Why use CAT tools?

An introduction to
Computer-Assisted Translation
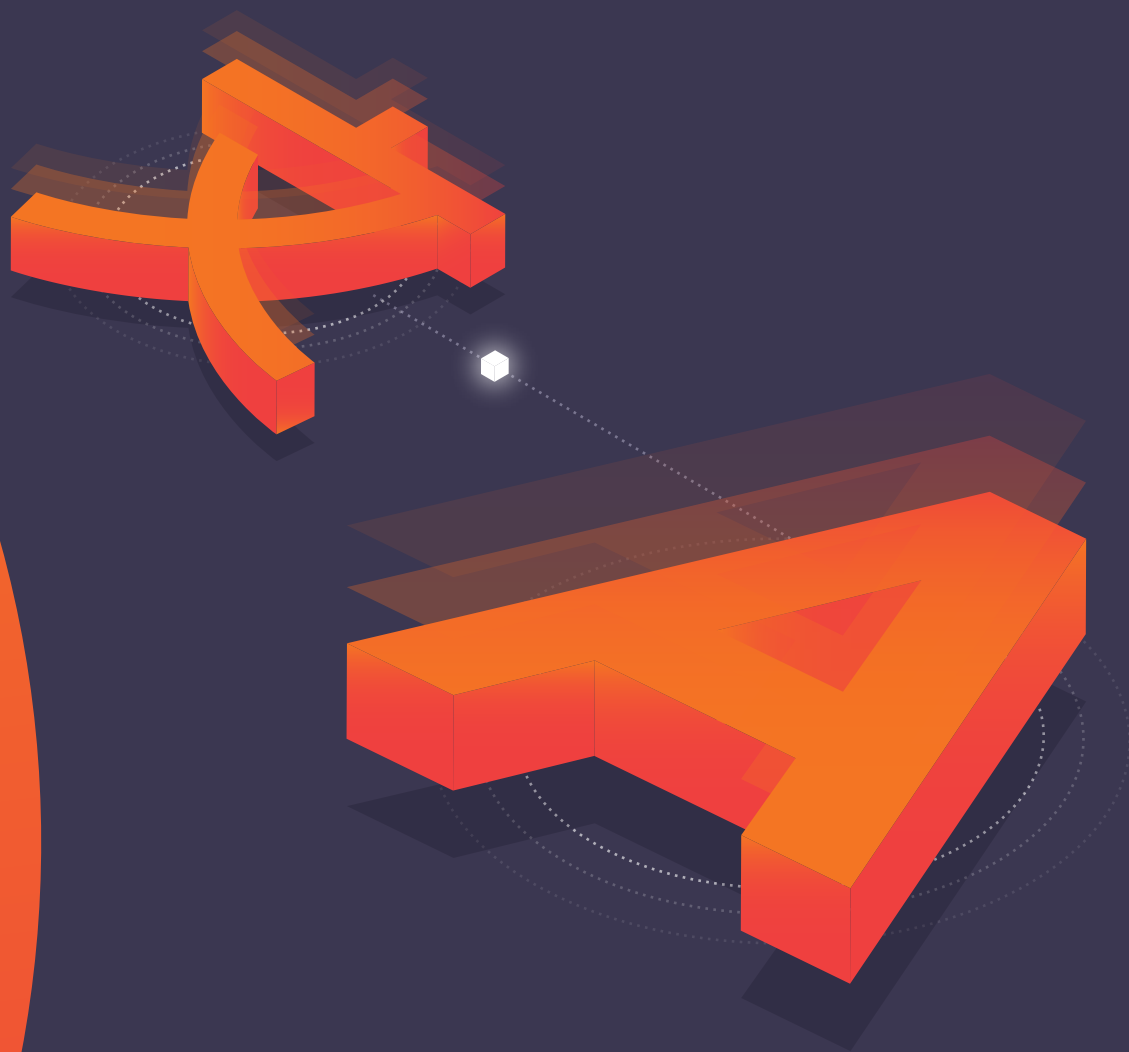
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Introduction

This eBook was written for translators and translation students who are newcomers to translation technology and are wondering what exactly a CAT tool does and how it can benefit them. Investing in translation technology should change your approach to work. If you are considering to purchase a CAT tool, you need to think of it as one of the most important assets to do your job as a translator.

In a nutshell, the purpose of a CAT tool is simply to increase the productivity of the translator. It helps translators do more translation work while at the same time improve in terms of consistency and quality.

