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Dedication

I dedicate this work to

*My family
And*

To my best friends

Acknowledgements

*I would like to express my special appreciation and thanks, to my supervisor, Professor Dr. **Jamel Goui**, for his supervision, help and being there whenever I felt hopeless and gloomy.*

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List of Abbreviations

FB: Facebook.

IM: Instant messaging.

MT: Machine translation.

AI : Artificial intelligence.

NMT: Neural machine translation.

GAT: Georgetown automatic translation.

MIT: Massachusetts institute of technology.

ALPAC: Automatic language processing advisory committee.

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ملخص الدراسة

Abstract

Everyone has taken the advantage of free online translation services, at least once in lifetime nowadays. The one and only well known application for this service is provided by Google. However, what is known about the translation process of this application is limited in spite of its reputation. Machine translation became a familiar concept that all people know. The remarkable point about it, is the action of translation which is quite complex and made by a translator is carried out in a mechanical platform. As a subject of research, it was decided to focus on Google Translate because of its being as the most wide known and utilized translation service program, Facebook users, quite at the same level to communicate. This research which is based on machine translation, aims at evaluating machine translation practices through Facebook users, and its basis have been based upon the analysis of several types of communicative texts often used by FB users, translated from English into Arabic language taking in consideration linguistic features and assessment of translation legibility, with the help of error analysis method, beginning with machine translation definition and providing an insight on it, moving to the concept of Facebook and its several features and uses.

Keywords: *Machine Translation, Facebook, Google Translate, Emojies .*

استغل الجميع وسائل الاتصال المجانية عبر الإنترنت حتى وان لم يتم باستغلالها اطلاقا ، يكون قد استخدمها مرة على الأقل. و التطبيق المشهور في استخدام عملية الترجمة هو غوغل للترجمة؛ و ما هو معروف عن عملية ترجمة هذا التطبيق محدودة على الرغم من سمعتها، و أصبحت الترجمة الآلية مفهوما مألوفا يعرفه كل الناس. والنقطة المثيرة للاهتمام حول هذا الموضوع ، هي عمل الترجمة المعقدة للغاية والتي يتم إجراؤه بواسطة مترجم يتم تنفيذه ميكانيكيا. و كموضوع للبحث تقرر التركيز على الترجمة من موقع غوغل نظرا لكونه برنامج خدمة الترجمة الأكثر انتشارا و استفادة من مستخدمي فيس بوك، تماما على نفس المستوى للتواصل. هذا البحث يعتمد على الترجمة الآلية و يهدف أيضا الى تقييم ممارسات الترجمة الآلية و قد استند أساسها الى تحليل عدة أنواع من النصوص التواصلية، و التي غالبا ما تستخدم من طرف مستخدمي الموقع التواصلية فيس بوك. فباستخدام طرق التحليل تأخذ طريقة الترجمة من اللغة الإنجليزية الى اللغة العربية أو العكس، مع الأخذ بعين الاعتبار الخصائص اللغوية و تقييم دقة و صحة الترجمة ، بدءا بتقديم مفهوم للترجمة و نظرة عن كثب عليها مرورا بتعريف فيس بوك ، ميزاته خصائصه و استخداماته المختلفة.

الكلمات المفتاحية: الترجمة الآلية، فيس بوك، غوغل للترجمة، رموز تعبيرية.

Introduction

Since the emergence of the 21st century, a lot of developments and new technologies have been brought to the world, which has made life easier and simple. (MT) which is the abbreviation for machine translation, has received much attention in recent years, due to its importance in people's life, which is made to help them translating words, sentences and paragraphs from a language into another, getting meanings without spending days and hours poring over dictionaries. Also the software can translate the content and provide a quality to the user in no time at all. Yet accuracy is not offered by the machine translation, unlike human translators, who can get the gist of a draft or documents, but machine translation only does word for word translation without comprehending the information that might be corrected later on. nowadays multimedia and communication era, people who communicates very often in order to reach a seekable goal from it, desires a strong communication between them and the other parts and partners, with zero communicative problems hopping on their way, when doing this online, machine translation is the only provided solution for them to make the communication made successfully understood worldwide. Two bosses of online communication over the globe that people seek and use very often, which are Google and Facebook. On top of the list, Facebook site is widely used by everyone lately, with its two effective means of communication, written and vocal chat.

Research Objectives

- Identifying whether the possibilities of artificial intelligence are considered successful for the hopes of Facebook, Google and Microsoft in creating hypothetical assistants, or robots for written chat and other interfaces for its users.
- Determining whether Google Translate can convey accurate translations from English into Arabic and vise versa.
- Examining if it is a successful way to provide Facebook experiences for all people in their own language, and if it is very useful in identifying writings on pictures and applications.

Literature review:

Nirenburg & Wilks stated, “It is a venerable scientific enterprise, a component of the larger area of studies concerned with the studies of human language understanding capacity. Indeed, computer modeling of thought processes, memory and knowledge is an important component of certain areas of linguistics, philosophy, psychology, neuroscience, and artificial intelligence (AI) within computer science. MT promises the practitioners of these sciences empirical results that could be used for corroboration or refutation of a variety of hypotheses and theories. But MT is also a technological challenge of the rest order. It provides an opportunity for software designers and engineers in constructing very complex and large-scale non-numerical systems and for computational linguists, an opportunity to test their understanding of the syntax and semantics of a variety of languages by encoding this vast, though rarely comprehensive, knowledge into a form suitable for processing by computer programs” (2000, p.13).

Douglas. A et al emphasized: “Automatic translation between human languages (‘Machine Translation’) is a Science Fiction staple, and a long-term scientific dream of enormous social, political, and scientific importance. It was one of the earliest applications suggested for digital computers, but turning this dream into reality has turned out to be a much harder, and in many ways a much more interesting task than at first appeared” (1994 P.1).

Methodology

The language type used in Facebook is not the same as other situations and places, as Necip Fazil Facebook engineering manager, and FB head of translation, explained during an interview for TechCrunch on Translation and Facebook, informing that language style is totally different and inaccurate using street language, acronyms and informal language. This goal of this research is to develop a translation software, which can fulfill an accurate one, the procedures of machine translation offers a difference in the depth of analysis attempting an intent or a meaning between target and source language. Eventually, using some methods and instruction such as rule-based approach and multi-engine systems, might be the preferred ways to simplify other languages for media users in general, and for Facebook users in particular, and to fulfill some goals, and artificial intelligence is the great assistant in it.

Research Question

1- To what extent Facebook users communicate successfully using machine -translation services?

This main question might be divided into sub-questions:

- Does Google Translate help Facebook users solve their communication failure problems?

-Is the mastery of the language and translation mandatory to fix Facebook communicative failures?

Hypotheses

This research hypothesizes the following:

- Machine Translation can help Facebook users to communicating successfully.

Statement of the Problem

- Today's technology is still very far from correctly addressing certain aspects of translation, machine translation services available in internet, are just like dictionaries than translators.

- The automatic translating services found online, cannot translate local terms and expressions, nor can they adapt a language to more than one country, i.e. Spanish spoken in France, differs in many ways from Spanish spoken in central and South American countries.

- A high number of errors will occur, when Machine translation systems moving through three languages instead of two, the kind of mistakes that only human can translate, moving directly from the source language into the target language.

- Facebook is changing the way texts were translated in user's messages, posts and comments, so that translations must be somewhat more accurate in the future.

Significance of the Study

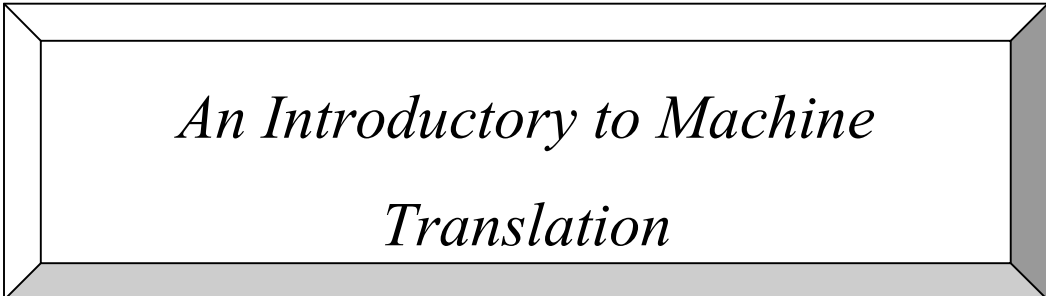
This study seeks to investigate the practices of Facebook users who use Google translate for online communication; also it seeks to clarify points and arguments regarding the effectiveness of machine translation in online global communication.

It seeks mainly to highlight that human translation is irreplaceable at least for the time being.

Limitations of the Study

- Research is conducted only to Facebook users who use Google translate.
- This study is based on the responses of people using Google translate.

