



**aia**  
Translations

# Managing Human Translators

Combining Humans and Machines

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## About Us:

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*aiaTranslations LLC is the leading provider of specialized life sciences translation. With a global network of medical linguists, aiaTranslations can provide translations for projects ranging from clinical trials through commercialization and market research.*

As machine translation becomes increasingly effective, many people may question the purpose of human translators. After all, a human translator (or a good one, at any rate), won't simply sit down and translate a text word-for-word or based on an algorithm. Instead, they will consider things like word choice, connotation, the author's intention(s), and the culture of the target language. Additionally, being human, they will have to stop working at some point to rest.

For many clients, even the slightest wait time can cost them business. Budget may also be a concern; the longer a translator has to work, the more they have to be paid. Not so for machines. To many people, the advent of AI like Google Translate, or more technical innovations such as [neural machine translation \(NMT\)](#), means translations can be as rapid and cost-effective as they'd hoped.

Unfortunately for them, the solution isn't that simple. Experts agree that machines will [never](#) be able to fully replace human translators.

Still, the two are often positioned as rivals. In reality, machine and human translators can work together, with efficient, accurate results.



# Translation still depends on humans

Relying entirely on machine translation seems especially [advantageous](#) for clients with a tight budget or who need quick turnover. Machines don't need to take breaks or have a structured workday. This not only "translates" to faster translations, but less paid time.

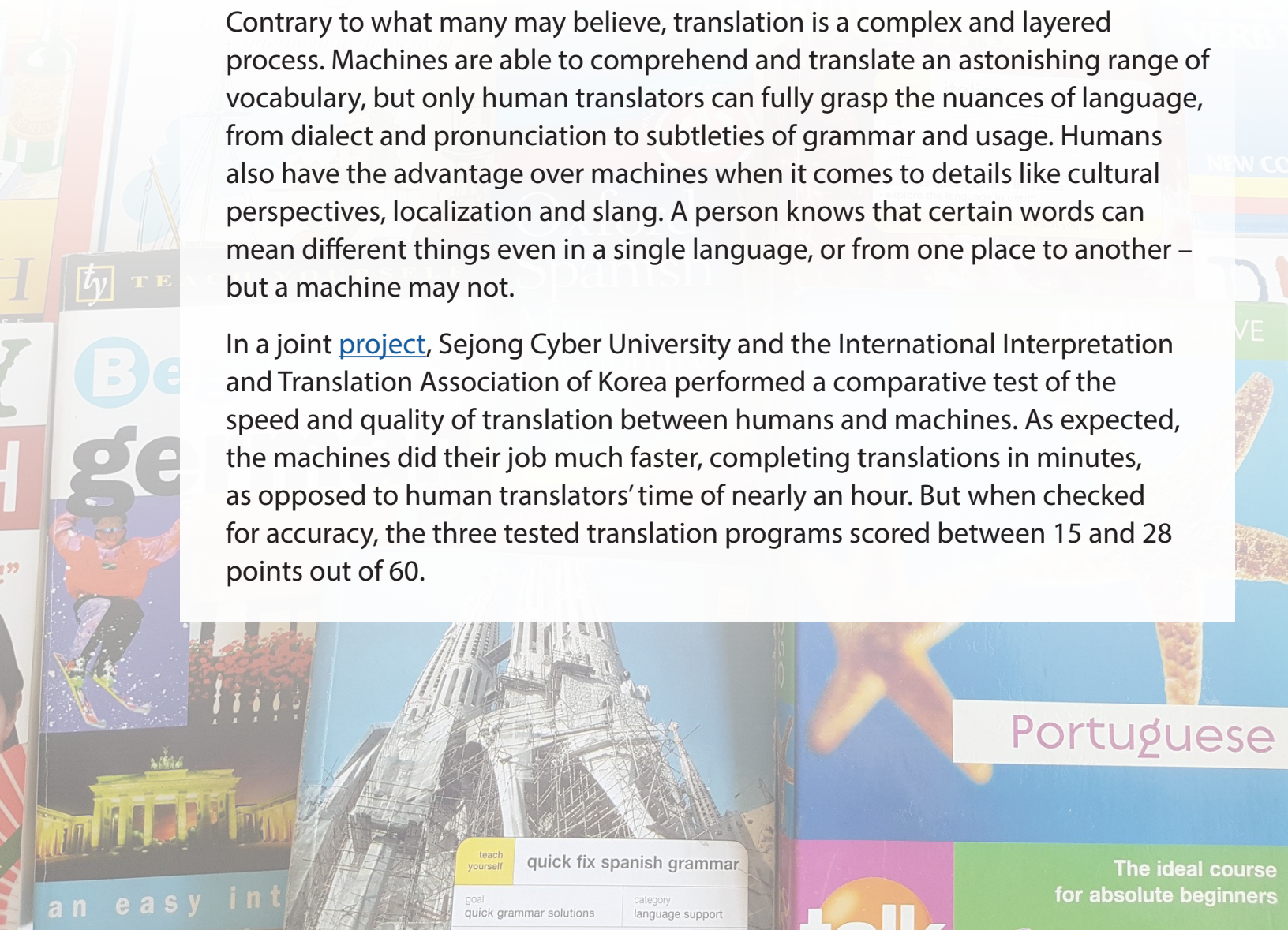
Translation clients have quickly picked up on this. The machine translation market is [worth](#) over \$550.46 million and is expected to grow significantly in the coming years.