However, getting started with a CAT tool means you will need a little bit of practice. Another goal of this eBook is to shorten the learning curve and familiarize yourself with basic expressions. It starts by explaining the concept of CAT tools and how it differs from machine translation (also known as MT or automatic translation). It then outlines the main benefits of using a CAT tool and shows you how it can improve your work as a translator.

What is a CAT tool?

CAT IS AN ACRONYM FOR COMPUTER-ASSISTED TRANSLATION. SOME PEOPLE ALSO CALL IT COMPUTER-AIDED TRANSLATION.

As the title suggests it is a computer software program that helps human translators carry out their translation work. There are various other acronyms and phrases used to describe these tools. They are sometimes called "translation memory tools" or just "translation technology". One of the better acronyms came from Jost Zetzsche, a translator, consultant, and publisher of a popular newsletter on translation technology[1]. Jost calls this type of software a TEnT, which stands for Translation Environment Tool.

[1] Jost Zetzsche newsletter: www.internationalwriters.com/toolkit/

The important thing to remember is that CAT tools help translators do their work. The main features of a CAT tool usually include the following:

- An **INTEGRATED SOFTWARE ENVIRONMENT** where a translator has most of what they need to do their translation work.
- A **TRANSLATION MEMORY** – A database for sentence pairs (source and target sentences belonging together). The translation memory makes possible to reuse of human-made translations and handle repeated phrases and sentences throughout a project with ease.
- A **TERM BASE** – A database containing terms. Term bases are usually related to specific subjects, products, customers or even users. A CAT tool should have the ability to store terminology or connect to an external terminology database. This terminology should be presented to you when you translate.
- A **QUALITY CONTROL MODULE** – Translation quality control is a process that checks for machine-detectable errors in a translation document. Most CAT tools have functionality for a quality check of the translation.
- A **PREVIEW PANE** to check work during translate.
- **SPELL CHECKING**

What is the difference between CAT tools and machine translation?

Machine translation is the translation of text by a computer, with no human involvement. It is also referred to as automatic translation or instant translation. There are different types of machine translation engines: rule-based, statistical and neural.

Until very recently, statistical engines where the most popular in the market. This system works using large databases of text pairs. When you submit text into the engine, it uses statistical modeling to produce target text where there is a high probability that this is the translation of a text you submitted - the source text.

Neural machine translation is a new approach that makes machines learn to translate through one large neural network. Recently, there has been a lot of interest in neural machine translation engines. The reason for the excitement is that neural machine translation is providing better results with language pairs where there is fewer data and the output is more readable.

Google Translate is the world's most popular machine translation engine. It is the best example of a machine translation engine that started using statistical modeling and then moved on to a neural approach.

Still, what makes machine translation different from CAT tools?

The main difference between CAT tools and machine translation is one involves humans while the other does not. Even if machine translation engines have become sophisticated, they are not yet capable of understanding the context in which words are said or written. Context constitutes an intangible asset crucial to understanding meaning. That is why the translations you get from the machine translation engine might be literally correct, but the tone, wording or register can be incorrect.

Whit a professional human translator you can have confidence that they are capable of understanding context. With text translated by machine translation engines like Google Translate, you can only be confident that you have a gist of the translation. However, some companies offer services that use customized and 'trained' machine translation engines followed by a human editing of the text.

Technical benefits of using CAT tools

In short words, a CAT tool helps translators do their job faster and better. The following section explains some functionality that benefits translators using a CAT tool:

- **THE TRANSLATION ENVIRONMENT**

- **TRANSLATION MEMORY**

- **ALIGNING EXISTING TRANSLATIONS**

- **USING CONSISTENT TERMINOLOGY**

- **QUALITY CHECKS**

- **PROJECT UPDATES**

- **WORKING WITH OTHERS**

The translation environment

One of the major advantages of using a CAT tool is that the environment is designed with translation in mind. A well-designed CAT tool will also make it easier for you to access all the functionality you need in order to improve your productivity and the quality of your work.

The translation environment

The screenshot above shows the interface a translator would use. It is made up of four areas:

- A **RIBBON**: just like Microsoft Word, CAT tools like memoQ have a top ribbon where you will find commands. memoQ's ribbon was carefully designed to follow the typical workflow of a translator.

- The **TRANSLATION GRID**: This is where translators translate. The left column is for a document's source language and the right one is for the translation.