Chapter One



*An Introductory to Machine
Translation*

Chapter One

1- Introduction:

Communication is an efficient method, and the computer in general and the Internet in particular, are the beating heart for people who use it. Nowadays, machine translation has a huge role, where social network users have relied heavily & enormously on it, in order to convey a certain idea to someone in another country, and in a total different language. Translation software are on top of list, are number one for translation over the net. The progress of machine translation since its emergence has the hugest amount of contents to translate, which is not enough for human translators to do a fraction of it, especially after the eruption of information revolution and the diversity of languages, that produce knowledge today, and indeed translation applications are beneficial, meanwhile it is not perfect or fully complete. Also they don't solve communication problems by providing understandable translation. Despite these efforts, machine translation introduced a range of language problems. Therefore, the computer shall have elements to receive and analyze the linguistic material to deal with bookmarked rules in its memory, then transferring those texts or sentences into a target language, in fact no concrete outcomes have been found concerning serious problems for machine translation.

This chapter sheds light on Machine translation, its concept, the emerging role, also a historical approach on it, in addition to the evolution and a close look on current Machine Translation.

2- Definition of Machine Translation:

Dimitra Anastasiou (2010) noted that machine translation is among the technological tools used in translation, and the reason of commencing the distinction by machine translation is purely evolutionary, because the communication worldwide has been promoted by the web and internet services, but to reach full connectivity the web has the language barrier to break through (p.08).

In other words, the world has witnessed lots of changes in technological tools of translation; the reason behind it is totally evolutionary, because communication globally has been promoted through internet services and web, which is obvious that it is a computerized translation, and a fully automatic machine translation form (Opt Site).

Warren Weaver said about that: “When I look at an article in Russian, I say: This is really written in English, but it has been coded in some strange symbols. I will now proceed to decode” (Looke& Booth 1995, p.18).

Artsrouni introduced a general-purpose machine that could also function as a mechanical multilingual dictionary. Troyanskii’s patent proposed not only a method for an automatic bilingual dictionary, but also a scheme for coding interlingual grammatical roles and an outline of how analysis and synthesis might work. The next MT development attempt was made in March 1947 starting from a letter that Warren Weaver of the Rockefeller Foundation sent to cyberneticist Norbert Wiener. Is appointed to conduct research at the Massachusetts Institute of Technology (MIT). In June 1952, he convened the first MT conference at MIT. This was a collaboration between Peter Sheridan of IBM and Paul Garvin at Georgetown University. Although a very restricted vocabulary of approximately 250 words and a restricted grammar were used, many MT projects were funded in the USA and the MT research throughout the world commenced. However, shortly after the beginning of MT research, a skeptical report from the Automatic Language Processing Advisory Committee (ALPAC) in 1966 was published to “rock the boat”. The ALPAC report emphasized the potential advantages of machine-aided translation: “Machine-aided translation may be an important avenue toward better, quicker, and cheaper translation” (Pierce et al, 1966: p32).

However, the report did not leave out the then current and future absence of useful MT: “[We] do not have useful machine translation [and] there is no immediate or predictable prospect of useful machine translation” (Opt Site).

2.1- The Emerging Role of Machine Translation:

“Humanity is in a great need for translation, daily and continuously. In work, study and other different fields in life. About a decade ago, machine translation was renewed to be in accordance with the needs of people and to several other factors. First, machine translation performance inevitably benefited from the staggering advances in

hardware and software witnessed by the computer industry during the last two decades of the 20th century” (Alex Yanishevsky, Para pp 2&3).

Analyzing that, machine translation with its several slips, is not unhelpful, though it is useful in retrieving accuracy. Google translation sites might be divided into lots of categories shown below, where it comes to achieving meanings, on top of the list, Facebook and social media applications. More than 986 million Regular users of Facebook and social media, chat in a regular basis, in which it gives new expressions and thought that helped to enrich translations sites. “Second, the consolidation of Web 2.0 increased the amount of data to be translated, and even caused new translation needs to arise, following the dramatic proliferation of user generated content.” (Ibid).

“Although available for decades, machine translation is now a viable, game-changing opportunity.” This is easy to understand, meaning even if (MT) is primarily considered as a blind automated way when dealing with language, giving no sense very often, or a low quality for a meaningful target text, and its readiness as it were being echoed as well (Opt. cite).

3- Evaluating Machine Translation of Google Translate:

Machine translation methods are set to obtain and determine its effectiveness and improving those systems. When evaluating translation quality, probably some acceptable translations might be correct, the two methods of machine translation are: Glass box evaluation and Black box evaluation focuses only on linguistic. This method of evaluation is only a fair comparison of systems if the systems being tested were both designed to work on data that is of the same character as the evaluation set, unless, the person testing the systems has the objective of testing robustness across different data types with variations in structure, genre, and style. Translation lately has been a challenging matter, especially English into Arabic language. Here, the efficiency of Google Translate has been evaluated for Arabic into English translation; this shall be done to compare two translations (Joseph P. Oliveet al, p.745).

3.1- Direct Machine Translation System:

According to the Sixth Framework Program for Research and Technological Development (2007), “The 'direct approach' was the rest developed; it is adopted by most MT systems where a word-for-word translation from the source language to the target language is performed. An example of the direct approach method is the GAT (Georgetown Automatic Translation) system. (Hans Uszkoreit). The translation; for example, disambiguation is performed only to the extent necessary for translation into that one target language, irrespective of what might be required for another language” [Slocum, 1985]. The GAT strategy was direct and local: simple word-for-word replacement. (Research and Technological Development programme, p.14).

3.2- Variations in Machine Translation Approaches:

Émile Delavenay (1960) has pointed out that, “The idea of automatic translation has generally been greeted by linguists and translators with a certain degree of skepticism, the natural result of their inbred knowledge of the difficulties of translation. Very few have studied the structure and content of language with the strict discipline of the natural sciences, examining them with instruments or methods equivalent to the microscope, the slow motion projector or mathematical analysis. It is scarcely surprising therefore to find that the ideas resulting from the early co-operation of linguists and electronics engineers appear on some points very far removed from what are now accepted as the main avenues of research in this field. We shall, however, be able better to understand the present state of such research if we first examine briefly the past history of these new studies, the evolution of the conceptions which underlie them, as well as of certain points of detail. Moreover, in many respects this evolution has been, and still is, dependent upon the perfecting of computers and on improvements in techniques of memory and of input. Without the hesitations and false starts of the pioneers, today's bold advances would have been impossible” (p.27).

3.2.1- From TER to HTER

Bonnie Dorr (2011) described TER to HTER system as two processes that shall be taken into consideration when translating: Beginning with explaining the adaptation of TER to a human-mediated evaluation measure, HTER. TER is defined as the measure of edit distance when editing the original MT output to exactly match a human reference translation. The scoring software simply compares the original MT output to the reference translation. But it is not necessary for MT system output to match a reference translation word-for-word in order to convey the complete meaning of the translation. (A. Lavie. 2008. Meteor). The first attempts at MT evaluation relied on purely subjective human judgments (King, 1996). Later work measured MT error by post editing MT output and counting the number of edits, typically measured in the number of keystrokes to convert the system output into a “canonical” human translation (Frederking and Nirenburg, 1994). Attempts have been made to improve MT performance by automatic post-editing techniques (Knight and Chander, 1994). Post editing measures have also been shown effective for text summarization evaluation (Mani et al., 2002) and natural language generation (Sripada et al., 2004). METEOR (Banerjee and Lavie, 2005) is an evaluation measure that counts the number of exact word matches between the system output and reference. Unmatched words are then stemmed and matched. Additional penalties are assessed for reordering words between hypothesis and reference (para.1).

3.2.2- Evolution of MT:

According to Daniel Stein (2013), the mathematical methods prove useful for cryptology; they turned out to be inadequate for more challenging and complex translation tasks. Accordingly, the subsequent systems that were developed were based on dictionaries and selectively used syntactic operations. From today’s point of view, these approaches were remarkably naïve. The constant threat of the Cold War caused euphoria in government and military circles regarding the anticipated possibilities of MT. Until 1966, great amounts of money were spent in order to develop MT systems, mostly for the English-Russian language constellation. With the exception of some practically oriented teams in Europe and the USA, research and development of MT expired. The results that have been achieved by these approaches were promising and so, in the middle of the 1970s and in the course of the rapid development of technology and the

introduction of the first personal computers, MT research was revitalized and headed to a continuously increasing popularity from the beginning of the 1980s. Thus, the results seemed very promising, especially regarding the extremely condensed time that would be necessary in order to create a state of the art MT system. Due of this, the majority of MT research switched to statistics-based MT in the following years, as it was possible to create comparable MT systems without ten years of work and the expertise of a team of linguists. A few days of time and a very good bilingual corpus (“bitext”) was enough for a prototype. Since then there has been a lot of development in statistical MT (SMT). While the first systems were only trained to compare the probabilities of co-occurring words, later approaches tried to use groups of words instead, n-grams of different sizes. But pure SMT seems to hit its frontiers as there are several shortcomings and problems confusingly similar to those of rule-based MT systems and it seems to be impossible to solve them by just using bigger corpora. Hence, the focus in MT research adapts again. Various trends are discussed simultaneously, e.g.: SMT for lesser resourced languages or example-based methods. Since the middle of the 2000s hybrid approaches that combine SMT with linguistic knowledge were often seen and a new trend of the last years is to use corpora, which are not parallel but at least comparable (p.6).

