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**Subtitles and Ecoterms in *Youtube*
Auto generated Translation of Obama's
Speech on Climate Change,
Georgetown University on June 25th, 2013**

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Dedication

Amis et famille, une seule page pour les deux

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Introduction

Translation is decidedly one of the earliest human endeavors throughout history. Since its inception, it has recognized the necessity of constructing connections to facilitate information exchange and engage in intellectual and urban interactions. Those who have overseen the evolution of translation over its extensive history understand that it serves as a response to the diverse needs of societies. Climate change is a reality, without the planet, nothing is possible. Currently, 3.3 to 3.6 billion out of the planet's 8 billion inhabitants live in countries extremely vulnerable to the effects of climate change. Statistical predictions project up to an additional 1.2 billion people to be in this situation by 2050.

Ecological studies, along with the emerging field of ecological translation, which explores translation through an ecological lens, have arisen as a response to the environmental challenges brought about by industrial and technological advancements. Not too long ago, discussions about safeguarding the environment were considered a luxury or an afterthought. However, in the latter half of the twentieth century, humanity began to confront a series of environmental catastrophes that reverberated across the globe. These crises served as a wake-up call, prompting a steadily increasing interest in environmental issues on multiple fronts.

Parallel to the rise of ecological studies, ecological translation emerged as an innovative and vital branch of translation studies. It sought to apply the principles of ecology to the realm of translation, recognizing that language and culture are ecosystems in their own right. Translators began to explore how translation practices could support sustainability efforts. Subtitles play a vital role in this endeavor by democratizing information and knowledge. They allow content to transcend linguistic boundaries, ensuring that important messages, whether they pertain to health, human rights, environmental conservation, or any other topic, reach a global audience who might not otherwise have had the opportunity to engage with such critical issues. Subtitles enable viewers to connect with the content on a personal level, making them

not just passive observers but active participants in the global conversation surrounding climate change.

Political communication recourse to translation for making political discussions understandable across different countries, translation can concretely help in this area. If political speeches are not translated and subtitled, many people would not understand major world events. Translators can also use their skills to support a specific political agenda. Politics and translation are closely linked through translation studies history, and this connection becomes even clearer when media get involved to convey political messages to the public.

We have chosen to conduct our study on Obama's Speech about climate change delivered on June 25th, 2013 in Georgetown University to present a detailed strategy to decrease carbon emissions, to ready the nation for climate change repercussions, and to take the lead in global initiatives on climate; as well as the *youtube* auto generated translation of this speech.

Our objective is to analyze the subtitling techniques used, if any, and the ecoterms rendering accuracy.

Our topic revolves around a major problem:

- What are the difficulties encountered by the translator when subtitling political speeches? and what are the techniques he can rely on for a successful translation of ecoterms from English into Arabic?

To help answer the questions we suggest the following hypotheses:

- The difficulties that the translator faces when subtitling diverse from respecting time limit to experiencing various cultures to word count reduction
- The translator uses direct translation procedures for a successful translation of ecoterms from English into Arabic

Definitely, the movies and shows we watch on *Youtube* always grab our attention. This is especially true for those that have Arabic subtitles or voiceovers. For translators, one of the hardest things to do is rendering meanings and terms in subtitles, especially when it comes to political talks. Translators can run into various issues when trying to explain what is being said in political texts when they are translating into Arabic. That is why, this study aims at exploring the problems that translators face when subtitling a political speech full of ecoterms.

To handle this issue, we divide our study into two main parts, a theoretical and practical one. The first chapter is about climate change issue in the political speech and its translation. We talk about leaders worldwide opinions concerning climate change. Then, the challenge of translating these speeches, especially, when it comes to eco terms. This process, known as “ecotranslation” which can be difficult for translators. Finally, we mention the need of translators to find the right terms and consider time limits and language differences to make sure the message is clear to everyone. The second chapter is entitled “An applied analytical study of Obama’s speech”. It tackles the challenges and techniques of Obama’s speech subtitling as well as we suggest an analysis of ecoterms’ translation from English to Arabic.

In the course of our research, several challenges emerged and highlighted the complexities of our task like decoding the subtle nuances of political rhetoric, the translation of ecoterms which is a new and not widely explored area for translators and researchers. Additionally, finding Arabic book references on ecotranslation and relevant terms’ equivalents adds to the difficulty of our analysis. To tackle these issues, we turned to experts like Michael Cronin (2017) referring to his famous book: “Translation and Ecology in the Age of Anthropocene”. We also refer to the direct and indirect translation procedures as mentioned in Jean Paul Vinay and Jean Darbelnet’s book *entitled “ Stylistique comparée du français et de l’anglais”* (1958) ,which was translated later on into “ Comparative Stylistics of Vinay and Darbelnet ” (1995).