- The **TRANSLATION RESULTS TABLE**: As you translate, CAT tools will assist your work in the background. In this table, you can find translation suggestions coming from different databases: translation memories, term bases, alignments of previously translated documents, etc.

- A **PREVIEW PANE**, where you can visualize how your translation will look like after translation.
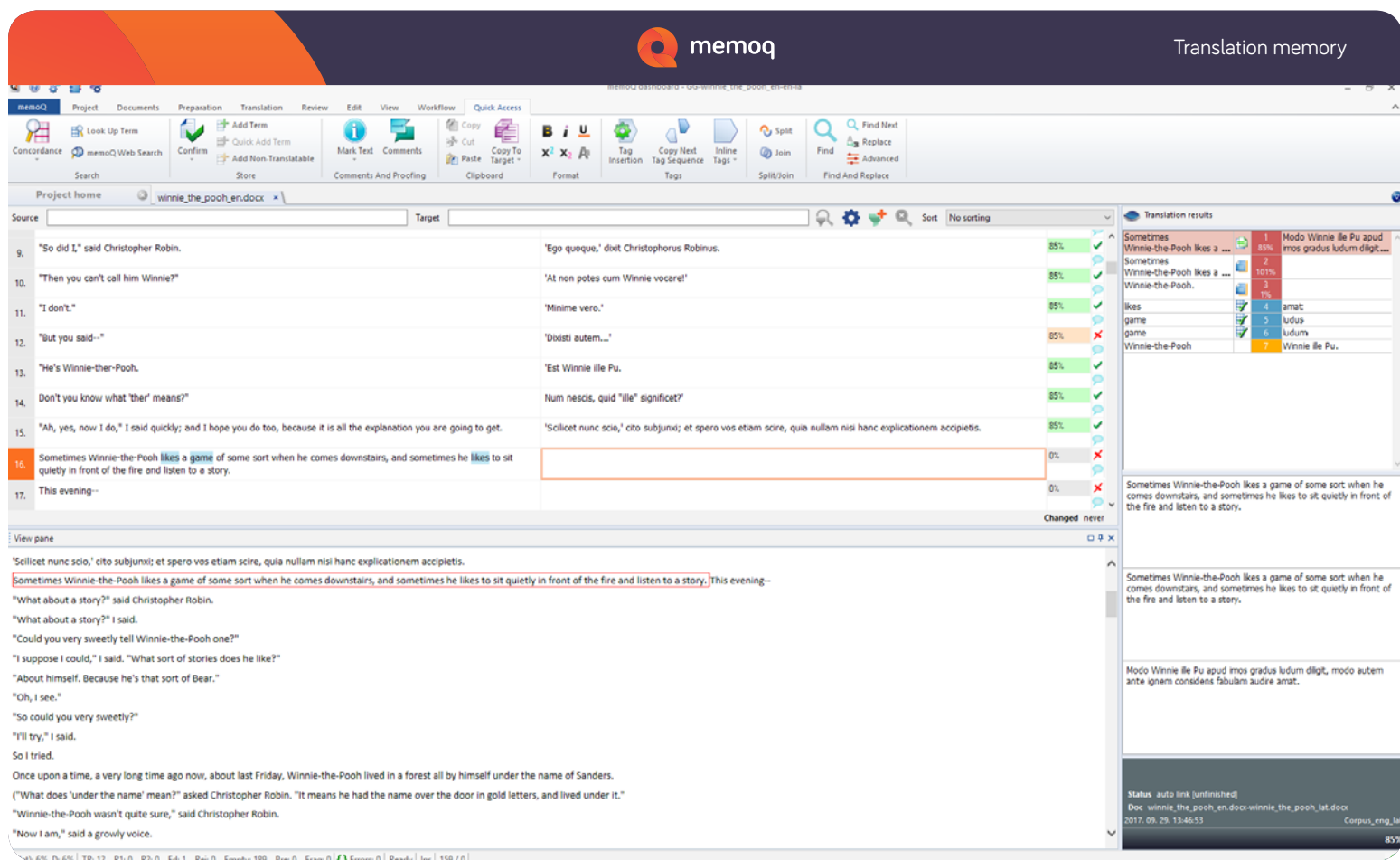
Translation memory

A database for sentence pairs (source and target sentences belonging together). The translation memory makes possible to reuse of human-made translations and handle repeated phrases and sentences throughout a project with ease.

