

MACHINE TRANSLATION IN TRANSLATING BUSINESS TEXTS: MYTH VERSUS REALITY

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Abstract: The translation of various types of texts is not a challenge anymore nowadays since the market offers several types of machine translation. But how reliable is it compared to human translation? In the present article we focus on a business article issued by a Romanian financial newspaper and we translate it into English with the help of Google translate, SDL Free Translator and Microsoft Bing. Then we analyze the differences provided by these three tools and observe the advantages and drawbacks of machine translation compared to human translation.

Keywords: translation, economic texts, grammatical aspects, lexical aspects, translator, machine translation engines.

1. Introduction

Translation is not a simple process, although simply put, it is to convey the meaning from ST into TT according to the meaning contained in ST. Theorists defined translation “as a craft consisting in the attempt to replace a written message and/or statement in another language” (Newmark 1988, 7). Ian Catford considers that the process of translation lies “in the replacement of textual material in one language by the same message and/or statement in another language (TT)” (1965, 20). According to Nida and Taber in the *Theory and Practice of Translation*, “translating consists in reproducing in the receptor language the closest natural equivalent of the source-language message, first in terms of meaning and secondly in terms of style” (Nida and Taber 2004, 12).

Translation is in fact a process of rendering message fidelity, through which the translator has to offer the best possible meaning in terms of idea and has to keep the style of the ST. Moreover, he has to respect the fluency of the text and to be a good *connoisseur* of the field he translates in. Nowadays, in the technological era we live, the important part a translator plays is doubled by the growing number of machine translations.

Even in the 21st century when technology is king, it is believed that a good translation can only be achieved by the means of an experienced translator who can accurately render from SL into TT both content and context. The present paper aims thus to tackle economic language and terms, observe the differences between three free machine translation programmes (SDL, Bing and Google), and to see if automatic translation can reach up to the level of the specialized translator, thus annihilating his need.

2. Translation and equivalence

Translation involves certain equivalence, although the concept of equivalence in translation has shifted a lot during past years. Some translation scholars emphasize the linguistic approach to translation, while others would opt for the cultural equivalence.

Vinay and Darbelnet view equivalent-based translation as a procedure which “replicates the same situation as in the original, whilst using completely different wording” (Vinay and Darbelnet 1958, 342). In his study that appeared just one year later, Roman Jakobson introduced a new notion of equivalence. Translation “involves two equivalent messages in two different codes” (2000, 233). This means that the translator’s task becomes to attain equality in messages despite different lexical, grammatical and semantic structures of ST and TT. Although there are many differences in grammar and lexical structures, translation is possible through finding necessary equivalents. Jakobson considers that it is the translator’s task to look for the most suitable terms: “whenever there is deficiency, terminology may be qualified and amplified by loanwords or loan-translations, neologisms or semantic shifts, and finally, by circumlocutions” (ibid, 234).

Nida starts by distinguishing between formal and dynamic equivalence. Formal equivalence consists of a target language item which represents the closest equivalent of the ST. Together with Taber, they conclude that formal equivalents cannot always be found in language pairs, that is why dynamic equivalence is preferred. It is the process through which the translator tries to render the meaning of the ST as to obtain the same impact on the TT audience, even if non-equivalence is used, but the message is preserved. (Nida and Taber 2004, 25).

The notion of equivalence has changed during time. Mona Baker explores it on different levels and applies it to the translation process. She considers that a good translation has to be a combination between linguistic and communicative approaches. That is why she distinguishes equivalence at the level of the word, at the grammatical level, and textual level. The combination of these levels is crucial in the translation process, as it is the key to a qualified translation. Christiane Nord sees translation as a “purposeful activity” (1997). This means that translation is not just an activity *per se*, but it is a communicative action carried out by the translator who is seen as an expert who plays the role of a text producer. The final goal of the translation is to produce clear “communication through a medium and situations that are limited in time and place. Each specific situation (including the interacting parties) determines what and how people communicate, and it is changed if people who communicate change. Situations are not universal, but embedded in a cultural habitat, which in turn conditions the situation.” (Nord 2006).

Despite the scientific papers that emphasise the need of the translator that has to combine the grammatical level with the semantic, lexical and not least, the communicative one, the emergence of machine translation seems to contradict the translator’s need. It represents technology’s response to this world where everything happens within seconds’ reach, and apparently, nobody cares about quality. It is a world where quick results are expected.