3.2.3- History of (MT):

Although the first systems of MT were built on the first computers in the years right after World War II, the history of MT does not begin, as often stated, in the 1940s, but some hundred years ago. In order to judge current developments in MT properly, it is important to understand the historical development (Ibid).

3.3- Machine Translation Nowadays

John HutchinsVerlag (2002) stated that, ” The field of machine translation (MT) was the pioneer research area in computational linguistics during the 1950s and 1960s. When it began, the assumed goal was the automatic translation of all kinds of documents at a quality equaling that of the best human translators. It became apparent very soon that this goal was impossible in the foreseeable future. Human revision of MT output was essential if the results were to be published in any form. At the same time, however, it was found that for many purposes the crude (unedited) MT output could be useful to those who wanted to get a general idea of the content of a text in an unknown language as

quickly as possible. For many years, however, this latter use of MT (i.e. as a tool of assimilation, for information gathering and monitoring) was largely ignored. It was assumed that MT should be devoted only to the production of human-quality translations” (para.1).

Human translators with their own rules and followed patterns are unique, as well as for automatic translation systems. They differ from each other in many ways, for instance machine translation systems are considered so efficient in their rapid way of translating all kinds of texts. Latest versions of net translation, are upgraded a day after another, due to the everyday practices of media users who communicate daily, those who needs it to communicate and interact with people worldwide. Also new translation services and software are enlarging and in huge growth. Most of these software and systems quality of translation are acceptable and almost accurate, with the international use of internet and computers, also with the wide developments that has brought most significant changes, with potentially far-reaching implications for the future. (Opt Site).

4- Conclusion:

As a conclusion, machine translation was and still the most used system, which contributes in helping people communicating with each other. It is known by everyone that it’s number one system used globally, in which it links and connects its users, and it enables them to communicate successfully. It can be said also; that machine translation systems are a key in successful linking, perhaps for people who use social media for contacting People who needs it and use it often, allows them to convey their messages in an understandable format, and provide them with all their communication needs.

Chapter Two



Translation & Facebook

1- Introduction:

Nowadays technology has made media, the most important communicative vehicle, for its own view of social reality, and for the influence of people's minds and thoughts through different media discourses, such as television, radio, magazines and newspaper articles. Technology, has known multiple new directions, such as YouTube, Instagram, twitter and Facebook. This last, is one of the most applicable sites that all people use daily to communicate with each other all over the globe. FB effected people on both positive and negative ways, in which it leads to new different angles. Facebook's mission is to give people the power to build community and bring the world closer together.

This chapter identifies and deals with Facebook since its appearance, till now & during these years, several changes and upgrades that FB had known so far.

2- Concept of (Facebook)

One researcher stated that Facebook is a web-based, interactive network that allows users to share information and thoughts over a wide area. It makes possible, a connection to those with shared interests across political, economic and geographic borders. (NACo–Social Media-Guides). Facebook is considered as a social media site, where everyone can sign in and creates an account on it, and it is free signing in on Facebook. It is managed by the company of Facebook. It was named after a paper notebook that holds pictures and information for individuals in a particular university or school, or a particular institution or territory. Mark Zuckerberg founded Facebook with his colleagues at Harvard University when he was a student He and his friends Dustin Moskowitz and Chris Hughes studied computer science. (عبد الحميد شمس الدين, 2014, para 1, 2, 3).

K. Scannell (2011) stated that Facebook reported about 900 million active users, and Twitter about 140 million. Both sites have substantial numbers of endangered language speakers. Indeed, we can back this claim up with detailed numbers in the case of Twitter. Last year i created a website called Indigenous Tweets that tracks everyone using Twitter in an indigenous language. Founded in 2004, FB is used by people to

remain connected with friends and family, to discover what's going on in the world, and to share and express what matters to them (para.4).

2.1- The Commencement & the Role of FB:

Sarah Phillips (2007) declared that: "Facebook, created by Mark Zuckerberg in 2004, Facebook is a social networking forum wherein individuals can share photographs, personal information, conversations and friends (Buckman, 2005)". In February 2004 Mr. Zuckerberg launched "The Facebook", as it was originally known; the name taken from the sheets of paper distributed to freshmen, profiling students and staff. Within 24 hours, 1,200 Harvard students had signed up, and after one month, over half of the undergraduate population had a profile. The network was promptly extended to other Boston universities, the Ivy League and eventually all US universities. It became Facebook.com in August 2005 after the address was purchased for \$200,000. US high schools could sign up from September 2005, and then it began to spread worldwide, reaching UK universities the following month (para.1, 2, 3).

Alphaone (2013) also stated that: Although other online sites such as My Space, Friendster and Bebo, are also designed to carry out such functions, Facebook is generally considered to be the leading site of its kind, currently consisting of over a billion users worldwide (Facebook, 2013). Facebook has increasingly become deeply integrated into user's daily routines (Debatin, 2009). Indeed, a recent study found that students spend an average of 38 minutes a day 'Face-booking' (Muisse et al, 2009). 38 minutes a day 'Face-booking' (Muisse et al, 2009). This equates to almost 9 days every year being dedicated to communication activities via the medium. With the internet increasingly being accessed via mobile devices, anytime, anyplace, and it is likely that this figure will increase over time. With these ideas in mind, it is interesting to consider sites such as Facebook as capable of revealing important information about how young adults interact with one another in the information age. Platform functions such as wall posts, comments, statuses, private messages and so on provide a vast space for a number of different text based interactions to take place (p.5).

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important information about how young adults interact with one another in the information age. Platform functions such as wall posts, comments, statuses, private messages and so on provide a vast space for a number of different text based interactions to take place. To be sure, some believe computer mediums such as social networking to be impoverished and unsuitable arenas for social interaction (Baron, 1984). And yet, due to the time people dedicate to these sites, their inherent social nature and the variety of interaction functions available, Facebook is perhaps better understood as a breeding” (Ibid).

3- History of (FB)

This researcher stated that: “Facemash used "photos compiled from the online Facebooks of nine Houses, placing two next to each other at a time and asking users to choose the “hotter person”. Facemash attracted 450 visitors and 22,000 photo-views in its first four hours online. The site was quickly forwarded to several campus group list-servers, but was shut down a few days later by the Harvard administration. Zuckerberg faced expulsion and was charged by the administration with breach of security, violating copyrights, and violating individual privacy. Ultimately, the charges were dropped. Zuckerberg expanded on this initial project that semester by creating a social study tool ahead of an art history final exam. He uploaded all art images to a website, each of which was featured with a corresponding comments section, then shared the site with his classmates, and people started sharing notes” (Harvard Crimson,2018, para.3&4).

Joshua Boyd (2018) stated: “Mark Zuckerberg took the first steps of his path at an early age. Clearly understanding the importance of coding, Zuckerberg’s father Edward taught him Atari Basic Computer Programming. It didn’t take long for his skills to become apparent. When he was 11, his parents hired a software developer named David Newman to tutor him. Newman to this day calls Zuckerberg a “prodigy”. Within a couple of years, Zuckerberg created an incredibly practical programme: ZuckNet. His father ran a dentist out of the house and wanted a simple way for the receptionist to contact him without shouting through their home. ZuckNet, which worked like an internal instant messaging system, did just that. While attending Phillips Exeter Academy, an elite boarding school, his drive to create did not abate. He attracted interest from AOL and

Microsoft. The wanted to buy Synapse, a piece of software that learned a user's music taste through AI and listening habits he created with a friend, and give him a job. Ultimately, he turned it down and set his sites on Harvard. It's here where the origins of Facebook can be found. It's a decision, he unlikely regrets now" (para.1, 2, 3, 4).

Mary. B (2018) described that: "In 2003 Zuckerberg a second-year student at Harvard at the time, wrote the software for a website called Facemash. He put his computer science skills to good use by hacking into Harvard's security network, where he copied the student ID images used by the dormitories and used them to populate his new website. Interestingly enough, he had initially created the site as a type of "hot or not" game for fellow students. Website visitors could use the site to compare two student photos side-by-side and decide who was "hot" and who was "not." Facemash opened on October 28, 2003, and closed a few days later, after it was shut down by Harvard execs. In the aftermath, Zuckerberg faced serious charges of breach of security, violating copyrights and violating individual privacy for stealing the student photos he used to populate the site. He also faced expulsion from Harvard University for his actions. However, all charges were eventually dropped" (para.2, 3, 4).