Translation memory

When you import a document for translation, the CAT tool will automatically divide the document into segments. Segments can often correspond to a sentence, but not necessarily, a segment could also consist of a two-word heading, for example. The user will translate the document segment by segment in the translation grid.

The translation memory (TM) is a collection of source and target segment pairs from previous translation work. You can choose to use one or multiple translation memories per translation project. When you start to translate, the CAT tool will show in the translation results pane segments from these databases which are similar to the segment being translated, these are called matches.

CAT tools are also capable of stating how closely the suggestion from the translation memory matches the segment being translated. Different CAT tools can have different ways to show leverage:

- 100% match when the segments are the same.
- 101% match or context match when the segments are the same as well as the context of the segment.
- Repetitions are when a segment is repeated again in the document.
- Fuzzy matching is when the matches are not exact. The degree of the fuzzy match will indicate how closely the segments are matched.

As well as presenting you with a segment which matches the one being translated, the CAT tool can also give a match for a part of the segment, which is then called a concordance match.

Building up your translation memory

As you work, you will add new segments to the translation memory to leverage these translations in the future. Once you have completed the translation of a segment, you will save the source and target segment as a segment pair to the translation memory.

memoQ will also outline what the difference between the match and the segment is. The following is a list of some of the differences which memoQ can spot:

- The current source segment has fewer or more space characters than the TM entry
- Different punctuation
- Uppercase/lower case is different
- Bold/italics/underline formatting is different
- Tags are different
- Numbers and elements are different

To learn more about the translation memory in memoQ, see this page.
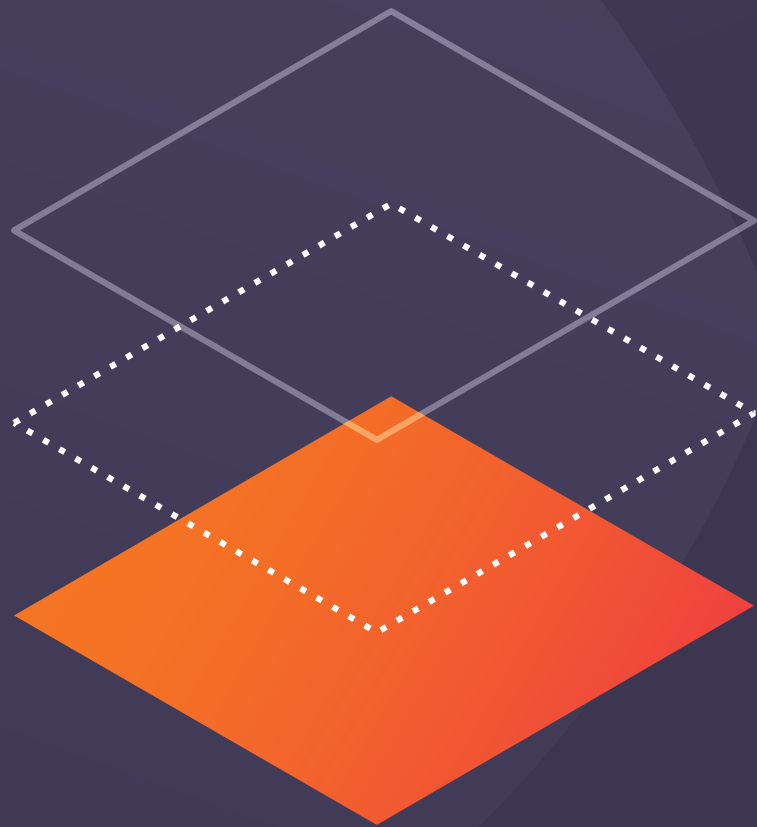
Aligning existing translations