“The speed at which ‘google translate’ can create the illusion of ‘transfer’ into another language (another world, essentially) creates the false impression that translation is an easy task, available at a click of the mouse. Naturally, every modern ‘gadget’ that provides speedy solutions is welcomed with enthusiasm, especially nowadays that technology has diminished the dimension of time to such a miraculous extent. However, maturity takes time. In translation, as in every kind of writing that requires thought, creativity, inspiration, innovation, versatility, caution and, above all, thorough investigation, ‘sleeping on it’ is often the best strategy, as it may prevent errors that would never have had a chance to be ‘cured’.” (Tagkas 2014, 280)

3. Machine translation

Is machine translation able to render a good quality translation adjusted to the situation of communication? Or, just a correct translation that needs post-editing by the translator? Or maybe, machine translation presents major flaws, and thus, it is totally unreliable.

It has been estimated that 90% of the overall output translation accounts for technical translation (Kingscott 2002, 247) due to the large number of multinational companies and legislative documents. Technical translation has always been considered the ‘ugly small brother’ of literary translation, and has usually been neglected in specialized studies. Nowadays, more and more start discussing about and give it the place it deserves.

This paper presents an economic text (Annex 1) which appeared in a Romanian financial newspaper, which was subsequently translated by three free machine translation engines (Google translate - Annex 2, BING - Annex 3 and SDL - Annex 4) to see if they qualify as good translation (here by good translation we understand a correct and clear translation which faithfully renders the ST message into the TT), or which is the closest to a good translation.

There are some pre-requisites when dealing with an economic text. Taking into consideration the specificity of the language and the terms that are characteristic to the economic language, translation should pay attention to faithfulness and precision. The translator/machine translation needs to use the same term when post-editing the text, and should also stick to the same term, even if it repeats itself. The term should not be embellished, like in literary translations, and repetitions should not be avoided. Increased attention has to be paid when translating economic terms in order to find the most appropriate term. When there is no equivalent, the translator/machine has to be able to find a new equivalence, or to paraphrase with precision the meaning intended to be conveyed. The knowledge and preparation of the translator are another pre-requisite, and the article would like to discover whether machines which are basically programmes, can cope with the lack of knowledge a translator possesses. The communicative aspect is the least important in translating business texts, as being highly specialized, the emphasis is placed on precision, and not on the communicative abilities. This is one of the main reasons for having selected an economic text, because it is less literary and does not need to transmit anything but a precise message: a clear word-for-word translation that might be performed by a programme.

Talking about non-fiction translation, we have to keep in mind that terms have to find equivalence in the TT, while they should also be comprehensible, and the message clear. In the process of analysis, I shall focus on two aspects: grammatical and lexical.

4. Grammatical aspects

Grammatical aspects are to be found in table 1. It presents the translation differences between the three different search engines, as well as some observations that explain the choice of one search engine over the others.

No	Romanian language (ST)	English machine translation (TT)			Observations
		Google Translate	BING	SDL	
1.	veniturile operaționale cu 2,5%, la 2,8 mld. Lei	operating income by 2.5% to 2.8 bln. Lei	operational income by 2.5% at 2.8 mld. Lei	operational revenues with 2,5 %, to 2.8 billion lei	By is the correct preposition used in front of percentage. With is the word by word translation, not suitable here. To is the best version here showing the amount it has reached.
2.	veniturile operaționale	operating income	operational income	operational revenues	Operating income is the correct term. "Operating income is an accounting figure that measures the amount of profit realized from a business's operations, after deducting operating expenses such as cost of goods sold (COGS), wages and depreciation." (Investopedia) The term associated with revenue is again operating, so SDL's version should have been operating revenue.
3.	2015, când s-a înregistrat...	2015 when there was a ...	2015, when there was	2015, when it has been...	The only possible accepted version is there was , as the text was published in 2017, and talking about an action that happened two years before can only accept the past tense, not the present perfect.
4.	(In 2016) am reușit să obținem rezultate bune	we managed to achieve good results	we have managed to achieve good results	we managed to get the best results	The present perfect is again unacceptable, as the article was published in 2017 and it was written from the perspective of a past year.
5	Stocul de credite nete acordate a ajuns la sfârșitul anului	Net credit stock reached late last year...	The stock of net credits granted came at the end of last year...	The stock of net credits granted has reached at the end of last	Google opted to skip the past participle acordate , which the other two engines translated by granted , as it is perceived redundant and one can convey

	trecut...			year...	the meaning of the sentence without having the term written down explicitly. On the other hand, SDL repeats the same grammatical mistake by translating a past action that happened last year by a present perfect.
6	în creștere cu 8,4% față de 2015	increasing by 8.4% compared to 2015	8.4% rise compared to 2015	on the rise by 8.4 percent as compared to 2015	The version of Google is again the best by far, and the other machine translation engines have a difficulty concerning the overall translation of the sentence, ranging from minor to severe mistakes (SDL).

