not part of the context of the translation; it *is* the translation and may not yet exist.

3. Discussion of the Five Aspects of Context

Each of these five contrastively derived aspects of context (co-text, chron-text, rel-text, bi-text, and non-text,) has been discussed separately, often without a label or using different terms, somewhere in the literature of translation studies, translation technology, linguistics, pragmatics, or philosophy. However, bringing them together from these diverse areas as one logically comprehensive system is novel.

   Although the discussion is focused on traditional documents (reports, articles, contracts, etc.), the five-way distinction also applies to textual elements of a product, such as software or hardware with a user interface. Instead of only referring to the next and previous sentences in a document, context may include the purpose of a button in a user interface. For example, a button labelled 'start' on a user interface that controls a medical device may cause it to begin scanning a patient, while a 'start' button on a video editing software package may capture the beginning time code of a video segment. Readers not already familiar with localisation, a growing part of the translation industry, may want to consult Dunne (2006) and other chapters in this translator-oriented book on localisation.

3.1. Co-text

The term 'co-text' is sometimes associated with the linguist M.A.K. Halliday, but he attributes its origin to J.C. Catford (Halliday, 2007, p.271; Catford, 1965, pp.30-31).

For our purposes, the co-text of a word or phrase is limited to surrounding text within a particular version of one document but not limited to the current sentence. Definitional text (text within a document that reveals the meaning of a lexical item or a term) will also be considered co-text. For example, a text about the history of shipping might mention the term 'burgoo' and include an informal definition as the food given to sailors, mentioning that it was usually a stew but in some cases was oatmeal porridge.

3.2. Chron-text

Often, in today's business environment, translation projects are launched before the source texts are completely stable. This results in multiple versions of the same document over the life of the translation project. Clearly, changes over time in the source text are relevant to the translation, especially if the translation process begins before final changes are made to a text. The history of a text (back to its origin) and its future (revisions made to the source text after a translation project has begun) can be considered to be part of the context. This aspect of context is called 'chron-text'. Co-text is synchronic while chron-text is diachronic.

Apparently, the first use of the term 'chron-text' (actually, 'chrontext' without the hyphen) was by Gerald Jay Sussman (1975) in his HACKER system. According to Shallice (1988, p.371), chrontext, as used by Sussman, was a component of a computer model of the human mind that kept track of changes in the world. The term is used here to designate a somewhat different concept: the chronological changes in a *source text*, which includes keeping track of different versions of a text and what edits were made at each stage. If a source text is itself a translation, that is, a target text, then the source text from which it was translated would become part of chron-text. For example, if a text from Ghana (in Akan) is translated into English and then from English into Japanese, the Akan text is part of the chron-text of the English source.

3.3. Rel-text

In translation, it is almost always necessary to consult not only the document being translated but also *related* documents and other resources, hence, rel-text.

A monolingual dictionary or terminology, though more structured than plain text, will be considered to be a type of rel-text. A resource, whether it is a typical document or a highly structured monolingual resource, such as a monolingual dictionary in either the source or target language, will be categorised as rel-text.

3.4. Bi-text

So far, context has been restricted to mono-lingual resources, specifically to other parts of the source text, to related resources, and to changes in a source text over time. A fourth type of context has become extremely important to the translation industry: bilingual information, which we will call bi-text. The term bi-text was coined by Harris (1988).

A typical definition of 'bi-text' is as follows:

> A bilingual text which is aligned so that within each bilingual
> chunk the texts are translations of each other. The use of the term
> does not necessarily commit one as to the level at which a text is

chunked and aligned, e.g. into sentences or paragraphs, but the chunks are very often sentences (Essex, 2007).

Bi-text is sometimes derived, after the fact, from source texts and their translations that have already been completed. It can also be created during the translation process when the translator is using software enabled to do so. A segment of text in a document to be translated is looked up in a corpus of bi-texts to see if it has been previously translated in another translation project. However, it is also possible to incrementally use segments of translation later on in the translation of the same text when similar segments occur. In addition, sometimes documents are re-translated, which can result in a comparison of various ways to translate the same document. In all cases, bi-text is a bilingual resource. Translations into multiple languages can always be reduced to multiple bi-texts.