You may have already translated many documents before you start to use a CAT tool. memoQ is the only CAT tool that offers the possibility to leverage previously translated material directly and without much work involved. It has the ability to align two documents (the source document and the translation), where it tries to connect so that every sentence in your source document to the equivalent in the target one.
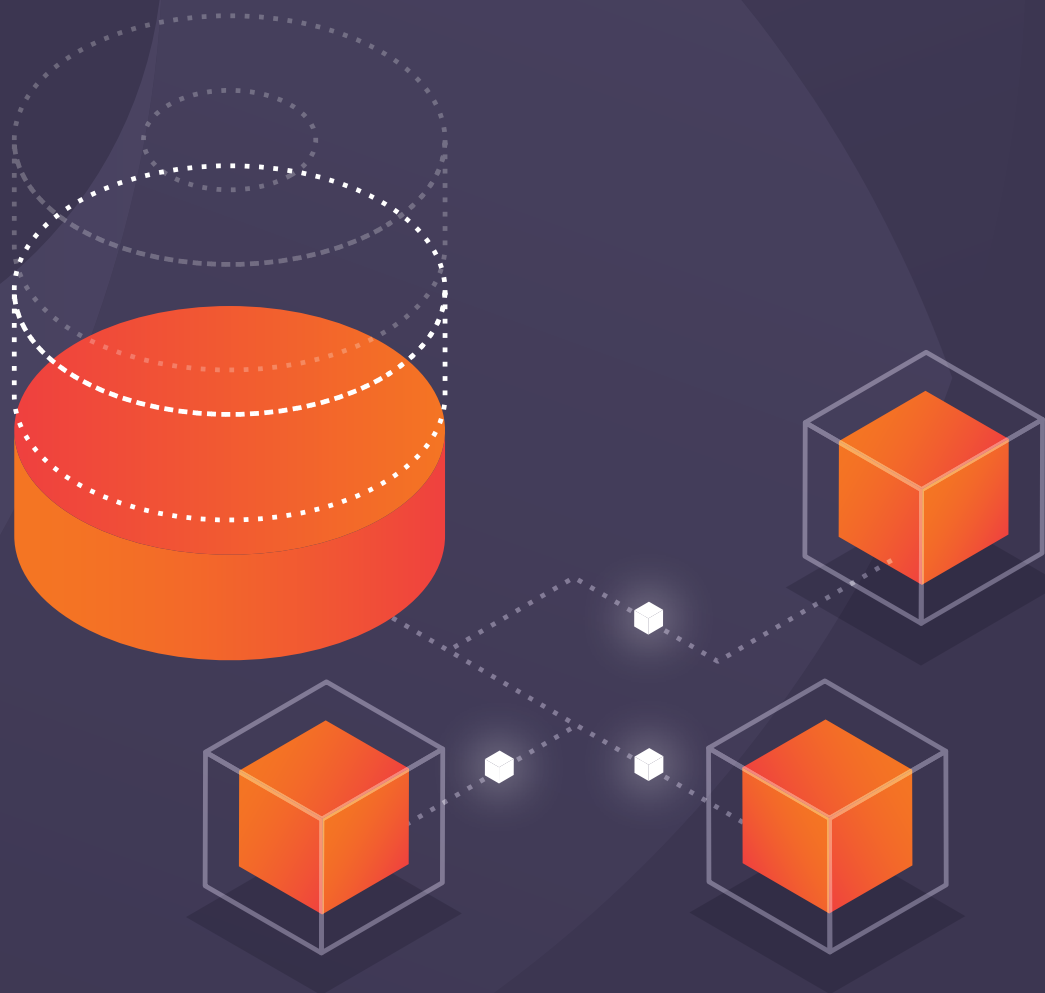
Aligning existing translations