Table 1. Grammatical aspects

5. Lexical aspects

This table presents the lexical aspects that were encountered in these translations. In the last column, you will find some observations concerning the different translation versions.

No	Romanian language (ST)	English machine translation (TT)			Observations
		Google Translate	BING	SDL	
1	în urma preluării Volksbank	following the takeover of Volksbank	following the takeover of Volksbank	as a result of the acquisition of Volksbank	Although the difference between takeover and acquisition is rather imperceptible and the two words can be used interchangeably, Investopedia clarifies the slight boundary: "Typically, <i>takeover</i> suggests that the target company is resisting or opposed to being bought. In contrast, <i>acquisition</i> is frequently used to describe more amicable transactions, or used in conjunction with the word <i>merger</i> , where both companies (usually of roughly equal size) are willing to join together, sometimes to form a third company." (Investopedia) <i>Following</i> and <i>as a result</i> can be used interchangeably.
2	am reușit să obținem rezultate bune	we managed to achieve good results	we have managed to achieve good results	we managed to get the best result	Firstly, to achieve is more suitable than to get, whose meaning is more neutral. Secondly, SDL translated rezultate bune by best results , which is inappropriate as the results of 2016 are not compared with others. Besides, we do not know if they really were the best, thus seriously leading the reader down the wrong path.

3	Chiar dacă avem ținte mari și planuri ambițioase, menținem politica prudentă de creditare	Even if we target large and ambitious plans, we maintain prudent lending policy	Even though we have big targets and ambitious plans, maintain a prudent lending policy	Even if we are the target of the large and ambitious plans to maintain the prudent lending	Google translated the Romanian avem ținte mari (have large targets) by target large , thus modifying the grammatical category of noun into verb, making the translation sound natural. BING opted for the word by word translation, but omitted the subject, which is a serious mistake. SDL on the contrary, has totally mistaken the translation to such an extent that the reader is totally confused without understanding the message or the meaning the text should convey.
4	câștig excepțional	windfall profit	an exceptional gain	an exceptional gain	This time Google opted for a less economic translation, thus the role of the supervisor is essential here. <i>Windfall</i> means "an amount of money that you win or receive from someone unexpectedly" (Cambridge) while <i>profit</i> is the difference between the amount of money earned and spent in producing something. Profit and gain are not interchangeable here. <i>Windfall</i> implies the surprise element, while the remarkable gain was somehow expected, but the increase was even better than what the bank was hoping for, so we conclude that a correct translation should say: <i>windfall gain/ remarkable gain</i> .
5	rămânem la un nivel adecvat de acoperire a expunerilor cu provizioane	stick to an appropriate level of provisioning of coverage of exposures	stick to an appropriate level of coverage of exposures with provision	remain at an appropriate level of coverage of the exposures with provisions	Google and BING opted for <i>stick to</i> , while SDL machine translation selected again the exact word. Both versions are correct, as there is no change in meaning. As for the Romanian <i>provizion</i> , the English version is <i>provision</i> . Yet, we have to be careful, because in economics, this term has two meanings: in financial accounting, it is an account which records a present liability of an entity (wikipedia) while in economics, it means a legal clause. The obvious meaning in this sentence is connected to the accounting area of the bank, so the translation should be: <i>adequate/appropriate level of provisions' coverage</i> . I decided to skip the word <i>exposures</i> , as in the English explanation it seems redundant, but not being familiar with the term, all three machine translation versions translated word by word, mistaking though the word order and meaning. Besides, their translations sound unnatural.