Related to a classic bi-text is translation memory. A translation memory database is a collection of translation units (each unit consisting of a source-language segment, corresponding target-language segment, and associated administrative information) that has been indexed to allow rapid retrieval. A translation memory may include translation units from many bi-texts, and, often, duplicate translation units are eliminated and the original order of the translation units in a bi-text is not retained, making it impossible to reconstruct the original bi-texts from which it was derived.

Bi-texts, bilingual corpora, and translation memories are treated extensively in such works as Bowker (2002), Somers (2003), Quah (2006), and L'Homme (2008). A discussion of translation and text can be found in Bowker (2006).

Bilingual glossaries and term-bases fall under the category bi-text in the present framework, since they are often partially derived from texts and their translations. Today, many dictionaries and terminology databases are almost entirely derived from machine-readable text, and we expect this trend to continue. Some have even speculated that bi-text corpora will replace terminology databases in most cases. Although we do not see an end to the need for the documentation and standardisation that are part of the traditions of lexicography and terminology work, it is clear that the boundary between carefully cleaned-up bi-texts and terminology databases is becoming less clear as translation software advances. Therefore, we have not defined a separate category for bilingual dictionaries and terminology databases. Instead, we have expanded the scope of the term bi-text for the purpose of discussing context.

3.5. Non-text

Often, the real-world setting of a document is relevant to its translation. We are using 'real-world' in a general-language sense and not as an implicit claim that there is one, stable semantic system built into the structure of the universe and waiting to be discovered. We are simply claiming that physical objects and events have a cultural and linguistic significance. For example, a translator will be better able to translate the documentation for a piece of machinery if first given the opportunity to operate that machine or at least see it in operation in person or through video.

There is often much more to the task of translating than simply taking text into account (co-text, rel-text, chron-text, and bi-text).This fifth aspect of context goes beyond text and includes what is sometimes called 'paralinguistic information', such as body language, technical knowledge, and cultural awareness. As mentioned previously, some would argue that there is no need for this fifth aspect of context, since everything that is relevant to translation can supposedly be reduced to text. Perhaps this is true

about body language, since there are terms for various types of body language such as smile, frown, and shrug; however, we claim, along with Levinas, that there is much of relevance to human communication in general and multilingual communication in particular that cannot be reduced to text without some loss.

For the purposes of practical translation, non-text can be thought of as those aspects of context that are not accessed through written texts during a translation project but that are nonetheless relevant to the work of a translator. They might include technical knowledge about the subject matter of the source text, general knowledge about the cultures to which the source and target texts are addressed, and a dynamic mental model of the interaction between the author of the source text and particular readers of the source text or between the translator and the reader of the translation.

If a particular piece of information needed by a translator is reduced to writing, it becomes rel-text. This demonstrates the fluid boundary between rel-text and non-text.

4. Access to Context

Having described the five aspects of context in the system of this article and found that they were both theoretically predicted and historically grounded, we will now further test their validity by looking for real-world examples of how a translation project has gone wrong because one or more of these five aspects was neglected.

The following illustrations of the need for access to context were all obtained from professional translators, sometimes on condition that their name not be revealed, since the problems caused by lack of context could embarrass their employers or clients.

Additional illustrations not included here because of length limitations are found in Appendix 1.

4.1. Co-text
Consider the following message found in a high-profile software application:

"Please restart before continue."

This defective message was automatically put together from small chunks, illustrating the need for consideration of co-text, starting with authoring. This is not a case of machine translation. The material sent to the translator asked for a generic translation of a verb without providing its syntactic context, as illustrated by co-text. This put the translator in an impossible position. It is a fundamental example of the need for context. A translator, no matter how experienced and skilled, cannot always translate a word in isolation. Obviously, the source text for the following target text unit should have been considered as a single unit of text to be translated, instead of a verb and other individual words, each without co-text:

"Please restart before continuing."

