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Sommaire

Machine Translation versus Human Translation: a Study Based on Camara Laye's L'Enfant Noir
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Abstract

Machine translation refers to the use of computers for the task of translating automatically from one language into another. The differences between languages and especially the inherent ambiguity of language make machine translation a very difficult problem. Semantics is the main difficulty met with machine translation. Texts translated through machine can neither take into account the meaning nor the cultures. Apart from the rapidity and the cost of this method, is machine translation really competitive when compared to human translation?

Key-words: *Translation, machine translation, human translation, language, meaning, culture.*

Résumé

La traduction automatique se réfère à l'utilisation de l'outil informatique pour traduire un texte d'une langue à une autre. Les différences linguistiques d'une langue à une autre et surtout l'ambiguïté inhérente à la langue font de la traduction automatique un problème complexe. La principale difficulté rencontrée en matière de traduction automatique relève de la sémantique. Les textes traduits de façon automatique ne peuvent prendre en compte ni le sens ni la culture. Mis à part la rapidité et le coût relativement bas de cette méthode, la traduction automatique est-elle vraiment compétitive lorsqu'on la compare à la traduction humaine ?

Mots-clés *: Traduction, traduction automatique, traduction humaine, langue, sens, culture.*

1. Introduction

Man is a social being and is, as so, bound to communicate with others within and outside his/her living area. To this end, the only means he/she is endowed with is language. All over the world, people use language to express themselves and

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interact with others. Owing to the diversity of cultures, language varies from a social group to another, depending on sociolinguistic variations.

As a consequence, there are many different languages throughout the world. This brings out a number of difficulties and problems of communication. The notion of translation intervenes in this context to somewhat settle the matter and bridge the gap among languages and facilitate mutual comprehension among people. Translation appears then as the most effective, if not the only means of communication especially among people of different languages.

Translation as a concept has existed for a hundred years, but it is only during the second half of the twentieth century that it emerged, as an independent academic discipline called Translation Studies and taught at universities. A dire need for translation, as an academic discipline, has prompted specialists and theorists in the field to seek for more sophisticated methods and techniques for quick, cheap and effective translation. Thus, a new type of translation has emerged to compete with human translation; it is called machine translation or automatic translation.

This paper, in its theoretical part, will try to shed light on the concept of translation and how translators have gained their importance through history. The focus must also be on the emergence of machine translation and how it evolved. For the sake of distinguishing between human translation and machine translation, a comparison is drawn between the two concepts. The practical background of the paper will provide an example of a text translated by both human translation and machine translation, trying to pinpoint some of the major practical features determining the quality of the translation.

2. The Concept of Translation

Translation is usually defined as the act of transmitting the language of the source text (ST) into the language of the target text (TT) taking into consideration cultural and linguistic differences. In this regard, it is necessary that before starting the translation of any text, the translator should have a clear understanding, linguistically, semantically and culturally speaking, of that source text so that he/she would be able to convey the real intended meaning in the target language.

In his book *Introducing Translation Studies: Theories and Applications*, Jeremy Munday describes translation as a process, saying: "The process of

translation between two different languages involves the translator changing an original written text (the source text or ST) in the original verbal language (the source language or SL) into a written text (the target text or TT) in a different verbal language (the target language or TL)" (2012:3)

In fact, what Munday defines in this statement is the type of translation called "interlingual translation" as has been categorised by Jakobson along with the two other types known as "intralingual translation" and "intersemiotic translation". The type of translation defined by Munday is the most common one in that it is concerned with translation of written texts of different languages as opposed, for instance, to intralingual translation which is concerned with translating within the same language (using, for example, paraphrasing), or as in the case of intersemiotic translation that has to do with translating written texts into non-written works such as: films, pictures or music.

3.   The Emergence of Machine Translation and its Evolution.

The competition towards establishing more business with different parts of the world incited advanced countries in technology to look for easy and quick ways for communication. Hence, there emerged a type of translation known as machine translation for the process of translation was carried out by machines. The specific date when this type of translation did emerge as stated in Olivia Craciunescu's article "Machine Translation and Computer-Assisted Translation: a New Way of Translating" is believed to be "the beginnings of the Cold War… in the 1950s competition between the United States and the Soviet Union" (2008:2).

Machine translation as a new emerging discipline in the field of translation studies has come to fill the void existing due to the small number of good and acknowledged translators. It was an advantageous way of translation in that it saves both time and money. A large quantity of articles and documents were easily translated in a short time with a low amount of money.

In so far as the defining features of machine translation are concerned, it was stated by Craciunescu et al. that the main task assigned to machine translation is "to analyse the structure of each term or phrase within the text to be translated (source text)" (2008:5). It then breaks this structure down into elements that can be easily translated, and recomposes a term of the same structure in the target language. The process done by machine translation, then, can be summarised in the act of breaking

the structural components of the source text and then synthesising the same components in the target language texts. The whole action of translation is done automatically.