But can machines do it all?

Some, like Ofer Shoshan, CEO of One Hour Translation, would say [yes](#). Shoshan claims that his company's translations, which are generated by neural machine technology, have a 90% accuracy rate. On the other hand, Shoshan and other machine translation providers still have to rely on humans to proofread these translations.

Contrary to what many may believe, translation is a complex and layered process. Machines are able to comprehend and translate an astonishing range of vocabulary, but only human translators can fully grasp the nuances of language, from dialect and pronunciation to subtleties of grammar and usage. Humans also have the advantage over machines when it comes to details like cultural perspectives, localization and slang. A person knows that certain words can mean different things even in a single language, or from one place to another – but a machine may not.

In a joint [project](#), Sejong Cyber University and the International Interpretation and Translation Association of Korea performed a comparative test of the speed and quality of translation between humans and machines. As expected, the machines did their job much faster, completing translations in minutes, as opposed to human translators' time of nearly an hour. But when checked for accuracy, the three tested translation programs scored between 15 and 28 points out of 60.





# Human and machine translation and the healthcare/pharma market

Most machine translation relies on algorithms – that is, essentially, using and reusing certain translated words, sentences, or even text passages that correspond to text in an original document. This system can work in some cases, for example with instructions or statistics. This type of translation can be done by a machine in a fraction of time that it would take a human translator.

For instance, life sciences translator “Monika Vytiskova [has written](#) about how documents like notifications of adverse events in clinical trials can be easily translated by machines.

On the other hand, while machine translations can save time with basic translations of materials like patient consent forms and data mining results, Vytiskova points out that human translators will have to stand by to read over and correct the machines’ work. The reason is simple: Analyzing data or adapting content for an audience’s culture isn’t something that can be done by AI. Machines can be programmed for many intellectual pursuits, but they can’t reason.



# The evolving role of translators and machines

Although machine translation may seem like competition, ultimately, it can also help human translators.

This is already the case for the many professional translators who work [with computer-assisted translation \(CAT\) tools](#). CAT tools are things like connected glossaries or software that automatically suggests a term the translator has previously used for the same word.

As technology advances, the role of CAT tools will become even more important. For example, [according to](#) researcher Dr. Donald A. DePalma, automated content enrichment is an evolving development that would link terms to relevant glossaries, and aid with localization by helping translators find content specific to a particular geographic location.

DePalma mentions another way that machines will help translators work in the future: a concept known as Lights Out Project Management. This means that while the humans involved in a translation project have “turned out the lights” and gone home for the day for some much-needed rest, machines can continue to do work that doesn’t have to be supervised, like creating invoices. This will save translators time, which will “translate” to cost effectiveness for clients.