Lack of co-text hinders the work of many translators, not just those involved in localising software messages. There is a practice that may be considered to be a trend or an old practice using new technology: This practice is to give a translator only the segments of a translation that have changed in a new version of a text. At first glance, this may be seen as a move toward efficiency. In the case where the translator has been involved in the

translation of the previous version of the text, it may be efficient to transmit only changed segments. However, consider the case where the translator does not have access to the previous version of the entire text and its translation. It may be impossible to properly translate a dozen scattered segments out of a thousand segments with no access to the preceding and following segments of source text and their translations or to the previous version of the segments that changed. Attempting to translate a few non-contiguous changed segments without any contextual resources involves a lack of three types of context: co-text (surrounding sentences), chron-text (the previous version of the text), and bi-text (the previous version of the text segmented and aligned with its translation).

For example, consider the following sentence, taken out of context: "With a large number of readers and relatively few writers, there is the possibility of writer starvation." Without some sufficient co-text, one might think it is talking about human readers and writers, when in fact it is talking about components of a computer software system (IBM, 2008).

See on-line Appendix 1 for further examples of problems caused by lack of co-text.

4.2. Chron-text

An example of the consequences of the lack of attention to chron-text is demonstrated in a request for a French version of the user guide for a product. The English source text provided to the translator was in awkward English. The translator began making inquiries to the client about particular aspects of the English text. Each inquiry was answered, but only after a delay of several days. Finally, the client informed the translator that further research into the origin of the English manual (part of what we are calling chron-text) revealed that it was actually a translation. Eventually, it came to light that the ultimate chron-text was a French document! That is, an English translation of a French document was being unnecessarily translated back into French. The client was an American reseller of a product that had originally been developed in Paris.

Further discussion of chron-text is found in on-line Appendix 1.

4.3. Rel-text

A translator must be able to quickly get up-to-date on the terms and concepts of a particular product, service, or subject area. Today, the best known mechanism for accessing rel-text is an internet search engine such as Google. Of course, a general-purpose search engine often provides an excess of documents, many of which are not related to the document being translated and are thus not truly rel-text, and the most important rel-texts may not be visible to Google. The requester of translation should supply rel-text, especially if related documents are not available to the general public. However, the burden of finding rel-text typically falls on the translator, even when the requester is in a much better position to provide it.

In technical translation, not only is there sometimes a lack of co-text for strings that are presented to translators, there is often a lack of rel-text in the form of explanatory material. Consider the following actual sentence presented to a translator:

"The transaction isolation level must be dirty read for local databases" (http://svn2.assembla.com/svn/Brimarex_Soft/Amx2/Brimarex.drc).

Understanding this message sufficiently well to translate it appropriately requires more than seeing where the message appears on a screen. It also requires background documents (rel-text) about the particular database in

question and a substantial prior understanding (non-text) of information technology. For example, "dirty" in this context means that a change has been made to a row of information in a database but that change has not yet been committed (i.e. it is not yet final).

Even with understanding of the source string, there is a need for a terminology database (or at least a project-specific glossary) in order to be sure to use the agreed-upon target-language terms for source-language terms such as "dirty read" and "transaction isolation level".

Translators involved in software localisation encounter such issues on a regular basis. However, the need for rel-text is not limited to software. A draft Spanish translation of a brochure was sent to another translator for revision. It was noticed that the English source-text of the brochure included terms from the English version of a European standard (EN-15038, 2006), but the translator did not have access to a crucial rel-text: the official Spanish version of the EN 15038. For more information about translation standards, see StandardsBrochure (2008). The reviser obtained a copy of the standard and made the terminology in the brochure consistent with it. However, the rel-text should have been available to the translator in order to reduce the amount of revision needed.

Further discussion of rel-text is found in on-line Appendix 1.