This part concludes that Facebook was about to be sold to a bigger company through My Space and News Corp, the sale of social networking website, also in September 2006 FB and Yahoo in serious talks occurred about owning FB with prices reaching as high as \$1 billion. It was declared by Microsoft purchased 1.6% share of Facebook for \$240 million On October 24th, 2007, also lots of investments was added to Facebook credit.

3.1- Messenger in (FB):

Jon Kelly (2010) stated that: "Instant messaging (IM), once the mainstay of teenage gossips, techie know-it-all and office time-wasters everywhere, looks as though it is in trouble. Just a few years ago, it was meant to be the future. More immediate than e-mail, less fiddly than texting, sending an IM was widely expected by many technology pundits to become our preferred mode of online communication, whether socially or in the office - or socially in the office, for that matter". It is a Facebook application that

allows users to chat with people and initiate conversations groups, sending emojis, gifs and pictures. This app is available within windows, Android and AOS; it supports some languages, Arabic language included. All people can set a Messenger account through a phone number, it doesn't have to be through Facebook to log in, and recently people are using it through their smart phones everywhere and all they have to do is switching their phone data on and go online. In July 20th, 2016 MSN Company published on its official site, announcing that the app reached a billion users (1.000.000.000), after it was in early 2016 celebrating its 200 million users, it made this enormous number only within 6 months. In August 30th, 2016 the MSN Company stated that the app supported instant video. Since most of us is using messenger, what if has amongst, a friend who is a translator to help him communicate with foreigners, not only for a period of time. This app is available there 24/7 and is always there to answer your questions or translates what you seek. The previous version of messenger was (Windows Live Messenger) it was even more globally used and spread more than GTalk. Now messenger is updated to more and better version to go swimmingly with FB application (para.1, 5).

3.1.1- Translation & (FB):

The author shows the relation between translation and Facebook: given suitable fonts and keyboards, it is possible to create content in virtually any language on any of the sites mentioned above. That said, the menus, navigation, and prompts on the sites themselves are only very rarely made available in endangered languages. So while you may be able to post status updates to Facebook in Ojibwe or Kashubian, you are at present forced to use the site in English or some other major languages. To their credit, Facebook have created an innovative and powerful system for translating their site, relying almost entirely on volunteer translators. One nice feature of this system is that translations can be done "inline". This means that if, during your normal day-to-day use of Facebook, you see a non-translated message, and you can click it and provide a translation on the spot. This approach provides a measure of instant gratification that is unavailable in most traditional software translation contexts, where translations must be submitted to developers, who compile test versions, which are then made available to the translators for proof reading and testing. Inline translation also helps with quality since the messages to be translated appear 'in context' on the site. As of March 2012, Facebook reported about 900 million active users, and Twitter about 140 million. Both sites have

substantial numbers of endangered language speakers. Indeed, we can back this claim up with detailed numbers in the case of Twitter. Last year I created a website called Indigenous Tweets that tracks everyone using Twitter in an indigenous language (many, but not all, of these are endangered languages). In fact, the idea was to allow speakers from small language communities to discover each other more easily on a site where endangered language voices are easily drowned out by the hundreds of millions of tweets each day in English, Japanese, Spanish, etc. To date we have identified more than 7.5 million tweets by 46000 users written in 136 indigenous languages. In Facebook 4.5 billion automatic translations are performed daily. Before, social networking sites created an easy method to translate from one language into another, but now, FB created a faster, more accurate system of translation using artificial intelligence. (FB) users speaks dozens of languages globally, and right now, the social network supports translation of over 45 different tongues; means if a person is an Arabic language speaker confronted with French, or an English speaker seeing German, he will see a link set under a link says “See Translation”, pressing it will translate the sentence or close its meaning to the reader. (Kevin Scannell, 2012, p.2).

3.1.2- The Concept of Emojies

Ye Tian et al (2017) identification of Emojies is that:” Emoticons, such as “ 😊 ” are representations of facial expressions using punctuation symbols. They were first used by the computer scientist Scott Fahlman in 1982 as a “joke marker” (Fahlman, 2012). Recently, emoticons have been gradually replaced by emojis, which are graphic symbols representing facial expressions (e.g. smiling), gestures (e.g. thumbs up), objects (e.g. vehicles) and even actions (e.g. dancing). They have gained popularity rapidly in smartphone texts, emails and social media. On certain platforms (e.g. Instagram), in some countries (e.g. Finland and France), over half of all online messages contain emojis, and this trend is going up worldwide (Dimson, 2015). Emojis have attracted an increasing amount of research interest in sociology and in computer science. Sociological research is interested in how people with different demographic profiles (age, gender and culture) use emoticons and emojis, how it affects people’s relationships and how it fits the cultural contexts (Huffaker and Calvert, 2005; Sugiyama, 2015; Wolf, 2000; Kelly and Watts, 2015). Research in computer science has primarily focused on using emoticons and emojis as a cue for automatically analyzing the sentiment of short messages,

commonly tweets (Hu et al., 2013; Novak et al., 2015; Thelwall et al., 2010; Boia et al., 2013; Zhao et al., 2012; Hogenboom et al., 2013). It was found that positive emoticons and emojis are used more frequently than negative ones (Novak et al., 2015). The polarity of emoticons and emojis is relatively well correlated with the perceived emotional polarity of the entire text, but is poorly correlated with the perceived emotional polarity of the accompanying linguistic text alone (Boia et al., 2013). Using emoticons and emojis as a cue for sentiment analysis of tweets results in better accuracy compared to using the linguistic text alone (Hogenboom et al., 2013; Huet et al., 2013; Zhao et al., 2012), to a level between 60% to 75%. Emojis, tend to be a better indicator for an overall negative tweet than a positive one” (p.11).

Simo Tchokni et al (2014) states that: “Emojis use the following features relating to emoticon use were included: average number of emoticons per tweet and fraction of positive/negative emoticons used. We also use 5 binary features to bin the average number of emoticons per tweet into 5 intervals. An emoticon’s sentiment is determined using an “Emoticon Sentiment Dictionary”. We created it by manually labeling the emoticons found in our datasets as positive or negative, guided by Wasden’s Internet Lingo Dictionary (p.6).

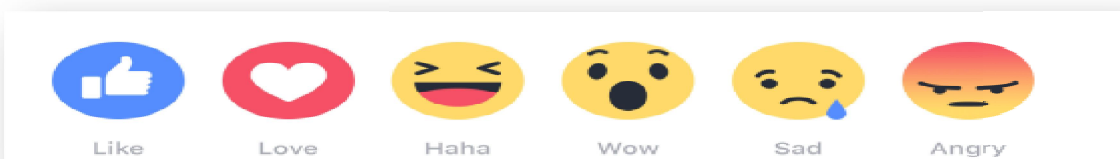


Figure1: Facebook Emojis.

Emoticons or Emojis, were first created by Shigataka Curità, between the years 1998 and 1999, they were simple and easy. By time and in 1997, Nickolas Lofraney realized started creating moving smiley colored faces, in order to go along with the American system for data exchanging made of normal numeration symbol, and the word emoji was added to the oxford dictionary in 2015, and they realized how effective is this word on the population, Soft key founders realized also that the most used emoticon used was the one (face with tears of joy) globally. Lately, emojis are widely used in FB, Emails, twitter, instagram and other site, getting really popular by time. Emojis used in

Emails are useful for marketing and shall price up notifications push in messages and so on; between platforms, emojis look different which convey different meanings, for instance in FB isn't the same as other communication platforms. "Facebook reactions, released in February 2016, are an extension of the old "Like" button. Its six options (Like, Love, Haha, Wow, Sad and Angry) are represented by slightly edited versions of several long-established Unicode emojis, and they allow for a more nuanced expression of how users feel towards a post. The emotions underlying these six reactions are supposed to be frequent and universal. If we assume that Facebook reactions reflect the readers' overall sentiment towards a post, we can investigate the distributions of emojis in readers' comments, under different emotional attitudes. Thus, if there is a mismatch in the emotional polarity between the overall profile of reactions (e.g. dominantly "Angry" - negative) and the sentiment of the emojis in the comments (e.g. "thumbs up" - positive), these emojis are likely used not to directly reflect emotions." Diving deeper, emoji is a loanword from a Japanese term, means smiley faces or symbolic pictures (GIFS) used in web and electronic mails. The word can be divided into two (Emoji) and it is derived in Japanese out of the word sculpture, which is its origin. E means a picture or image. Emojis refers to a specific symbol or representing a given reaction. (Opt. site).

