The Contribution of the Interpretative Theory to Disambiguating Automated Translation

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Abstract

The translation process either human or automated is faced with ambiguity that hinders the clarity of the message. It pollutes translation. It renders the target text tainted lacking the clarity conditioned to convey the exhaustive meaning and intention of the source text .As a consequence, receptors may fail to grasp the precise meaning contained in the linguistic structure. The automated translation process impacts conveying the target meaning, disambiguating it leads to overcoming the discursive obstacles, which reflect the ambiguity residue. The Interpretative Theory in Translation adopted a distinct simplistic approach to produce a clear translation. It focuses on the content contained rather than on the containing form. This paper aims at checking the validity of the interpretive model to be applied to Automated Translation. To what extent the interpretive theory can serve as a model of disambiguating automated translation to reflect the research question to answer? Hypothesizing that the fundamentals of the theory can constitute precious guidance to disambiguating automation in translation is the research core on which this paper gravitates.

 Key words: Automated translation; Explicitness; The interpretative theory in Translation.

Résumé

Le processus de traduction humaine comme automatique fait face à des ambiguïtés qui nuisent à la clarté du message transmis. Un message ambigu pollue la traduction. En effet, le récepteur peut ne pas saisir le sens contenu. Le processus de traduction automatique se répercute sur la transmission du sens, la désambiguïsation permet de surmonter les obstacles discursifs conservés. La théorie interprétative de la traduction adopte une approche distincte pour produire une traduction claire. Elle se concentre sur le contenu et pas sur la forme. Cet article vise à vérifier la validité du modèle interprétatif appliqué à la traduction automatique. Dans quelle mesure la théorie interprétative peut servir de modèle de désambiguïsation de la traduction automatique ? L'hypothèse selon laquelle les fondements de la théorie peuvent constituer un guide précieux pour la désambiguïsation de la traduction automatique est l'essence de cette contribution.

Mots clés : Traduction automatique; Explicitation; Théorie interprétative en traduction.

Introduction

Automated translation is a machine transference process based on algorithms to convey the meaning of texts. Intelligibility of transference is a matter of interpretation faculties that characterize the human brain exclusively with some similarities with artificial intelligence. The latter shares some of the faculties of the brain but it cannot function without being assisted by the human. The interpretative theory in Translation evoked ambiguity claiming that in order to overcome the obstacle and ensures clarity; one should dig to put his hand on sense, meaning and style. The message is either clear or ambiguous to render in a different language, regardless the nature of the linguistic system in question.

This article aims at throwing light on the usefulness of the human translation interpretive model as perceptions, strategies and translation solutions to disambiguate automated translation. The interpretive Theory is adopted as a case study to check the validity of the hypothesis put here which gravitate on the usefulness of the theory to overcome ambiguity residues in automated translation, as a answer to the research question which gravitates on the extent to which the model of "l'École de Paris" named the interpretive theory ,alternatively , can be inspired to serve as a model in disambiguating automated translation?

Investigating the usefulness of the interpretive theory in translation as a tool to serve disambiguating the translation discourse reflects a main targeted research aim concerned mostly with translation dictaticians, practioners and scholars who emphasized the importance of either editing or post editing in the process of producing a clear translation .Yorick Wilks in his books *Machine Translation ,its scope and limits* claims that the main concern is not to immediately transfer the message but to make sure to transfer its input to lead to an exhaustive output:

> "Although nothing follows from any particular example in this field, this use of general principles of language automatically that set up the representation itself is, I would argue, a more promising approach to the traditional machine translation problem than either (a) very large knowledge structures, like frames, that are difficult to motivate and manipulate or the other suggested alternative."(Yorkich Wilks, 2009:68).

Other scholars studied the issue from the perspective of the adaptability of the linguistic systems to the machine algorithms, emphasizing the importance of highlighting the linear similarities, which may deviate what automated terminology banks may contain. Translating on the level of input linear data is not only an obligation to adopt but a translation strategy in automated translation between the target and the source languages, which can appear as a choice of an automated, program that is chosen by the translator *« Elsewhere, translations are conceptualized, like other types of big data, to harvest a big data of language segment in which there is a narrow possibility to depict personal choice". (Dorothy Kenny, 2012:36)*

The interpretative theory in translation (Danica SELESKOVITCH & Marianne LEDERER, 2002:151) does not consider automated translation practiced on the level of words as a real translation that meets the parameters of a true and complete shift, the prerequisites of an exhaustive shift process being intelligibility, spontaneity, and clarity. We intend to investigate disambiguation strategies in the ITT, with an attempt to suggest them to be applied for automated translation.