During translation, memoQ will offer you suggestions coming from this alignment. You can even use these matches to pre-translate your file.
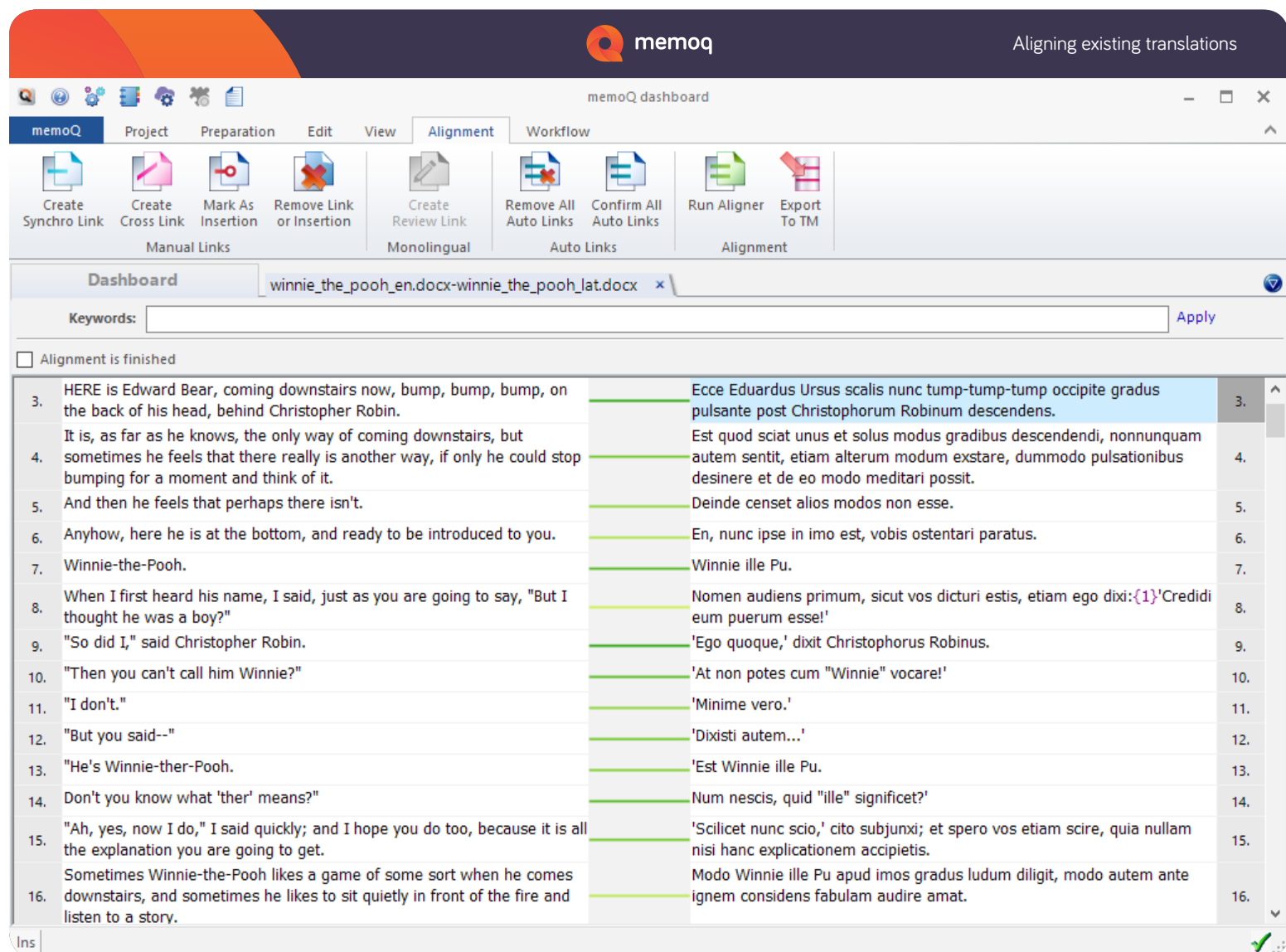
This screenshot shows a previous document aligned with the translated document in memoQ's LiveDocs.

To learn more about aligning documents in memoQ, see this page.

Using consistent terminology

Consistency and accuracy in terminology are within the most critical elements in translation projects. CAT tools usually have inbuilt terminology modules or can integrate with external terminology databases. Some, like memoQ, can do both.

Using consistent terminology

The terminology module of a CAT tool consists of database (a term base) where you store the terms that are important for your translation work. Terms in a term base are often bilingual and sometimes even multilingual. You can store information such a term description, explanation of the term usage or other grammar related information.

You can also select the preferred term base you want to work with and even mark terms as forbidden (which means they should not be used).