4.4. Bi-text

Bi-text, including translation memory, has become a crucial aspect of context provided to a translator and the basis for the current wave in machine translation (data-driven approaches). The growing importance of bi-text has raised copyright issues as more people look for ways to create large collections of bi-text data and share them. An unresolved issue with bi-texts and their derivatives is the use of copyrighted material. A detailed discussion of this issue is beyond the scope of this article; however, additional information is available through the International Federation of Translators (FIT, 2007). One approach is to license copyrighted material. This approach is used by the Translation Automation User Society (TAUS 2008). Another approach, used by the Translation Memory Marketplace, is to convert a bi-text to short segment pairs from which the original text cannot be reconstructed (TMmarket, 2008). A discussion of the issues related to translation memory is found in Gow (2007).

Setting aside the question of the legal status of a translation memory, translating a slight revision of a previously translated text without using translation memory software would today be so expensive as to be impractical. The consequences of not giving a translator access to information derived from bi-texts are well understood. However, the need for maintenance of translation memory databases is less understood or at least more frequently neglected. In publishing, the problem of making textual corrections (as opposed to layout decisions) to a document during final desktop publishing, without going back to the master copy of the document, is well known. A later version of the document that starts with the master copy (which was not kept up to date) will contain the same errors that were corrected during layout of the earlier version. A similar problem exists with translation memory databases. Corrections to a translation made after the preliminary translation is added to the translation memory database must also be made to the database or errors will be repeated when the translation memory is applied to a new source text. Thus, the existence of bi-text resources is not sufficient. They must be properly maintained in order to be maximally useful.

Further discussion of bi-text is found in on-line Appendix 1.

4.5. Non-text

Going beyond real-world knowledge about objects and events, non-text includes intent. What are the intended audience(s) and purpose(s) of the source text? Are the intended audience(s) and purpose(s) of the translation the same? What real-world knowledge is needed by the translator in order to properly interpret the source text and create an appropriate target text? Audience and purpose are part of what is sometimes called a translation brief and more recently called translation specifications. Translation specifications formalize some but not all non-text needed for a translation project.

As previously discussed, not all non-text can be expressed as text. In addition, much non-text that is needed for translation and could be expressed in text is not supplied with a source text. The ability to use non-text knowledge and detect the need to do research on particular points in a source text is part of what distinguishes professional human translators from machine translation systems. This point deserves some elaboration.

The first example of the need for non-text is the term *white elephant*. In American culture, a white elephant is typically an object lying around the house that supposedly has value but is actually useless. In a civic context, a white-elephant project is one that is expensive but does not live up to its expected usefulness.

An example of a white elephant in Canada is the Olympic stadium constructed in Montreal for the 1976 games. The official description (Quebec, 2010) is positive, but apparently, the original design did not take into account the probability of snow, which made the retractable roof unusable, and the project went far over budget. Today, a Canadian-French document is likely to use '*stade olympique*' (Olympic stadium) for the notion 'white elephant' when describing a project that has cost much more than budgeted, and a translator who was a small child during the 1976 Olympics must understand both the idiomatic meaning of white elephant and the Montreal cultural reference in order to appropriately translate some instances of *stade olympique*.

Translators must fully understand the source text to avoid such errors. This involves imagining the interaction between the author of the source text and the intended audience, then imagining the reaction of the intended audience of the translation.

It will seldom be the case that all needed context will be supplied to a translator. A computer can always make a choice between explicit alternatives presented to it. Sometimes that choice will be good, sometimes bad, but it will be based on mechanical analysis of text, not on an understanding of the text. An ability that is lacking in computers and present in human intelligence is the ability to decide when the answer is 'none of the above.' This 'none-of-the-above' detection ability is not well understood but probably draws on all aspects of context, including non-text.

The ability of humans to integrate non-text with various kinds of text is not currently found in computers. For example, they cannot adapt to various project specifications. This may partially explain the limitations of machine translation.

Further discussion of the importance of non-text to translation is found in on-line Appendix 1, and the philosophical and linguistic underpinnings related to non-text and context in general are explored on-line in Appendix 2 and Appendix 3. Appendix 3 also includes some examples of the relevance of the *saying*, which is part of non-text, to translation.