6	președintele boardului	chairman of board	Chairman of Board	the president's board over	The best version here is <i>Chairman of the Board</i> , so the translation made by BING is closest to the correct one, as the title is written with capital letters. On the contrary, the SDL version is very far from a correct translation.
7	Banca sus- ține că a acordat aproape 175.000 de credite noi pentru populație, IMM și corporate	Bank claims that almost 175,000 new loans granted to the population, SME and corporate	The Bank claims that it has granted nearly new credits for 175,000 populatio n, SMES and corporate	The bank is claiming that he has granted almost 175,000 new loans for the population of SMES and corporate	Google offers the best translation, although it provides a telegraphic style. BING and SDL translate the Romanian <i>a acordat</i> by the English Present Perfect. As we know that it all happened during 2016, and the article was written the next year, it is clear that the tense used should have been the Past Tense Simple, but from the perspective that the year may be still in progress, the choice for the grammatical tense is not mistaken. SDL classifies the bank as being a male person, as it is called <i>he</i> in the translation, a severe mistake. BING translated <i>credite</i> by <i>credits</i> , while the other two engines opted for <i>loans</i> . "Standard loans and lines of credit represent two different methods of borrowing money for both businesses and individuals. Typical loans might include mortgages, student loans, auto loans or personal loans; these are one-time, lump-sum extensions of credit that tend to be paid down through periodic, consistent instalments. Lines of credit are usually seen with business lines of credit or home equity lines of credit (HELOCs); a borrowing limit is extended to a consumer, and funds can be borrowed again later after the money is repaid." (Investopedia). Considering the fact that we involve population, SMEs and corporate, we are in difficulty with the selection of the term, but <i>loans</i> appear to be much more common and clear, as <i>credits</i> are used either as lines of credits or as credit score necessary for a loan.
8	Veniturile nete din do- bânzi	Net interest income	Net interest income	Net income from interest	SDL translates word by word, while the other two engines are aware of the fact that the English language has a business term for that: <i>net interest income</i> .

Table 2. Lexical aspects

The grammatical features of a text are easier to control than other aspects, as we deal with rules that have to be applied. Still, the texts translated by the translation

programme are the proof that the verbal tense can be difficult to translate. The fact that the translator knows the publishing date of the article makes it clear what tense has to be used for the translation. Thus, due to the fact that the paper was issued in 2017, an action that happened two years before can only be rendered by the past tense. In another sentence which talks about *the end of last year*, the correct translation uses the past tense, but the present perfect used by a machine translation programme does not qualify as a mistake necessarily if we believe that the year is still in progress. To conclude over the correct translation of the verbal tenses, the text gives a hint that is helpful: "În 2016 am reușit să obținem..." (source text), so from this perspective, it is clear that 2016 belongs to the past already.

Another important grammatical aspect in the text is related to prepositions. They are mainly translated word by word. There are also other sides concerning grammatical mistakes, like the lack of subject in a sentence, the insertion of the male subject *he* in front of the bank, considered wrong but also strange, because the noun is female in Romanian.

The lexical features prove to be more slippery when considering a translation because they do not have to conform to strict grammatical rules. Despite the economical bias of the text which involves word-by-word translation and faithfulness, we mention two possibilities. Sometimes, this type of translation proves to be wrong because of incorrect word order or small grammatical problems. On the other hand, the selection of the appropriate term between two terms which are very similar in meaning has to be done cautiously, therefore it requires an analysis made by a specialist, not a programme.

6. Conclusions

The grammatical and lexical aspects studied for this business translation prove again that equivalence is crucial when dealing with translating a text, and the message has to be as faithfully rendered as possible. Equivalence, according to Newmark, is not categoric, he agrees that it cannot be defined as such, there are degrees of equivalence (1993, 75).

When translating, specialists resort to all sorts of techniques that can be combined in a single text or even paragraph: word-by-word translation, modification, calque, transposition, paraphrasing or literal translation. Even if economic translation is less literary and more rigid, sometimes word-by-word translation is just not enough, and the translator comes up with different techniques. The same is true for machine translation, although to a smaller extent. "It would seem then, that the easiest way of maintaining all of the tools and strategies in the translator's repertoire is to adopt a communicative approach to translation [...]. After all, texts are written to communicate information and translations are no exception (Byrne 2006, 44). "When dealing with the lexical features in the machine assisted translation, I observed that they are in deep connection with communication concerning google translate (the best machine translation of the three), making it less robotic, and more human. The rigid translation adopted by the other two programmes (BING and SDL) denies the communicative function of the text, thus minimizing its impact on the reader.

The myth according to which machine translation is not as good as human translation accomplished by a professional has been busted for now, but taking into consideration the speed of technology, machine programmes will probably evolve much more than the current level. Still, there are many aspects that a programme cannot take into account, like lexical or cultural issues.

To conclude, the programme which offers the best solution of the three was Google translate, while SDL has so many flaws that one cannot understand the message. Still, in the translation achieved by Google, there are many things that should be improved, but the largest number of techniques together with the smallest amount of mistakes rank it as the first among the three studied programmes. Despite the technological advances, my introspection proves that the specialized translator still has a well-established part in a good quality translation. Starting from the premise that the past of machine translation is very recent and considering that translation programmes are being constantly improved, it is possible that sooner than we think, such programmes will fully replace the human brain.