In the same article, a clear distinction has been drawn between machine translation and another type of translation called computer-assisted translation. The latter is, in fact, a new form of automatic translation that came to replace machine translation in that it provided more advantageous services. Since its first appearance, machine translation has known a sort of evolution in terms of the emergence of a number of sophisticated programs established by companies competing in the field of information technology. Thus, computer-assisted translation has witnessed its birth and it was of course on account of machine translation that lost much of its importance in favour of the more developed hard and soft materials the new emerging programme has brought.

Computer-assisted translation, as the name may reveal, is an automatic translation in which the human translator is aided by the machine and vice versa. This type of automatic translation differs from machine translation, and it was mainly favoured, for it first provides "a number of tools" including "terminology databases and translation memories", and second for it allows much space for the human translator to intervene in the process of translation "to make changes at any time while the work is in progress" (Craciunescu et al. 2008:7).

Therefore, the fact that machine translation is carried out by machines does not mean that human beings are totally absent from the process of translation. Nevertheless, there is human intervention, as in the case of computer-assisted translation and in other cases of some translating machine programmes that are limited in terms of the vocabulary provided by their programmed dictionaries. In this regard, the role of human translators is manifested in what is known as the process of pre-editing of the intended source text to be translated, and post-editing of the translated version provided by the machine translation.

4. Comparing a Machine and a Human Translated Text

In an attempt to spot light on the major practical differences between machine translation and human translation, the paper provides the following text to be translated by the two types of translation. The text is an extract written in French, taken from Camara Laye's novel *L'Enfant Noir* published in 1953. This novel has

been translated into English by James Kirkup and published in 1959 under the title *The African Child*. The English translation provided by Kirkup will be compared with the Google translation. My analysis is based on a part of the first chapter (pp.14-15) of *L'Enfant Noir*. The focus is to be on depicting semantic and pragmatic differences manifested in the translated version.

Source Text	Human Translation 15-16	Machine Translation
Depuis qu'on m'avait défendu de jouer avec les serpents, sitôt que j'en apercevais un, j'accourais chez ma mère.	Ever since the day I had been forbidden to play with snakes, I would run to my mother as soon as I saw one.	Since we had forbidden me to play with snakes, as soon as I could see one, I accourais with my mother.
-Il y a un serpent ! criais-je.	'There's a snake!' I would cry.	- There is a snake! I shouted.
-Encore un ! s'écriait ma mère.	'What, another?' my mother would shout.	- Another one! cried my mother.
Et elle venait voir quelle sorte de serpent c'était. Si c'était un serpent comme tous les serpents─ en fait, ils différaient fort !─ elle le tuait aussitôt à coup de bâton, et elle s'acharnait, comme toutes les femmes de chez nous, jusqu'à le réduire en bouillie, tandis que les hommes, eux, se contentent d'un coup sec, nettement assené.	And she would come running out to see what sort of a snake it was. If it was just like any other snake – actually, they were all quite different! She would beat it to death at once; and like all the women of our country she would work herself up into frenzy, beating the snake to pulp, whereas the men would content themselves with a single hard blow, neatly struck.	And she came to see what kind of snake it was. If it was a snake like all snakes ─ in fact, they differed much! ─ she immediately killed with a stick , and she was bent , like all women here, to reduce the slurry , while the men, they are content with a jerk , clearly insists.

Un jour pourtant, je remarquai un petit serpent noir au corps particulièrement brillant, qui se dirigeait sans hâte vers l'atelier. Je courus avertir ma mère, comme j'en avais pris l'habitude ; mais ma mère n'eut pas plus tôt aperçu le serpent noir, qu'elle me dit gravement :	One day, however, I noticed a little black snake with a strikingly marked body that was proceeding leisurely in the direction of the workshop. I ran to warn my mother, as usual. But as soon as my mother saw the black snake she said to me gravely:	One day, however, I noticed a small black snake body particularly brilliant, which moved without haste to the workshop. I ran to tell my mother, as I had become accustomed, but my mother had no sooner saw the black snake , she said gravely:
-Celui-ci, mon enfant, il ne faut pas le tuer : ce serpent n'est pas un serpent comme les autres, il ne te fera aucun mal ; néanmoins ne contrarie jamais sa course.	'My son, this one must not be killed: he is not as other snakes, and he will not harm you; you must never interfere with him.'	- This, my child, do not kill him: this snake is not a snake like the others, it will do you no harm, however, never upset his race.
Personne, dans notre concession, n'ignorait que ce serpent-là, on ne devait pas le tuer, sauf moi, sauf mes petits compagnons de jeu, je présume, qui étions encore des enfants naïfs.	Everyone in our compound knew that this snake must not be killed; excepting myself, and, I suppose, my little playmates, who were still just ignorant children.	Nobody in our dealership, was aware that this snake then we should not kill him, but me, except my little playmates, I presume, were still naive children.
-Ce serpent, ajouta ma mère, est le génie de ton père.	'This snake', my mother added, 'is your father's guiding spirit.'	- This snake, 'said my mother, is the genius of your father.
Je considérai le petit serpent avec ébahissement. Il poursuivit sa route vers	I gazed dumbfounded at the little snake. He was proceeding calmly towards the workshop;	I considered the little snake with amazement. He continued his