4- Facebook Users & MT Using:

The researcher declared that: "We switched from using phrase-based machine translation models to neural networks to power all of our backend translation systems, which account for more than 2,000 translation directions and 4.5 billion translations each day," Facebook engineers Juan Miguel Pino, Alexander Sidorov and Necip Fazil Ayan wrote in the company's developer's blog. Facebook, which uses machine translation to translate text in posts and comments automatically, announced in a blog post on August 3, 2017 that it has completed transitioning to a neural machine translation (NMT) system. Fayan said at the time the NMT at Facebook has been deployed in 15 systems, including popular language pairs English to German, English to Spanish, English to French, and Turkish to English. Now with the full rollout of NMT, it is hoping that the new model could "provide more accurate and fluent translations." Will Facebook's two billion users really see better translations across the social network and in its two other platforms, Instagram and Workplace? The blog authors admitted that translating Facebook posts and comments is difficult. "We need to account for context, slang, typos, abbreviations, and intent simultaneously," they explained. Improvements in

translation quality, especially in high-traffic languages, will be worth watching (Eden Estopace). Machine translation is used and still utilized by people all over, Facebook users are on top of the list. The research indicated that even when FB users and other media platforms use very often MT, even if it doesn't convey the accurate translation. This suggest that they have a preference for MT, however some sites offer usually well, accepted and meaningful translations; this might have distorted the results and assure that not all machine translations aren't accurate and meaningless. Language translation is one of the ways we can give people the power to build community and bring the world closer together. It can help people connect with family members who live overseas, or better understand the perspective of someone who speak a different language. We use machine translation to translate text in posts and comments automatically, in order to break language barriers and allow people around the world to communicate with each other. Creating seamless, highly accurate translation experiences for the 2 billion people who use Facebook is difficult. We need to account for context, slang, typos, abbreviations, and intent simultaneously. To continue improving the quality of our translations, we recently switched from using phrase-based machine translation models to neural networks to power all of our backend translation systems, which account for more than 2,000 translation directions and 4.5 billion translations each day. These new models provide more accurate and fluent translations, improving people's experience consuming Facebook content that is not written in their preferred language (Juan MP, 2017, para.2, 3, and 4).

5- Conclusion

The emphasis of this chapter, is to cast light on Facebook users and through practices on social media in general, and Facebook in particular. Youth is an important social group in every society, has its own characteristics including the spirit of adventure and excitement and love of discovery and recognition of new things. And this has made young people the most popular social groups on the Internet, and the huge field of self-realization and its validation through participations and expression of opinions, and compensation of what people miss in their surroundings.

The only remaining obstacle is the lack of knowledge of English, resulting social communication problem, these difficulties and obstacles face users to use it effectively, whether technical or political such as monitoring what is published on internet or private blogs on Facebook, or other social media platforms. Languages are objectively positive in their ease of communication.

Chapter Three

Practical Part:

The evaluation of Facebook users practices

1- Introduction

This chapter will deal practically with the use of translation programs Google translating several patterns, and investigating the role of these programs in an attempt to find an applicable solution in which it contributes an advantage of an accurate translation, relying on Google Translate as a translating website, testing its ability to achieve the desired results. In other hand translation website are used also as translating programs. This study also, contains the analysis of different Facebook chat conversation between two different people, with a different language background, one is a native speaker, and the other uses Google Translate to gain a successful communication between the two parties.

2- Corpus Description

In this study, we are going to investigate and see to what extent can Google translate determine accurate or close translations, in order to find out whether it can facilitate communication between people from different backgrounds.

2.1- Methodology

Since it was difficult to find previous conversations, we selected two groups of pairs, discussing on a written chat through Facebook, one of them masters English, and the other is using Google translate software to understand and communicate with his pair.

Both groups were separated and put in different spots.

3. Data analysis



Figure 2: translated by Google Translate.

As follows is a table containing the whole conversation when it was translated by Google translate user, in blue pole, in both languages in order to respond with pair in gray pole.

Hello	مرحبا
Praise be to Allah. How are you?	الحمد لله بخير و كيف حالك أنت ؟
I am a college student	أنا طالب جامعي

Table 1: Writings in blue poles explained as shown in Google Translate.

Hello How are you?	مرحبا كيف حالك
I am fine What do you do?	أنا بخير ماذا تعمل؟
Great	عظيم

Table 2: Writings in gray poles explained as shown in Google Translate.

As shown in the discussion above, the conversation went very good, relying on its simple and facile usage of phrases & sentences. As for the second part, this conversation with several words, with slangs included, in which it was occurred new translations with inaccurate meanings, and in some cases, it was out of range. This conversation here is going to be divided into two parts; first part contains the two first gray and blue poles.

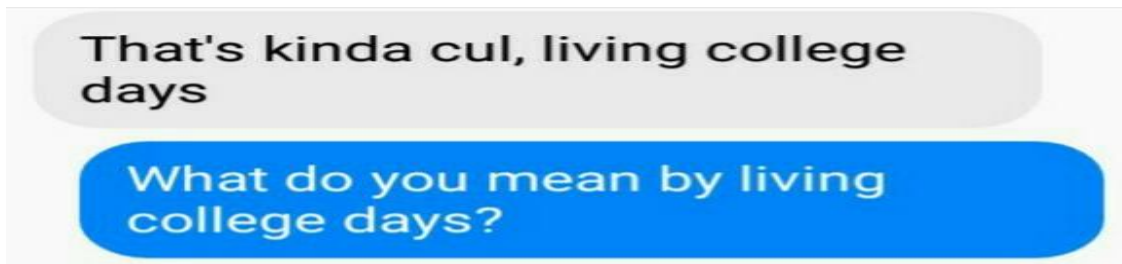


Figure 3: Second part of the conversation translated by Google translate.

This table shown under, is the two first gray and blue pole translations

That's kinda cul, living college days	هذا هو كولا كيندا , أيام الكلية الحية
---------------------------------------	---------------------------------------

Table 3: A table representing checking machine translation.

The receptor shall not understand what was translated, because it is out of context, and totally inaccurate, but it was shown on Google translate “DID YOU MEAN” in order to fix the slang “Kinda & Cul”.



Figure 4: translated by Google Translate.

After clicking the “Did YOU MEAN” sign as shown on the figure in red above, the translation took a turn for the better, for the first section of the sentence before the comma (,) as shown under, on the figure.



Figure 5: translated by Google Translate.

As for the sentence after the comma, the second sentence wasn't translated accurately where it took a different angle, as described in Arabic on this figure above, أيام الكلية الحية

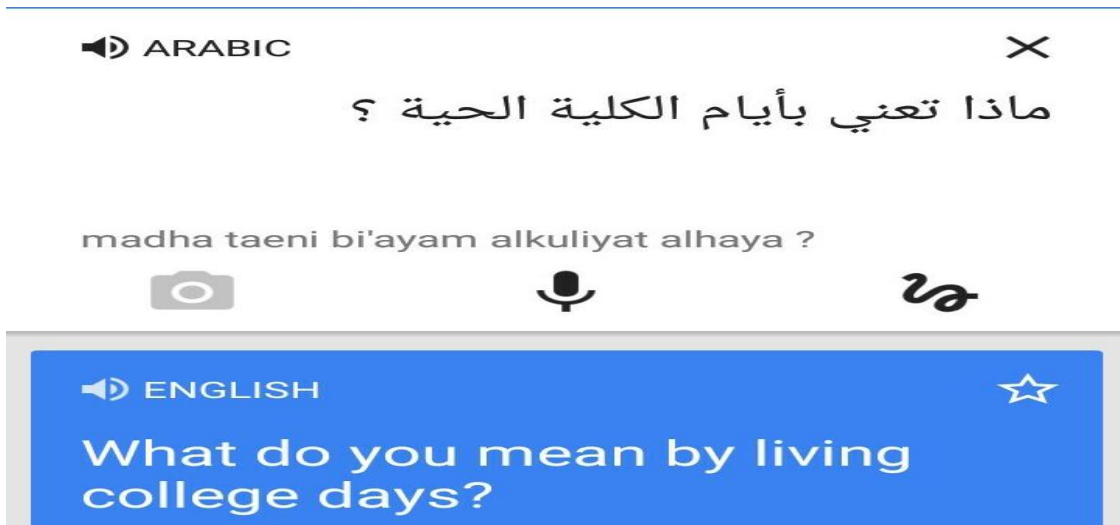


Figure 6 : translated by Google Translate.

As it is seen on this figure above, that the pair who uses Google translate, couldn't understand the word « collage days », in which it was translated into « الكلية الحية » where the sender meant : "أيام الكلية" or "الحياة الجامعية".