The theory is cantered on the expression of the discourse meaning regardless the linguistic and formal manifestations that convey the meaning. Discourse resides in the whole text that is characterized by coherence and cohesion. The logical expression of meaning through the choice of adequate linguistic means, precision and specialization are the main characteristics of a real discourse that deserves to be considered true translation. Texts convey different discourses that can be oral or written; the oral discourse inspires its validity from rhetoric norms that characterize each speaker's style through the textual strategy adopted by the text producer or the speaker. The written discourse represents another nature based on static rules that find their foundations in syntax, lexical rules and figures of style.

Marianne Lederer (1994:211) claims:[2]

> "A sentence is ambiguous when the verbal context is not sufficient to impose a single meaning on the words among several possible meanings [...] ambiguity is a phenomenon widely observed in machine translation [...] no ambiguity arises when the in discourse, when listeners/readers possess relevant cognitive complements. Ambiguity may be intended by an author; in that case, it is part of the author's intention and is respected in translation."(Our translation)

Fulfilling the communicative duty in translation requires the production of a clear target text that prevents the receptor or the end user to preserve the target text's ambiguity that affects the retrieval translation performance. The ITT adopts a distinct approach to disambiguate translation, which is mainly human. Automated or semi-automated translation reflects many facets of involuntary ambiguity that result from the nature of the languages in contact that can be lexical, syntactic, or semantic, that is reflected in the shift process by the machine.

John Hutchins (1992: 72) claims *«Translation ambiguity is a major problem to be resolved not only in human translation but in automated translation as well. Disambiguation identifies the correct contextual meaning that should be understood under all its manifestations »*.

The Interpretive Theory in Translation does not distinguish between quality types of translation regarding the steps adopted, which include perception of the source message, its "deverbalizing", and its spontaneous expression by the translator function, according to the genuine feature of the receptor language, to the level of style and in conformity to the users' level, users' competence, and users' needs. Automated translation admits translational solutions regarding the predictable solutions that reflect the prior choices that are distinctive and identical each time the same text is introduced and that produces ambiguity regarding the contextual modifications that the discourse and the message undertakes. Reediting process intervenes in automated translation to clarify meaning, and to facilitate grasping the intended sense in the target text.

Conveying the meaning of the message of a given text in translation is based on a shift from one linguistic system into another that has its rules. Interpretation is necessary to assimilate the full intended meaning; it is a mental process not a mechanical process that characterizes the machine. Ambiguity enhances the impossibility of perceiving the whole meaning of the translated text and

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[2] « Une phrase est ambigüité lorsque le contexte verbal ne suffit pas à imposer aux vocables une signification unique parmi plusieurs possibles […] l'ambigüité est un phénomène abondamment observé en traduction automatique […] aucune ambigüités n'apparait lorsque le dans les discours, lorsque les auditeurs /lecteurs possèdent des compléments cognitifs pertinents. Une ambigüité peut être voulue par un auteur ; elle fait alors partie de son vouloir dire et est respectée en traduction.» Marianne Lederer (1994:211)

its intention by the receptor because of a deviation from the admitted norms of the text type either/or because of a specific use of different linguistic codes or another language. Ambiguity within a text makes comprehension foggy and constitutes a great prejudice that render translation non valid, neither to express the full meaning of the source text nor to meet the quality assessment requirements.

The process of automated translation depends on the use of the machine to convey the content of a source text into its supposed meaning. It acquires its legitimacy from supplying the machine with automated dictionaries and glossaries that contain correspondent words separately and out of context. This process imagines the existence of prior translation possibilities regardless the different contextual situations that govern the production of the translated discourse. The strategy can give birth to ambiguity of word meaning or/and to sentence meaning that produce a foggy message characterized by either polysemy, homonymy, or semantic deviation that reflects on the meaning of the whole message.

The efficacy of the communicative essence in the translated discourse in automated translation implies disambiguation. The interpretative theory in translation considers ambiguity as a result of a mistaken step of the transference strategy based on conveying linguistic codes not their meanings, which are transmitted by them.