l'atelier ; il avançait gracieusement, très sûr de lui, eût-on dit, et comme conscient de son immunité ; son corps éclatant et noir étincelait dans la lumière crue. Quand il fut parvenu à l'atelier, j'avisai pour la première fois qu'il y avait là, ménagé au ras du sol, un trou dans la paroi. Le serpent disparut par ce trou.	he was moving gracefully, very sure of himself, and almost as if conscious of his immunity; his body, black and brilliant, glittered in the harsh light of the sun. When he reached the workshop, I noticed for the first time, cut out level with the ground, a small hole in the wall. The snake disappeared through this hole.	journey to the workshop he walked gracefully, very sure of himself, would have said, and as aware of his immunity, his shiny black body and sparkled in the bright light. When he arrived at the studio, I caught sight for the first time that there was, struck to the ground, a hole in the wall. The snake disappeared into the hole.
-Tu vois : le serpent va faire visite à ton père, dit encore ma mère.	'Look', said my mother, 'he snake is going to pay your father a visit.'	- You see, the snake is going to visit your father, my mother said again.

It is quite obvious, from the first reading of each translation, that machine translation is not a perfect rendering of the source text into the target text. The point is that the translated text, still, bears much of the traits characterising the language of the source text. Therefore, much should be said about how the use of language is violated as well as the meaning. Simultaneously, some focus is to be on to what extent the human translation has succeeded in transforming the source text into the target text depicting whether the translated text has the same effect as the source text.

4.1 The Use of Language

Violating the use of language is one of the main deficiencies that machine translation suffers from. The following example is an illustration of this misuse of language.

Example:

Source text: Un jour pourtant, je remarquai un petit serpent noir au corps particulièrement brillant, qui se dirigeait sans hâte vers l'atelier.

Human translation: One day, however, I noticed a little black snake with a strikingly marked body that was proceeding leisurely in the direction of the workshop.

Google translation: One day, however, I noticed a small black snake body particularly brilliant, which moved without haste to the workshop.

The misuse of language, which is much manifested in machine translation, is mainly due to the literal nature of the translation. In the above example, the machine translation is a literal translation or instead a word-for-word translation. The reader can easily notice that there is no flexibility in the machine translation in that each word in the source text has been substituted orderly by another in the machine translation.

Thus, it becomes clear that machine translation, is a translation, the focus of which is the source text rather than the target text. The word order is respected only in the source text. However, as far as the target text is concerned, no importance is given to the word order and the way words are linked resembles the way how words are linked in the source text.

Although the meaning can be comprehensible, the structures of languages are different and, hence, they should be respected for the sake of producing a well-formed translation in the target language. The inability of the machine translation to produce a well-structured text is due to its focus, as stated by Olivia Craciunescu, on the "comprehension" and not "the production of a perfect target text".

In so far as the human translation is concerned, the above example can reveal clearly how the human translator is capable of avoiding what has been criticised in the machine translation. The human version is a structure respecting the grammatical structure of the target language and its focus has been in both the source text, in an act of comprehension, and the target text, in an act of producing a perfect translation. The human translators' flexibility allows them to move from language into another bearing in their minds the difference of structures among languages.

4.2 Violation of the Meaning

No one can deny that the main rationale behind any translation is to transfer as much as possible the meaning intended by the source text into the target text. Yet, in machine translation, this is not always the case in that sometimes the achieved meaning is ambiguous, distorted, and it becomes difficult to grasp it just like in the following examples.

Example 1:

Source text: Depuis qu'on m'avait défendu de jouer avec les serpents, sitôt que j'en apercevais un, j'accourais chez ma mère.

Human translation: Ever since the day I had been forbidden to play with snakes, I would run to my mother as soon as I saw one.

Machine translation: Since we had forbidden me to play with snakes, as soon as I could see one, I accourais with my mother.

In the machine translation version, the indefinite pronoun "*on*" has been mistranslated. "*On*" can actually be rendered in many different ways in English depending on the meaning. "*On*" can be translated as "we" as in "*on y a été hier*" meaning "we went there yesterday". "*On*" in this case includes the speaker.