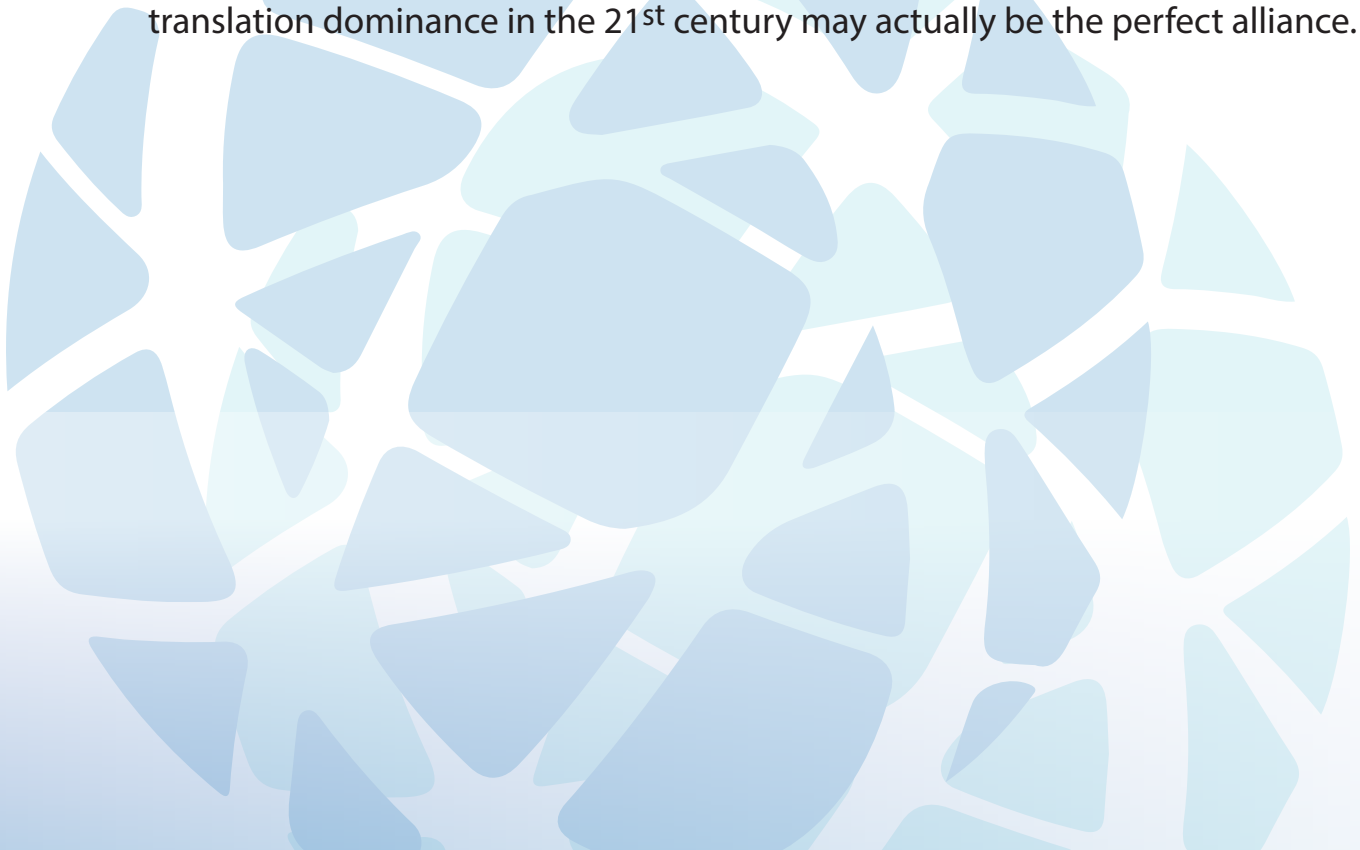
# The future of translation is a partnership between humans and tech

Technology is becoming increasingly prevalent in the translation world. It seems like AI, NMT, and other tech could one day replace human translators. In reality, this is unlikely. Even the most advanced technology remains technology, and won't be able to ever fully understand and translate connotation, regional speech differences, figurative language, humor, and other nuances of language.

With this in mind, human translators will, at the very least, be required to proofread and correct machine translations. But there is more to the evolving relationship between human and AI translators. Technology is also evolving to help translators better do their jobs. CAT tools and other tech provide translators with time-saving resources.

For example, some CAT tools currently are able to remember the way a word or term was translated initially and suggest it whenever it appears in a project's material. Technology is being developed that will help translators find more information about specialized terms and resources for localization purposes as well. Translation-related tech will also be able to automatically complete rote tasks, such as billing, which will save translators time.

Human translators' accuracy and insight will continue to benefit clients and their translations - as will machines' efficiency. What seemed like a battle for translation dominance in the 21<sup>st</sup> century may actually be the perfect alliance.





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