Danica SELESKOVITCH (2002), the pioneer of the theory, claims:

> « Les théories de la traduction n'ont vu trop longtemps que les langues et leurs différences, alors que l'on traduit des textes ou des discours et non pas des langues en tant que telles. Dans la théorie nouvelle que nous proposons, l'homme et ses mécanismes cognitifs interviennent en la langue originale et la langue de traduction et à partir de là, nombre de problèmes se trouvent aisément résolues »(283).

The manifestations of ambiguity in translation in the interpretative theory of translation cover the following aspects of the message:

1) Context: Ambiguity is not a matter of meaning but a question of an erroneous mixture between the linguistic recipient that conveys meaning and the meaning itself. The translation process is a matter of sense and intention not a matter of codes. Identical codes produce different meanings; ambiguity is not a result of the process of translation, *but a matter of an amalgamation between what it is said and what is intended to say.*
The following example: «*I'm tired* "means different intentions, although it seems extremely easy to convey its meaning, but in reality it intends to express different contextual meanings». It can mean tiredness in the general context. But, if your friend that you visit in the hospital voices it, it means that he is extremely ill.

2) Code switching: Among the obstacles, code switching represents another manifestation of ambiguity for non bilingual receptors who find strange and inappropriate the way adopted by the translator to express ideas. The interpretative theory in translation admits that code switching is a manifestation of computer and automated translation; semi-automated translation can mean disambiguation that does not respect the genuine quality of the source language.

3) The linguistic level of the specialized discourse: The source text represents another manifestation of ambiguity for translation. Preserving the same level enhances the clarity and aims at keeping

the receptor able to perceive the meaning of the message clearly and intelligibly. Ambiguity results from a variation of linguistic levels from the source to the target texts; the interpretative theory admits the approach of one source text, various target texts according to the competence of the translators and their capacity to use linguistic means to convey the meanings. Moreover the same translator may produce different versions of the same source text that are all convenient. Adopting systems that produce a variety of equivalent texts multiplies the alternatives and militates to produce unambiguous message. Trying to disambiguate translation through post editing represents a solution to be adapted to the specificities of the text to be translated regarding its speciality, level and content.

4) General texts: Ambiguity of the produced text is a matter of general texts that contain words that take different meanings in different contexts. Specialized translation excludes ambiguity and specialized translators produce texts that are adapted to the communicative situation; translators should translate to their mother tongues and they should adapt their translations to receptors. The varied automated translation programs can enhance clearance via the translational programs that should be specialized. Terminological terms tend to have specific meanings that do not vary according to the type of text. Input or pre-editing in automated translation predicts and avoids ambiguity through its translational strategy. Shadow meanings and the metaphoric use of linguistic means should be avoided to combat misinterpretation of the target text. We have not mentioned homonymy since it is related to separate words out of contexts that the ITT does not recognize as a matter of translation, but of words and meanings not intentions.

5) Implicitness and explicitness: The way a text producer chooses a textual strategy to express thoughts varies and differs. Implicitness expresses a linguistic competence to arrange words together to express meanings that should be understood from the contextual situation of the discourse. The translational competence should make sure that both the sender and the receptor share the same interpretations to implicitness; the machine does not interpret the message that is introduced roughly. The message is produced in the target language reflecting the same implicit views and means. Fighting implicitness in automated translation is fighting ambiguity. Semi-automated translation can constitute a safe issue to render implicitness expressive. Discourses can be themselves full of implicitness, where the translation competence should differentiate between cases constitutes an innate characteristic of discourse or the convenient stylistic strategies to render it explicit. Implicitness is not a problem for the brain, but for the machine, since the brain interprets discourses and anticipates meanings through extracting information from the context, the situation and its previous experience.

The semantic and linguistic levels help interpret the meanings; interpretation is not a mechanical strategy, it is a mental strategy that excludes sometimes linguistic equivalents to produce equivalence in meanings, since the pragmatic level takes into account the communicative context to convey the meaning. The cognitive context is absent within the machine, no fruitful translation strategy translates out of context. Context disambiguates meaning and intentions and explicitness is a necessity in the specialized discourse. The pragmatic aspect of the target text simplifies means of expression to achieve full clarity.