"*On*" can also be translated as "you" as in the example "*alors, on s'amuse bien*?" that means "having fun?" Here the speaker is not included. "*On*" can also be rendered as "you" when the subject is unspecified. In this case, it can also be rendered as "one" as in "*on ne sait jamais*" translatable as "you never know" or "one never knows".

"*On*" can be rendered as "they" or "people" as in the example "*que pensera-t-on d'un tel comportement?*" meaning "what will they/people think of such behaviour?"

"*On*" can be also rendered as "someone" or "somebody" or simply omitted in the translation as in the examples "*on m'a dit que…*" meaning "someone told me that …" or "I was told that…"; "*on a volé mon passeport*" meaning "somebody has stolen my passport" or "my passport has been stolen".

From all these possible translations of the indefinite pronoun "*on*", the machine translation programme has chosen the worse one because the use of "we" includes the speaker; that is not the case in the original text. In this example, the machine translation produces certain associations with no sense because the group of words "we had forbidden me" does not mean anything. The association of the word "we" to the word "me" is quite unfit. The non translation of the word "*accourais*" in the machine translation version shows the limits of this translation method.

As for the human translation in the same example, the ability of the translator to use the passive voice to render the passage "I had been forbidden" instead of the active voice of the source text renders the target text simple and easy to understand. It is important to point out the reorganisation of the whole passage by the translator. He has preferred to write "I would run to my mother as soon as I saw one" instead of "as soon as I saw one, I would run to my mother", which is the word order of the original text. The machine translation could not change the order of the words, it is only through human translation that the translator can add or delete certain words or even phrases, sometimes, for the sake of clarity. In the following example, the violation of the meaning of the source text can also be noticed.

Example 2:

Source text: Personne, dans notre concession, n'ignorait que ce serpent-là, on ne devait pas le tuer, sauf moi, sauf mes petits compagnons de jeu, je présume, qui étions encore des enfants naïfs.

Human translation: Everyone in our compound knew that this snake must not be killed; excepting myself, and, I suppose, my little playmates, who were still just ignorant children.

Machine translation: Nobody in our dealership, was aware that this snake then we should not kill him, but me, except my little playmates, I presume, were still naive children.

In the translation provided by Google translation in this example, the use of the word "dealership" for "*concession*" used in the source text can make the reader think that the text is about commercial affairs, which is not the case. The meaning is

once more violated and this can be noticed all the text through. All the sense of the passage has been violated through the clause "nobody... was aware that..." In the original text, the phrase "*personne...n'ignorait que...*" means "everybody knew that..." The machine translation has rendered the contrary of what should be.

4.3 Human Translation Effect

Actually, before any translation, there should be a full understanding of the source text from the part of the human translator. From the example "*Et elle venait voir quelle sorte de serpent c'était. Si c'était un serpent comme tous les serpents—en fait, ils différaient fort!*" rendered in human translation as "And she would come running out to see what sort of a snake it was. If it was just like any other snake – actually, they were all quite different!" one can notice that the tense of the verb "*venait*" has changed in the human translation; becoming "would come" instead of "came" used in the machine translation. There is also the addition of the phrase "running out" in the human translation and "*elle venait voir*" becomes "she would come running out" instead of "she came" rendered by the machine translation. It becomes obvious from this example that the act of leaving the same effect is not as easy as it can be thought of; the very act of adding or deleting a word or phrase may affect the intensity of the effect that the source text has and which the target text cannot.

Generally speaking, since it was first acknowledged as an academic discipline, translation studies have known the emergence of new methods of translation including the so-called machine translation. However, its emergence was not at the expense of human translation for the latter proved to be the only subject capable of translating not only by means of substituting words for words, like machine translation, but also in terms of respecting linguistic, semantic, and more importantly cultural differences among languages.

5. Conclusion: the importance of Human Translation

Any attempt to replace human translation totally by machine translation would certainly face failure for, due to a simple reason; there is no machine translation that is capable of interpretation. For instance, it is only the human translator who is able of interpreting certain cultural components that may exist in

the source text and that cannot be translated in terms of equivalent terms, just like what automatic translation does, into the language of the target text. In addition, it is widely agreed upon that one of the most difficult tasks in the act of translation is how to keep the same effect left by the source text in the target text. The automatic translation, in this regard, has proved its weakness, most of the time, when compared with a human translation. The human translator is the only subject in a position to understand the different cultural, linguistic and semantic factors contributing to leaving the same effect that is left in the source text, in the target text.

It is an undeniable fact that automatic translation is regarded as a tool for producing quick and great number of translated texts; nevertheless, the quality of the translation is still much debatable. On the other hand, no human translator would make the same mistake for their ability to read words with different diacritic marks or vowels. In some cases, the automatic translation cannot even provide equivalent terms in the target language leaving them as they are in the source text as the case of "*accourais*" in the excerpt used in this study. The general differences between automatic translation and human translation discussed in this paper make the latter undoubtedly much more favourable than the former.

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