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Annexes

Annex 1

<http://www.zf.ro/banci-si-asigurari/banca-transilvania-profit-de-1-2-mld-lei-in-2016-suntem-deschisi-si-la-alte-achizitii-banca-din-cluj-a-ajuns-pe-locul-2-in-topul-celor-mari-banci-din-romania-depasind-brd-16162403>

Banca Transilvania (BT) a reușit anul trecut să-și majoreze veniturile operaționale cu 2,5%, la 2,8 mld. lei, și a raportat un profit net de 1,2 mld. lei, la jumătate față de nivelul record din 2015, când s-a înregistrat un câștig excepțional în urma preluării Volksbank. „În 2016 am reușit să obținem rezultate bune din punctul de vedere al creșterii organice și al profitabilității, după un an de integrare și fuziune cu Volksbank România. Chiar dacă avem ținte mari și planuri ambițioase, menținem politica prudentă de creditare și rămânem la un nivel adecvat de acoperire a expunerilor cu provizioane”, spune Ömer Tetik, CEO-ul băncii.

Horia Ciorcilă, președintele boardului, spune că banca este deschisă în continuare la noi achiziții. Stocul de credite nete acordate a ajuns la sfârșitul anului trecut la 27,2 mld. lei, în creștere cu 8,4% față de 2015. Banca susține că a acordat aproape 175.000 de credite noi pentru populație, IMM și corporate pe parcursul anului 2016.

Annex 2 (Google Translate)

Banca Transilvania (BT) last year managed to increase its operating income by 2.5% to 2.8 bln. Lei, and reported a net profit of 1.2 billion. lei, half the record level of 2015 when there was a windfall profit following the takeover of Volksbank. "In 2016 we managed to achieve good results in terms of organic growth and profitability after a year of integration and merger with Volksbank Romania. Even if we target large and ambitious plans, we maintain prudent lending policy and stick to an appropriate level of provisioning coverage of exposures," says Ömer Tetik, CEO of the bank.

Horia Ciorcilă, chairman of board, says that the bank is still open to new acquisitions. Net credit stock reached late last year to 27.2 bln. Lei, increasing by 8.4% compared to 2015. Bank claims that almost 175,000 new loans granted to the population, SME and corporate during 2016 .

Net interest income decreased by 10.4% compared with 2015 to 1.7 billion lei, while net earnings from commissions rose 11.3% to 509 million lei.

Annex 3 (BING)

Banca Transilvania (BT) managed last year to increase the operational income by 2.5% at 2.8 mld. Lei, and reported a net profit of 1.2 billion. Lei, at the half against a record level of 2015, when there was an exceptional gain following the takeover of Volksbank.

"In 2016 we have managed to achieve good results in terms of organic growth and profitability, after a year of integration and merger with VolksbankRomania. Even though we have big targets and ambitious plans, maintain a prudent lending policy and stick to an appropriate level of coverage of exposures with provisions," says Ömer Tetik, CEO of the Bank.

Horia Ciorcilă, Chairman of Board, says that the Bank is still open to new acquisitions.

The stock of net credits granted came at the end of last year to 27.2 billion. Lei, 8.4% rise compared to 2015. The Bank claims that it has granted nearly new credits for 175,000 population, SMES and corporate during the year 2016.

Net interest income decreased by 10.4% in 2015, compared to 1.7 billion, while net earnings from commissions climbed 11.3 percent at 509 million lei.

Annex 4 (SDL)

Banca Transilvania (BT) managed last year to increase operational revenues with 2,5 %, to 2.8 billion lei, and reported a net profit of 1.2 billion lei, at half the level of the record in 2015, when it has been programd with an exceptional gain as a result of the acquisition of Volksbank.

"In 2016 we managed to get the best results from the point of view of organic growth and profitability, after a year of integration and merger with Volksbank Romania. Even if we are the target of the large and ambitious plans to maintain the prudent lending and remain at an appropriate level of coverage of the exposures with provisions", says Ömer Tetik, CEO of the bank.

Horia Ciorcila, the president's board over, said that the bank is always open to new acquisitions.

The stock of net credits granted has reached at the end of last year at 27,2 billion lei, on the rise by 8.4 percent as compared to 2015. The bank is claiming that he has granted almost 175,000 new loans for the population of SMES and corporate during the year 2016.

Net income from interest decreased by 10.4% compared to 2015, to 1.7 billion lei, while the net earnings from commissions went up by 11.3%, at 509 million lei.