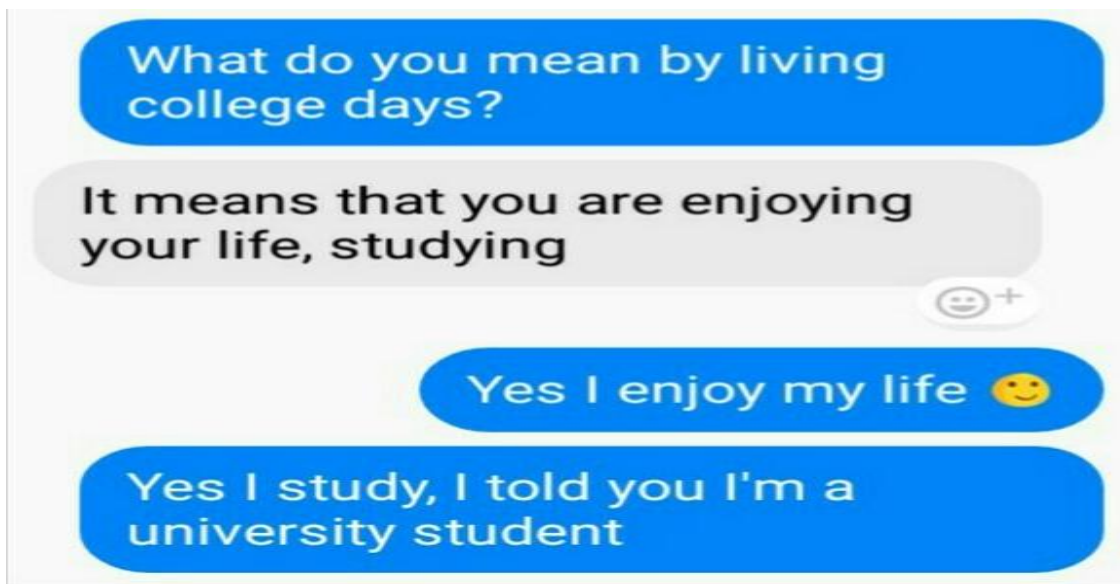


Figure 7 : Translated by Google Translate.

The following figure, is the supplement to the conversation, and as shown, the blue pole pair, answered two different answers, the first answer is for the sentence before the

comma, then the second answer which is result for the word “studying” after the comma, which it was translated in Arabic into "تدرس", that was shaped in a form of a question, as shown in this figure under.



Figure 8: Translated by Google Translate.

These previous examples, were an explanation of the automatic translation of Facebook users. It can be seen through it, that the machine translations sometimes have some shortcomings and in its simplest dealings with sentences. Within this coming example, it shall be seen whether machine translation is successful in transmitting concepts and information and conveying them, from one language into another sometimes successfully or not. Down here, there is a figure, showing a conversation between two pairs, part (A) has the blue pole, as for part (B) has the gray one. Note that the sentences in red, are the sentences that the first party translated through Google translate.

Peace thanks for acceptance of friendship	سلام شكرا لقبول الصداقة
على الرحب و السعة	You're welcome Who are you, and where are you from ?
I'm Amin,24, from Algeria seized the city recognizes the state of Ouargla	أنا أمين,24, من الجزائر بالضبط من ولاية ورقلة

سعدت بلقائك , لكني لم يستطع فهم كل ما قال , لكن لا بأس بذلك ماذا تعمل ؟	Nice to meet you, but I couldn't understand all what you've said, but it's ok. What you do in life?
I'm a college student	أنا طالب جامعي
عظيم !في أي مجال	Great ! what field ?

Table 4: Written translations in previous figures

In the third column of the table we see that the translation did not take a correct turn in delivering the correct translation, so the translation for:

“أنا أمين,24, من الجزائر بالضبط من ولاية ورقلة” was as follows: “I'm Amin,24, from Algeria seized the city recognizes the state of Ouargla”, which is out of context, and as a result to that, part (B) couldn't understand what was written responding: “Nice to meet you, but I couldn't understand all what you've said”, and as it is shown in column four.

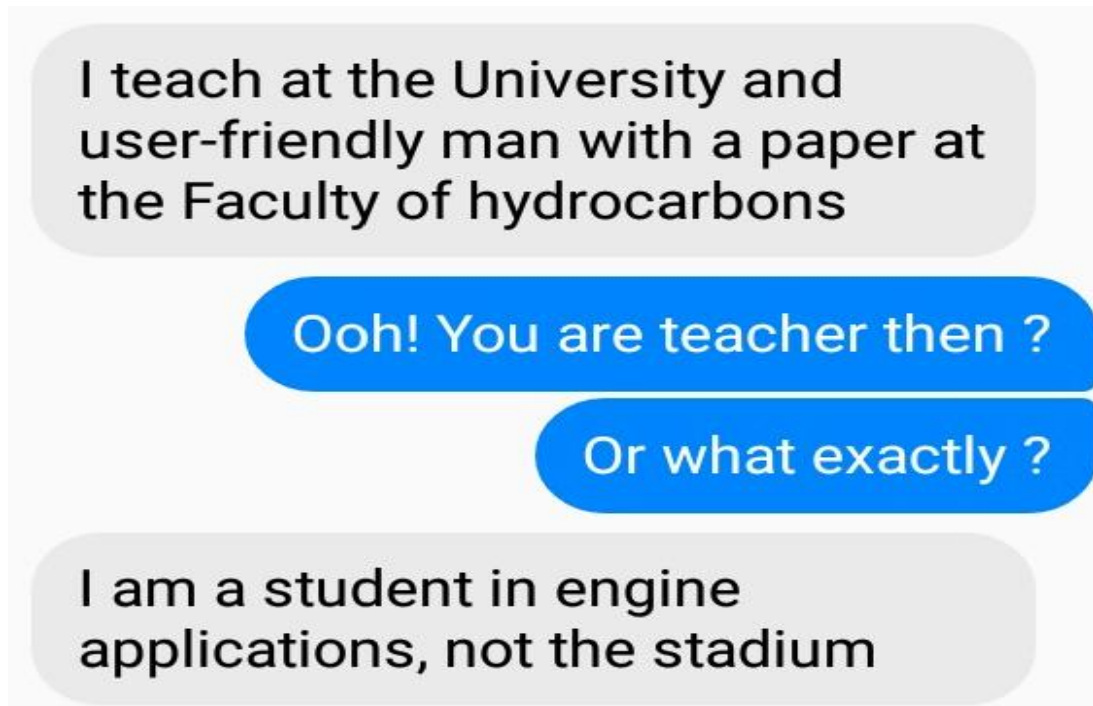


Figure 9: Second part of the conversation translated by Google translate.

In this figure shown above, it is obvious and clear that translation lost its appeal on translation, in which it provided a wrong translation, as illustrated by the first gray part. As follows, is what's written on it:

“I teach at the university and user-friendly man with a paper at the faculty of hydrocarbons”

and in Arabic part (A) wrote

“انا ادرس في جامعة قاصدي مرباح في كلية المحروقات”.

Changing a letter, changes the whole meaning, part (A) didn't include the (ء) in the Arabic word (الدرس) replacing it with the letter (ا), and at the end it leads to translating the word into “I teach”.

Also, the second gray pole missed its path to an accurate translation, in which part (A) wanted to correct the sentence and explaining more to make his idea clearer.

As follows is what he wrote in Arabic to translate into English using Google translate.

“لا أنا طالب جامعي و لست أستاذ”

That resulted what is shown on the figure above, which is

« I am a student in engine applications, not the stadium ».

4- Conclusion

To conclude, the practical chapter of this research is about finding to what extent can Facebook users who do not master English language can successfully communicate using the translations websites Google Translate, though which is attempted to investigate the effectiveness of machine translation on Facebook written chat of users, and as a whole to demonstrate if this software can be a reliable tool of translating this kind of texts, taken in consideration their nature, that can be considered as a new way of effective communication tool. The results show a lot of outcomes were aiming that Google translate cannot provide accurate translations all the time. Google translate remains as an attempt to facilitate communication only for words and simple phrases, as for Complex paragraphs and sentences remain inaccurate.

As a final result, Google translate is there only to translate words and simple phrases.

Conclusion

Social media is about establishing and building relationships. FB isn't just for university and college students as well it is not an evil time-waster, or something scary or irrelevant for its users, meanwhile, FB is a tool for connecting people with those around. And as with any social media tool, users with knowledge of English language have the opportunity to use it even easier in communicating with others. But yes, sometimes it can be difficult when it comes to the way people neglect the fact that not all languages can be understood. And yes, it can be a quite feat to convince some users to use translations through social media. Yes, it is possible armed with the right knowledge and metrics, and if used well either. People do not feel a bond between them and what they learn in English and living reality, and what stands between them and their beliefs of this language, and that can be achieved through ongoing reading of book, newspapers magazines and listening to modern mains such as radio, watching TV or using internet, although it's abandoned and will not be appreciated, this way it will be hard for them to contact or to react with others, and losing some opportunities. Communication in general, become nowadays an essential mean for people to contact with each other, partially online communication become even more important, because all people now use internet. This research is conducted to evaluate machine translation that Facebook users follow in order to translate words, expressions & sentences to enable them connect and interact with others, and to determine to what extent can Facebook users receipt their thoughts and ideas to others, using some translation software and applications, which enables them to understand and get the other part to receive the targeted idea. In this research, Google translate was considered and taken as a translating app which is used on internet and people who use Facebook, to know how translation is done and if it was translated properly, in a way the receiver would understand what sender is conveying.