It is clear that the human brain functions slowly compared to the machine, but it has the interpretative capacity that makes it achieve prior disambiguation of the meaning.
No couple of languages functions perfectly to produce a fully comprehensible message. Implicitness and implicitness can vary according to types of texts. The more literary and poetic texts stem their weight from implicitness of fragments that are added to stylistic features to guide

the reader to assimilate the meaning; adding lexical words to the source language renders clear the source message since we do not translate the words number, but words weights. Implicitness is not an obstacle when it is natural; it is so when the translational choice fails to keep the same traits of a message that needs to be not only disambiguated, but understood. Being aware of the receptors competence enhances finding appropriate adapted solutions.

Danica Seleskovitch gives the following example of ambiguity of the source message:
«*The chickens are ready to eat*». She adds that the sentence represents a couple of meanings that need prior clarifying through addition not in meaning, but in lexicon.

Does the receptor-translator understand?
« *Les poulets sont prêts à manger.*»
Or
« *Les poulets sont prêt à être manger.* »

هل الدجاجات جاهزة للأكل؟

الدجاجات جاهزة لتأكل؟

Marilyn Gaddis Rose (1982:P) points out concerning the shortenings of machine translation that «*Bad translations usually result when a translator is merely translating words and does not understand what he is translating […] if he does not understand what he is translating as a whole, he is likely to mistranslate even the mere words*». (14)

In Arabic, the following examples can be stated:

طلق القاضي الزوجة

The judge declared the wife divorced.
The judge announced the divorce of the wife.

ترك الشهادة من أجل الشهادة

He left studies seeking for martyrdom
He preferred martyrdom to getting his degree

أعطيت زهرة لزهرة

I offered a flower to Zahra
I gave a rose to Zahra

Other examples were suggested:
The contagious virus is spread by coughing and sneezing.

إن الفيروس المعديُ يننَشر كالسعال والعطس.

The translation platform Misbar adopted in translating into Arabic medical discourse engendered the former translation, the reader depicts its ambiguity, and the receptor in Arabic is unable to distinguish between reason and result. Similarity of both intensifies ambiguity.
The human output clarifies the translation to be read as follows:

عطس وسعال المصابين ينقل عدوى الفيروس.

Two typhoid vaccines are currently recommended for use by WHO.

لقاحي التوفوئيد ينصح بهما من طرف من؟

All, or at least the specialized audience, know that WHO is not a person, but acronyms of a united nation specialized organization. The human translation in its interpretation of meaning, as suggested by the interpretive theory, would produce the following fragment:

<div dir="rtl">

حاليا، تنصح منظمة الصحة العالمية بأخذ لقاحين للتيفوئيد.

</div>

The sentences represent a couple of meanings that reflect different contextual situations that have different intentions. Acting in the professional context or a personal one indicates the intention. The linear manifestation of fragments arrangement is inspired from what the computer, the platform or the system is equipped with. The common output between the human and the machine is that the results cannot be predicted the same according to the nature of the system or platform. The human intelligence doesn't disseminate clarity, but it contributes to do that with the machine, through contextualizing the machine's input through

"Reinforcing Generative Lexicon structures, to dictionary senses for which there had not been preceded, for only some"(Yorick Wilks,2009:147).
Uniqueness of the solution in translation of a given text fragment enhances ambiguity in automated translation. Disambiguating sense should focus on the intention in the target text not the meaning in the source text. The source text has nothing to do with ambiguity; even if it is apparent what should be assessed is the target message.
The absence of interpretation reinforces the need of clarification; nevertheless specialized texts also interfere to give illustrations to ambiguity of meanings through code switching, as already mentioned.

The Interpretative Theory in Translation considers that polysemy is a matter of language but not a matter of translation. It is a matter of separated words not discourse where separated words disappear to give priority to the whole meaning. Polysemy disappears within contexts and translators do not translate words but discourses.
5) *Sufficient documentary research:* Ambiguity in
 ITT is also a result of non sufficient documentary research. Documentary research is done not in the source language, but in the target language that makes the translator discovers the specificity of the spontaneous nature of expressing ideas; it facilitates discovering the linguistic means to convey meanings. The specificities of expression in discourses should belong to the target language, not to the source language, which should meet the requirement of a real specialized discourse that meets prerequisites of clarity and comprehensiveness. The residual ambiguity means the failure of the translation strategy, either to translate or to translate clearly.