memoQ dialog for entering a new term

During translation, terms from your term base/s are marked in blue in the translation grid, and shown with their translation in the results list.
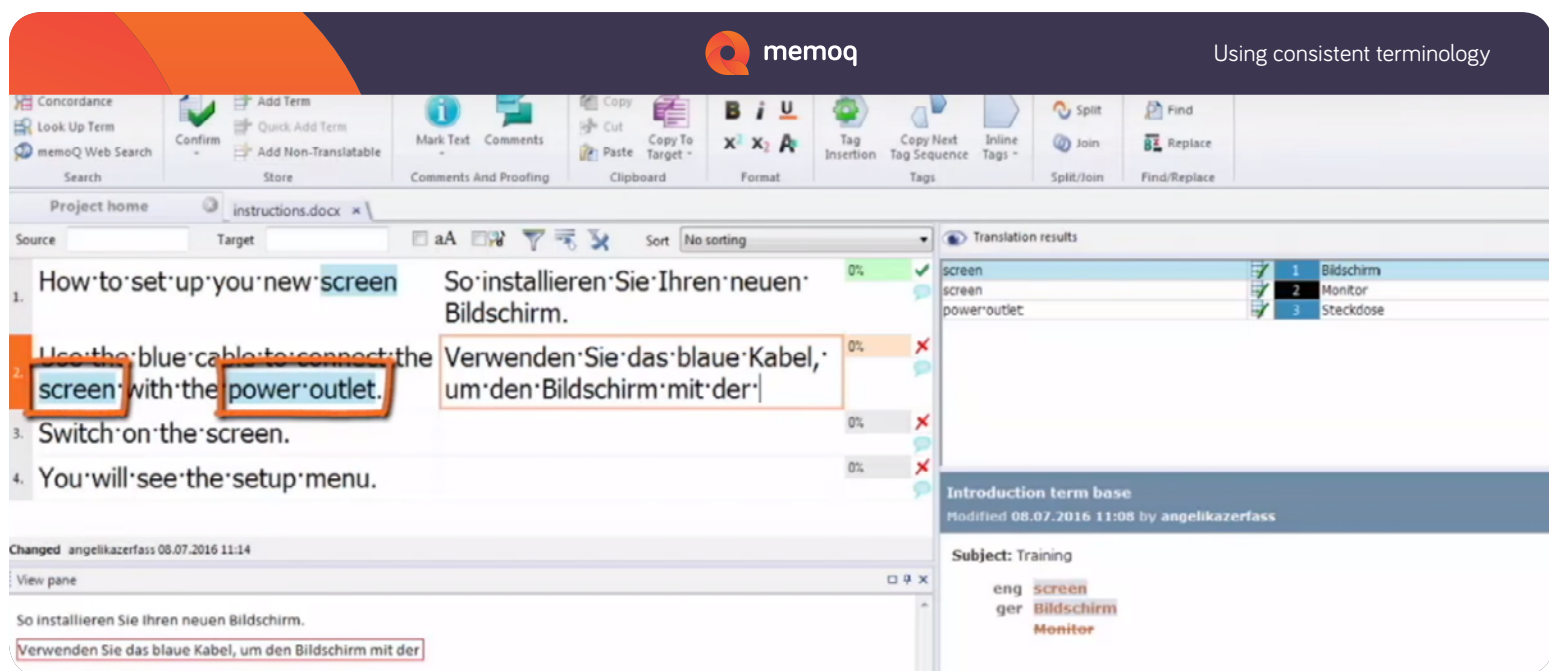
To learn more about terminology in memoQ, see the following page.

Quality Checks

One of the huge benefits of using a CAT tool is the automated quality checks that the tool can perform.

Quality Checks

Usually, CAT tools include the following series of automated checks:

- Spelling
- Punctuation
- Placeholders for images, formatting information or references
- Number value and number format checking
- Empty segments/missing translations
- If a forbidden term is used
- Consistency check (same translation for the same source segment)
- Length of translated text

The quality control settings in CAT tools like memoQ can be customized. To learn more about QA in memoQ, see the following page.

Project updates

A common problem for translators is when their customer comes to them with an update midway through the project. If you are not using a CAT tool you have a lot of work on your hands updating your existing translation with the new source document. A CAT tool makes this update far easier and the translation memory can be used to populate the updated source text with your existing translations.

Working with others

Another reason why you should start to look at CAT tools is because your customer mentions that it could be easier for everyone if you used such a tool.

Working with others

A CAT tool allows easier transfer of documents, translation memories and terminology. Many translation companies go so far as to insist that freelance translators working with them use a CAT tool.

memoQ has an added advantage here. Using memoQ makes it far easier to work with other memoQ users and it also has the functionality to deal with files from other CAT tools.

You can work with your colleague together on one project, have the latest translations from your colleague, and ensure a peer review.

Other benefits of using a CAT tool

- MANAGING YOUR WORK
- QUOTING JOBS EASILY
- REGULAR UPDATES
- GET MORE JOB OFFERS

Managing your work

Nowadays, most CAT Tools have an opening dashboard where you can see the state of your projects. A dashboard usually has filtering options which allows you to sort projects by name, size, language pair, client, and deadlines. As you become a seasoned translator, the dashboard becomes a critical tool that helps you organize and keep a close eye on current projects.