Through the research findings, it was found that Facebook users who utilize Google Translate finds, in which this application transfer the whole sentence almost like human translation when it comes to translating words and simple sentences, but it provides inaccurate equivalences that pushes the whole sentence or text, away from the original meaning, as were seen in the samples shown above in all patterns. Also using

Google Translating system each time repeatedly, enables its users to catch and learn new words and vocabularies with the function of listening, that helps them improving their abilities, the more they listen to it, the more they develop their thinking strategies and usage of translation, and their professional conversation techniques. Although Google translate rarely provides some fruitful goals, it doesn't help its users in general and Facebookers in particular, solve their communication failure problems.

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جامعة قاصدي مرباح - ورقلة
كلية الآداب واللغات
قسم اللآداب و اللغة الانجليزية



مذكرة

ماستر أكاديمي

ميدان : الآداب واللغات الأجنبية

اختصاص : الترجمة و علم الترجمة

بعنوان

تقييم الترجمة الآلية

عبر ممارسات مستخدمى الفايسبوك

من إعداد الطالب : أحمد فيصل طبال
مذكرة مقدمة لاستكمال متطلبات نيل شهادة الماستر في اختصاص
الترجمة و علم الترجمة

تمت مناقشتها علنا بتاريخ

2018/05/06

أمام اللجنة المكونة من:

رئيسا
مشرفا و مقرا
مناقشا

✓ السيدة سميرة السايح لمبارك
✓ أ.د جمال قوي
✓ د. محمد كوداد

السنة الجامعية: 2017/ 2018

ملخص الدراسة باللغة العربية

مقدمة

تهدف هذه الدراسة لإيضاح دور الترجمة الآلية لمستخدمي فيس بوك، كما أنها تسلط الضوء على مستخدمي الدردشة الذين لا يملكون مهارة التحدث باللغة الانجليزية و يلجئون عبرها لاستعمال الإنترنت عموما و ترجمة غوغل الآلية لمساعدتهم في عملية التواصل و تسهيل الاتصال فيما بينهم. مروراً بتعريف الترجمة الآلية تاريخها و بعض العناصر الملمة بها. و فيس بوك و الذي يعتبر المحور الرئيسي الذي انطلقت بموجبه هذه الدراسة، و ختاماً بتقديم عينة قامت عليها الدراسة. كما تركز هذه الدراسة أيضا على معالجة الصعوبات التي يواجهها مستخدمي فيس بوك الذين يواجهون صعوبات في التواصل مع الآخرين. اتبعت الدراسة أيضا منهجا وصفيًا في تحليل النتائج من خلال تجميع عينات من الدردشة المترجمة عبر غوغل لأشخاص لا يتقنون اللغة الانجليزية. و من خلال هذه الدراسة وصلت النتائج أن للترجمة الآلية دور في مساعدة الأشخاص في التواصل و ما الى ذلك. و اسفرت الدراسة أيضا أن ترجمة غوغل بإمكانها فقط ترجمة المصطلحات و الجمل البسيطة، و احيانا تكون الترجمة صحيحة أو قريبة من الصحة، و تحتاج فقط لبعض التعديلات من قبل الانسان ليقوم بالتدقيق و النظر بمدى صحتها. بمعنى اخر يمكن لمستخدمي فيس بوك الاستعانة أحيانا بمستخدمي اللغة، أو بالأحرى استخدام لغة عربية بسيطة و سهلة، بحيث ان تكون سهلة لمترجم غوغل ترجمتها بكل بساطة. و تناولنا في هذه الدراسة دور الترجمة الآلية في الحفاظ على الحوار بين اللغات و الثقافات. فالإتصال قبل كل شي هو تبادل الافكار و المعلومات بين طرفين أو أكثر. فبالترجمة يمكن التعرف على مختلف الثقافات، تقاليد، قيم و كذا المعتقدات. و هي وسيلة حلول عملية للشعوب حتى تتواصل فيما بينها و تتفاهم و تنثري بعضها البعض. بمعنى آخر هي انفتاح على الآخر.

تطرقنا في هذا البحث أيضا بإعطاء لمحة عن موقع فايسبوك، و الذي أسس من طرف شاب يسمى مارك زاكربيرغ و هو يهودي امريكي من مواليد أربعة و ثمانين تسعمائة و ألف. حيث أنه موقع يتيح التواصل بين الأفراد و الجماعات في كافة أنحاء العالم؛ و لموقع فايس بوك العديد من الايجابيات حيث أنه وسيلة لنشر الافكار و ما الى ذلك عن طريق الدعاية و الإشهار كما يعتبر نافذة للإعلام و نشر الأخبار المختلفة فور حدوثها، دون أن ننسى أنه سبب للتسلية و الترويح عن النفس

ووسيلة للحصول على الأخبار و مختلف المجالات و باب للتواصل مع الأصدقاء و الاقارب الموجودين في اماكن بعيدة. دون أن ننسى سلبيات هذا الموقع من ضياع للوقت و هدر للأوقات وسيلة للفساد الأخلاقي و النقاشات الطويلة التي تحدث احيانا و تسبب الخلافات. في ظلّ شبكة الانترنت تمّ تطوير بعض البرمجيات التي تقوم على أساس تقديم خدمة التواصل الاجتماعي عبر سَكّان الكرة الأرضية وفي أي مكان تصل إليه تكنولوجيا الإنترنت، ومن أبرز هذه التطبيقات أو البرمجيات هو تطبيق فيس بوك، وهو برنامج يُتيح التواصل بين الناس ممّن لهم حسابات خاصّة على هذا البرنامج حيث أنّ هذه الخدمة تتوفّر وبشكلٍ مجانيّ لأعضاء فيس بوك، وتحدّثنا أيضا في هذا المقال عن دور فيس بوك و علاقته بالترجمة، لاسيما أن للفيس بوك مزايا لا ترفض كإتاحة فرصة التواصل بين مستخدميه أيا كانت صفاتهم.

اشكالية البحث

كما يهدف هذا البحث لإبراز و معاينة صعوبات برامج الترجمة الآلية عبر الانترنت و مدى دقتها في إيصال المعنى الأقرب أو الصحيح، و التي يواجهها مستخدم فيس بوك أثناء الدردشة مع أشخاص بلغة مغايرة، و ذلك لإيجاد بعض الحلول المناسبة و التي قد تساعدهم في اداء عملية الترجمة الآلية بطريقة صحيحة. فكان طرح الاشكالية التالية مرفقة بإشكاليتين فرعيتين:

الى أي مدى يمكن لمستخدمي الترجمة الآلية التواصل بشكل ناجح باستخدام برامج الترجمة عبر الانترنت؟

هل بإمكان ترجمة غوغل أن تساعد في حل تعذر التواصل بين مستخدم فيس بوك ؟

هل إتقان كلا من اللغة و الترجمة إلزاميين في إصلاح إخفاقات التواصل عبر فيس بوك؟

فرضية البحث

وُضِعَتْ الفرضية التالية و التي يمكن لها تأكيد الاشكالية و هي :

يمكن للترجمة الآلية مساعدة مستخدم فيس بوك في التواصل بشكل سليم

ليس للترجمة الآلية القدرة في مساعدة مستخدم فيس بوك في التواصل بشكل سليم

منهجية البحث

هذا البحث مقسم لقسمين، قسم نظري و آخر تطبيقي. ففي القسم الأول قدمت نظرة عامة حول الترجمة الآلية، و ذلك بتعريفها و ذكر بعض النظريات و التي من شأنها المساهمة في شرح

عملية الترجمة. ثم يليها كذلك بعض النظريات و نظرة عامة حول الترجمة الآلية و ما قاله بعض أهل اللغة و الاختصاص حولها. أما في القسم الثاني، أي القسم النظري كان الاهتمام مركزا على اثبات الفرضية و الاشكال المطروح أعلاه، و ذلك بجمع بعض العينات من دردشات أجريت عبر فيس بوك بين طرفين، اضافة الى مناقشة النتائج المتحصل عليها.

الفصل الأول : مدخل الى الترجمة الآلية

مقدمة

ان الترجمة الالية جزء لا يتجزأ المعالجة الالية للكلمات و الجمل و النصوص. و تهتم بترجمة اللغة الى لغات أخرى باستعمال الرقمنة . الأساسى هو تيسير المهام للفئات المختلفة الناطقة بلغات أخرى. و تعرف بأنها تدخل الذكاء الاصطناعي عن طريق المساعدة الرقمية و الحواسيب لأداء عملية الترجمة عن طريق الأصناف اللغوية و المعرفية المخزنة بفعل تراكيب و مصطلحات يسترجعها في مقابل اللغة التي يترجم منها. و قد استفاد الجميع من خدمات الترجمة المجانية عبر الإنترنت مرة واحدة على الأقل في الحياة. و يعتبر غوغل للترجمة التطبيق الوحيد و المستخدم ومع ذلك، وما هو معروف عن عملية الترجمة محدودة على الرغم من سمعتها. أصبحت الترجمة الآلية مفهوما مألوفاً يعرفه كل الناس، والنقطة المثيرة للاهتمام حول هذا الموضوع، هي عمل الترجمة المعقد للغاية والتي يتم إجراؤه بواسطة مترجم يتم تنفيذه في ميكانيكيا، و كموضوع للبحث تقرر التركيز على الترجمة من غوغل، نظراً لكونه برنامج خدمة الترجمة الأكثر انتشاراً واستخداماً على نفس مستوى التواصل، يهدف هذا البحث الذي يعتمد على الترجمة الآلية الى تقييم ممارساتها عبر مستخدمى فيس بوك، اضافة لإجراء مقارنة بين خدمات الترجمة، وقد استند أساسه إلى تحليل عدة أنواع من النصوص التواصلية التي غالباً ما يستخدمها مستخدمو فيس بوك، حيث تقوم الترجمة من لغة الى أخرى مع الأخذ بالميزات اللغوية و تقييم وضوح تلك الترجمة وذلك بمساعدة طريقة تحليل الأخطاء و التمعن بالترجمة من خلال تعديلها.