5. Teamwork

Given the framework of this article (a five-part definition of translation) and the fact that translators are sometimes not given access to sufficient context, how can everyone involved in the multilingual document production chain work together to avoid asking translators to translate without sufficient context?

Here are some suggestions:

1. Translators should carefully assemble the needed types of context for a given project and ask for additional resources that are only available through the client. Human translators who understand source texts in their full context need not be afraid of machine translation. Rather, they should be happy that machine translation can take care of some tedious and boring work while they apply their minds to work that cannot be done properly by a computer.

2. Clients and project managers need to be aware of the need for context and ask themselves how they can provide it and pass it along with the source text all the way through the translation supply chain; if the translation provider asks for more context that they do not have access to, this should be viewed as an indication of a diligent translator or translation project manager, not an incompetent or inexperienced one.

3. Everyone involved in creating translation memories needs to seriously consider the question of size vs. focus, which provides an increasingly important type of context. It is often assumed that a bigger bi-text corpus is always a better (more useful) corpus. However, it may be the case that a large bi-text corpus that does not focus on the same subject field as the source text may be less helpful than a smaller, better-maintained, focused corpus. The focus is non-text that assists in interpreting a particular segment of text.

4. Translation tool vendors need to (a) avoid or at least warn users about selecting options that produce data files for translators that expect translation without providing context that could have been made available to the translator and (b) develop and publicise tools for measuring and correcting inconsistencies in translation memories and bi-text corpora.

5. Project managers and portfolio managers should conduct and publish cost-benefit analyses of (a) providing more context to translators to improve Quality Assurance (QA) vs. (b) providing less context and (presumably) increasing the need for Quality Control (QC) to correct context-deficit-based errors. Context management could be added to the job description of a project manager or could even become the primary focus of a member of a team of project managers.

6. Those who initiate the creation of texts in the first place could look at authoring as a component of multilingual document production rather than assuming it to be an isolated task. Glossaries used during authoring to facilitate consistent use of terminology should be coordinated with bilingual term-bases used during translation, and translators should have access to authors when clarifications of the source text are needed.

7. Those considering the use of machine translation should evaluate the types of context needed to produce an acceptable translation of the

source texts in question. Computers are incapable of taking into account non-text. When texts are tightly restricted to a narrow domain and are highly uncreative, all the context that is needed may be present in the source text, monolingual dictionaries, and processed bi-texts. When understanding of the source text and adherence to a variety of specifications is required, it is probably better to ask a human to produce the initial draft translation rather than post-edit a raw machine translation.

8. Translation Studies scholars might consider doing research in the area of translation errors (by machine translation systems and by humans) using the framework of this article to categorize errors that context-based, as opposed to errors that have nothing to do with context. Such studies may provide evidence for relative importance of the five types of context, at least for a particular set of project specifications.

6. Conclusion

It is hoped that this article will result in an increased recognition of the importance of context in translation and contribute toward greater understanding of the various types of context that may be necessary for desired results. This greater understanding can then encourage both those who request translations and those who provide them to ensure that all aspects of needed context are available. It is further hoped that the five-part definition of context presented here will facilitate communication about context, both available and missing, as all stakeholders work together toward increased accuracy and efficiency in translation.

Translation teachers can also contribute to a long-term solution by providing needed context to translation students, categorized as co-text, rel-text, chron-text, and bi-text, while pointing out the relevance of non-text to particular translation problems.

Perhaps the five-part definition will even contribute to the analysis of context-deficiency errors in translations.

Acknowledgments

Appendices

Length limitations do not allow the inclusion of the appendices in the article itself. The three appendices are available on-line at http://www.ttt.org/context (Melby-Foster-Appendices-context 2010).

Appendix 1: More Examples of the Need for Context in Practical Translation

Appendix 2: Context in Generative Grammar and in Philosophy

Appendix 3: Three Distinctions: General/Domain; Dynamic/Frozen; and Saying/Said

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