Quoting jobs easily

The most efficient way to create an offer for your translation work is to use the statistics function in a CAT tool. When a client sends you a project, you will receive the files to be translated plus other resources such as translation memories or term bases.

After importing the files into your project, you can easily run a statistics analysis to see how many words need to be translated. In memoQ, the analysis will show you the following:

- Total number of words/segments to be translated
- The repetition in the text
- The number of matches coming from the translation memory
- The number of segments without matches

You will be paid more for translation done over segments without matches (new translation). You may be paid something for cases when the segments are the same, however, you are not likely to be paid if the segments are the same and so are the previous and subsequent segments (101% matches).

The following picture shows an example of the table memoQ will produce after running the statistic feature over your files:

	memoq			Quoting jobs easily	
Type	Segments	Source words	Source chars	Source tags	Percent
All	15	91	673	0	100
X-translated	0	0	0	0	0
Repetition	0	0	0	0	0
101%	0	0	0	0	0
100%	0	0	0	0	0
95%-99%	0	0	0	0	0
85%-94%	1	13	73	0	14
75%-84%	2	22	155	0	24
50%-74%	9	49	387	0	53
No match	3	7	58	0	7

Regular updates

Translators in University often believe that these years are the only ones when they will be devoting a lot of time to education. However, this is not always the case.

A career in translation means that you will regularly have to update your skills and knowledge. Translators do this by reading books, newsletters, and blogs, by going to conferences and attending webinars, courses, and seminars. Like many professions, translation is advancing and changing. You will have much to learn as you work as a translator. A love of lifelong learning is a great asset for a translator.

Much of the learning translators need to grasp will also come from the fact that CAT tools update frequently. Technology is constantly evolving, and CAT tools are no exception. CAT tools update to become better and many, if not most, of the improvements that take place every time a new version is launched to market, come from ideas recommended by translators. What the translation community suggests becomes a feature that could help you in your future work.

Like other software companies, at memoQ we have a frequent release approach, which means we launch to market 4 new versions of memoQ per year. Every release is carefully planned not to introduce too many changes into the software. Too many new features per version may prove disturbing for the learning cycle of translators. Learning takes time and training, and that is why we support each release with a series of technical videos and webinars that help you master the new functionality introduced.

Get more job offers!

A CAT tool is also a window of opportunity for new job offers, because there are many file formats you simply can't handle without the help from computer-assisted translation tools. Imagine you started to work with a new company and they now request you translate an Adobe FrameMaker file. You will not be able to open such file with a program like Microsoft Word. Instead, CAT tools like memoQ are able to handle numerous file formats such as *.DOCX, *.XLSX, and *.HTML or even more complicated one like *.psd (Photoshop), *.XML-based formats, *.XLIFF or DTP formats, like InDesign and FrameMaker

Language service providers also use translation technology, and they will be most likely to work with you if you have experience with these kind of tools too. Translators that embrace the benefits of technology end up with a competitive advatage over those who do not. If you are still a student at university, becoming an CAT tool champion can be a great help for finding your first job.

How to pick a CAT Tool?

Many translators worry about buying a CAT tool. The best source of information on CAT tools is undoubtedly your fellow translators. They will be sure to give you a lot of good advice on tools they work with and what you should look for in a CAT tool.

Your University is another great source of information. If you studied translation at a University you will be able to get information from a colleague or lecturer. They often have a wealth of practical experience and will be delighted to help you.

The same is true with any translation association you might belong to. Almost every country has a national association of translators and it is well worth getting in touch with them.

Blogs and other sources of information on the internet can also help you decide and highlight more benefits and in some cases also issues, you should look out for.

Try memoQ!

While this eBook is to help you understand why you should use a CAT tool, we naturally hope you decide to start with memoQ or at least explore memoQ by downloading here.

We offer a 45-day trial period that you can use to see if you feel comfortable with our CAT tool. The trial is valid for new customers only and can be later activated if you purchase a full license.

Resources to help you learn more about memoQ

If you would like more information on memoQ here are some places where you could take a look:

MORE INFORMATION about memoQ:
www.memoq.com/en/memoq-translator-pro

GUIDES AND VIDEOS:
www.memoq.com/en/guides-and-videos

WEBINARS:
www.memoq.com/en/webinars

FREE ONLINE TRAINING:
www.memoq.com/learn/training-courses/online-trainings/