تطور دور الترجمة الآلية

لقد كان هناك نقاش طويل حول موضوع ما إذا كانت الترجمة الآلية والترجمة بمساعدة الحاسوب قد تحول المترجمين إلى مجرد محررين، مما يجعلهم أقل أهمية من برامج الحاسوب. أدى الخوف من حدوث هذا إلى رفض معين للتقنيات الجديدة من قبل المترجمين، ليس فقط بسبب احتمال فقدان العمل والمكانة المهنية، ولكن أيضاً بسبب القلق بشأن الانخفاض في جودة الإنتاج. ويرفض بعض المترجمين الترجمة الآلية بالكامل، لأنهم يربطونها مع وجهة نظر أن الترجمة هي مجرد منتج آخر يمكن تسويقه على أساس حساب الاستثمار مقابل الأرباح. ويعرفون الترجمة على أنها فن له معايير جمالية خاصة به لا علاقة لها بالربح والخسارة، ولكنها بالأحرى مرتبطة بالإبداع وقوة الخيال. لكن هذا ينطبق في الغالب على أنواع معينة من الترجمة، مثل النصوص الأدبية التي يلعب فيها تعدد المعاني والدلالات والأسلوب دوراً حاسماً. ومن الواضح أن الحواسيب لم تستطع حتى أن

تبدأ في استبدال المترجمين البشريين مع مثل هذه النصوص. وحتى مع الأنواع الأخرى من النصوص، فإن تحليلنا لأدوار وقدرات كل من الترجمة الآلية والترجمة بمساعدة الحاسوب يبين أن كلاهما غير كفاء أو دقيق بما فيه الكفاية للتخلص من ضرورة المترجمين البشر. وفي الواقع، فإننا سنكون أكثر دقة إذا وصفنا ما يسمى بالترجمة الآلية بأنها ترجمة بمساعدة الحاسوب أيضا. وينبغي أن يعرف المترجمون ويتعلموا استغلال إمكانات التقنيات الجديدة حتى تساعدهم على أن يكونوا أكثر صرامة واتساقا وإنتاجية بدون الشعور بأنهم مهددين. كما أن لخدمتي الترجمة على الانترنت ميزة خاصة تتمثل في الاكتشاف الذاتي للغة، حيث أنهما يمكّنان المستخدم من التعرف على اللغة التي تحتاج للترجمة آليا في حالة عدم تمكنه من التعرف على اللغة. وبغض النظر عن رؤية النسخة المترجمة، يمكن للمستخدم أيضا سماعها عن طريق خيار الاستماع. كما أنهما يعطيان للمستخدم سلطة اعطاء درجة للترجمات. وبالإضافة إلى ذلك، تسمح كلا الخدمتين للمستخدم بإضافتهما مجانا على موقعه على الانترنت لمساعدة زوّاره.

تقييم الترجمة الآلية لترجمة غوغل

تطور الترجمة الآلية أوصلها حتى الآن إلى مرحلة ترجمة العبارات بطريقة منفصلة، بمعنى أن الموقع عندما يترجم فإنه يترجم كل عبارة على حدا بطريقة منفصلة عن الجملة و عن ما قبلها و ما بعدها، لذلك بالطبع أنت تلاحظ أن السياق العام للنص غير صحيح عندما تستخدم أي موقع للترجمة وهذه هي الجهة السلبية للترجمة الآلية، و لكن بالطبع لها فوائدها الكبيرة التي لا يمكن إنكارها.

نبذة تاريخية عن الترجمة الآلية:

إن تطور تقنيات العالم والاتصال التي مّست مختلف المجالات أدى بالباحثين إلى التفكير في استعمال الآلة للقيام بترجمة آلية والاستغناء عن المترجم البشري. ويعود تاريخ الترجمة الآلية إلى ما قبل منتصف القرن الماضي سنة 1333 حين تمّكن الفرنسي جورج أرسطروني من اختراع آلة أطلق عليها اسم "العقل الإلكتروني لترجمة الكلمات، وتزامن هذا الاختراع مع اختراع الروسي بيتر ترويانسكي آلة مشابهة لها. وفي سنة 1395 قام العالم ج. برنال من جامعة لندن بوضع تصميم نظام للترجمة الآلية بالتعاون مع الأمريكيين و. ويفر و أندرو بوث وأثناء الحرب الباردة قامت الولايات المتحدة بدعم الترجمة الآلية في مجال تكنولوجيا العالم نتيجة لتخوفها من التطور العلمي السوفياتي، واهتمت بترجمة الوثائق العلمية الروسية المرتبطة بالتقنيات العسكرية ظهر اتجاه من البحث خلال الستينيات وتطور في السبعينيات عن طريق وضع برامج الذاكرة الترجمة التي تمّكن من الاستفادة من الترجمات السابقة إذ يبحث البرنامج في ذاكرة الآلات التي تقوم بالترجمة.

الاختلافات في نهج الترجمة الآلية

للترجمة الآلية عيوب و مساوئ كثيرة اهمها أنها تعتمد على ترجمة النص بشكل حرفي بمعنى أنها تترجم كل كلمة على حده فتغفل بذلك المعنى السياقي للكلمة و مدى مناسبتها للنص المذكور بالإضافة الى أن الترجمة الآلية لا تهتم بتراكيب و قواعد اللغة و لا تراعي الاختلافات اللغوية بين اللغة المصدر و اللغة الهدف. كما أن الترجمة الآلية لا توفق في ترجمة الجمل المعقدة و لا تراعي الاختلافات في استخدام علامات الترقيم و ذلك لأنها تعتمد على ترجمة الكلمات فقط و التي سبق ترجمتها على شبكة الانترنت.

بناء على ذلك فان غوغل للترجمة و غيرها، لا تختص بترجمة النصوص بصورة صحيحة بل تختص بترجمتها بشكل جماعي، فمثلا من يود معرفة ما اذا كان هنالك ترجمة لكلمات معينة على شبكة الانترنت و يود أن يوفر الوقت فانه يضع هذه الكلمات مجتمعة ليوفر الوقت و الجهد. كما أن الترجمة الآلية لا تراعي اختلاف الأساليب و تنوعها.

الترجمة الآلية في عصرنا

نظراً لتعدد العلاقات بين العرب وغيرهم من أهل الأرض في هذا العصر وكثرة اللقاءات بين الناس؛ علق المجتمع الحديث آمالاً عراضاً على الحاسوب في تحقيق السرعة، وهذا الأمل ساعد في إحياء فكرة الترجمة الآلية والترجمة المدعمة بالآلة في العقد الأخير، ولكن السرعة التي تحققتها الترجمة الآلية توشك أن تضيق في عملية إعداد المدخلات قبل الترجمة وتنقيح المخرجات من بعد، وأكثر من ذلك فإن المترجم الإنسان يفوق الحاسوب في ترجمته، وأومن بأنه سيظل كذلك في المستقبل بغض النظر عن مدى الإحكام الذي قد تصل إليه البرمجة.

الخاتمة

يواجه مستخدمي الترجمة الآلية عبر فيس بوك صعوبات جمة فيما يتعلق بهذه العملية. قد تكون هذه الصعوبات في مجال ترجمة الجمل و الفقرات و كذا بعض الكلمات التي لها أكثر من مقابل واحد في الترجمة.

يهدف هذا البحث لتقييم ممارسات الترجمة الآلية لمستخدمي فيس بوك أثناء اجراء محادثات دردشة مختلفة مع أشخاص بلغة مختلفة عن لغتهم. و في سبيل التواصل يقومون باللجوء الى برامج الية تساعدهم في الترجمة و التواصل. بعد تحليل و مناقشة المعطيات يمكن أن نقول أن ترجمة غوغل غير كفيلة دائماً بإيصال المعنى المراد أو الصحيح، و لكنها أحيانا تساعد في شرح المصطلحات و الجمل البسيطة فقط، لا الجمل و غيرها.