W. John Hutchins (1992: 14) states:
«*The target language should separate meanings indistinguishable in the source language.* »
Starting from that, imagining specialized automated translation programs may predict target meanings and disambiguate the sense. Specific discourses can be predicted and the margin of misinterpretation is highly reduced.

Claiming that the human brain has more capacities in comparison to the machine is not only a claim, but an affirmation, as well. Ambiguity is not a matter of moral capacity, but a matter of a production capacity. If the brain functions in isolation with the logical construction of language, embedding meanings in language may reflect a hindrance to clarity reflected through lexical and grammatical choice.

Ambiguity is matter of discourse construction, as well as, discursive competence among the receptors of the automatically translated fragments. Ambiguity is no longer a matter of language, but of linguistic logic of meaning construction, hence every attempt to disambiguate may lead to blended ambiguity. The interpretive theory claimed that *"Ambiguity is not exclusively a matter of discourse logic, but of matter of discursive competence among the target audience, maybe which ought to be competent enough to perceive the level of discourse asymmetry, along with language natural style".*(Lederer Marianne,198:53)

Conclusion

Experience showed that foggy translation makes understanding not only impossible but erroneous, the obstacle that renders the shift process far from being a real translation, which keeps the meaning, intention and usefulness of the target text. It is more appropriate to observe an absence of translation than the existence of non adapted translation to fulfil a given means. Machine translation is simply difficult because, it is difficult for humans.

Claiming to consider the Interpretive Theory as the ultimate solution to ambiguity seems to be an exaggeration, nevertheless naturalizing the machine output discourse functions in harmony with what was introduced in the machine. Encyclopaedic knowledge lacks even with the humans, with the machine, it doesn't only lack, but it is poorly use, which leads to ambiguity in style and in ambiguity of interpreting the results of the automated shift. Poor formulation leads to poor output, as a consequence ambiguity is blended. Researchers in the field have not to focus a language, but on the discursive logic, as well. The interpretive theory may constitute a path to investigate seeking more clarity and more naturalness of the discourse to disambiguate.

The interpretative theory in translation contributes ambiguity reduction only if specific programs are invented and elaborated to predict the exact intention and elaborating artificial brains that posses the minimum of faculty of interpretation that predict the pragmatic aspect of meanings. Automated program should be equipped with tools of lexical selecting.

Claiming total disambiguation is a myth since residual ambiguity is a matter of all forms of translation; exhaustive disambiguation is a matter of the end user, who is supposed to use the solutions suggested by the interpretive theory of translation. Deverbalizing not only the message, but at the same time the input data, is the key success of automated translation.

Automated translation itself is a manifestation of ambiguity; artificial intelligence has been extensively assessed as a translation tool, which requires permanently outputting data to vulgarize meaning and make it adapted to the reader, particularly the reader who belongs to a different linguistic and cultural space.

Similarity in thought among human may be interpreted differently in case the discursive manifestations of naturalness, clarity and convenience in accordance with the not only the discourse level, the audience competency, but in accordance with the automated translation system, which must be updated and actualised smoothly and regularly.

Bibliography:

Delisle J,(1984) La traduction raisonnée, Presses de l'université d'Ottawa.

Djik van, T.A. and Kintsch,W.(1983) Strategies of Discourse Comprehension, Academic Press, New-York.

Dorothy K & and Way A, Teaching Machine Translation & Translation,Compostella Press,Spain.

Hirst, G. (2012) Semantic Interpretation and the Resolution of Ambiguity. Cambridge University Press, 1986.

Kerbrat-OrecchiniC, ,(1981) « Comment comprend-on l'implicite », In Comprendre le langage, Didier erudition, Paris.

Lederer, M.(1994) La traduction aujourd'hui, le model interprétatif, Hachette, Paris.

Lévy, P. (1990) Les technologies de l'intelligente, La découverte, Paris.

Marilyn G.R, (1982) "Time and space in the translation process", In Translation Spectrum, Essays in Theory and Practice, State University Of New York Press, ALBANY.

Seleskovitch, D. & Lederer M, (2002) Interpréter pour traduire, Didier érudition.

W. John Hutchins (1992) An Introduction to Machine Translation, Academic Press, London.

Yorick ,W.(2009)Machine Translation ,its scope and its Limits,Springer.

Conflict of Interest

The authors declare that they have no conflict of interest

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