I. Chapter 1

Climate change issue in the translated political speech

This first chapter of our work is about climate change issue in the political speech and its translation. First, we start by giving a brief definition of the political speech, and then we present its outstanding characteristics as a specific text type. After that, we give an overview on climate change through global decision-makers' positions. To supplement our subject we also make a study on ecotranslation and translators' challenges regarding ecoterms. We finish this chapter by giving subtitling strategies and some subtitling techniques and constraints, and then we end up with a conclusion reminding the importance of these developed elements before starting our practical part.

I.1 Brief definitions of a political speech

Political speech refers to a type of communication that is designed to persuade, inform or inspire people with respect to political issues, candidates, parties, or policies. Political speech can take many different forms, including public speeches, rallies, campaign ads, social media posts, interviews, debates, and more. It often involves the use of persuasive techniques such as emotional appeals, rhetorical devices, statistics, and factual evidence to convince people to adopt a particular position regarding a political issue or to support a particular candidate's ideas as it is the case in our corpus .(www.lawinsider.com/visited on April, 1st 2023)

It is also an essential component of democratic societies, as it allows citizens to express their opinions, participate in the political process, and hold their leaders accountable. However, political speeches can also be divisive and controversial, especially when they involve sensitive topics such as race, gender, religion, and human rights.

“ In many countries, laws guarantee to political speeches the fundamental right to freedom of expression. However, there are also limitations on political speech, such as restrictions on hate speech, incitement to violence, and defamation of character.”

<https://www.uscourts.gov/about-federal-courts/educational-resources/about-educational-outreach/activity-resources/> Visited on April 3rd 2023)

If politics is the art and science of governments, a political speech is a tool used by politicians to convey their message to the people. Political speeches have been used throughout history to rally support, inspire change, and communicate ideas. A great political speech can inspire a nation, change the course of history, and bring about lasting change.

In today's world, political speeches are more important than ever. With the rise of social media and the 24-hour news cycle, politicians are constantly under scrutiny. Every word they say is analyzed and dissected by the media, and millions of people around the world watch their speeches. In this context, it is more important than ever for politicians to craft effective speeches that resonate with their audience and communicate their message effectively. (www.lawinsider.com/ Visited on April 3rd 2023)

For example, one of the most famous speeches of *Obama* is his “**Yes We Can**” speech, which he delivered during his 2008 campaign for Presidency. In this speech, *Obama* spoke about his vision for a more united and prosperous America, and he used powerful rhetorical techniques to connect with his audience and inspire them to believe in his message.

Another memorable speech by *Obama* was his eulogy for the victims of the Charleston church shooting in 2015. In this speech, *Obama* spoke about the need for Americans to come together in the face of tragedy and to confront the persistent issue of racism in America.

Throughout his presidency, *Obama* delivered many other important speeches, including his address on healthcare reform, his State of the Union addresses, and his remarks on the killing of *Osama bin Laden*. Overall, *Obama*'s political speeches were known for their eloquence, passion, and ability to connect with his audience. He used his platform to address some of the most pressing issues of our time and to inspire people to work towards a better future for all. This is what made us choose one of his speeches for our study under the translation prism.

I.2 Outstanding characteristics of a political speech

One of the most important elements of a great political speech is a **clear and compelling message**. The message should be simple and easy to understand, and it should resonate with the audience on an emotional level. For example, a politician might use the phrase "Make America Great Again" to convey a message of hope and optimism. This message is simple, catchy, and easy to remember, making it an effective tool for rallying support.

Another important element of a great political speech is **authenticity**. The best political speeches are those that come from the heart and are delivered with conviction. When a politician speaks with authenticity, his words are more likely to resonate with the audience and inspire change. Authenticity can be conveyed through *tone of voice, body language, and the use of personal anecdotes*.

In addition to a clear message and authenticity, a great political speech should also be **well-organized and structured**. The speech should have a clear beginning, middle and end, with each section building on the previous one.

The speech should also be delivered in a way that is **easy to follow** and understand, with **clear transitions** between sections.

One of the most famous political speeches in history is the "I Have a Dream" speech by Martin Luther King Jr Aug 28, 1963. This speech is a master class in effective political oratory, combining a clear and compelling message with authenticity and excellent structure. Luther King's message of racial equality and justice resonated with millions of people around the world, and his speech is still remembered and studied today.

Of course, not all political speeches are as effective as Luther king's "I Have a Dream" speech. Many political speeches fall flat, failing to connect with the audience or communicate a clear message. This can be due to a number of reasons including poor preparation, lack of authenticity, and poor delivery.

In fact, one of the most common mistakes that politicians make when delivering a speech is failing to connect with the audience. To avoid this, it is important for politicians to understand their audience and tailor their message accordingly. For example, a politician speaking to a group of farmers might use a different language and many examples than a politician speaking to a group of urban professionals.

Another common mistake is using a language that is too complex or technical. This can alienate the audience and make it difficult for them to understand the message. To avoid this, politicians should **use simple, everyday language** that is easy to understand.

Finally, it is important for politicians **to practice** their delivery and **be prepared for unexpected situations**. This includes practicing their tone of voice, body language, and pacing. It also means being prepared to answer questions and respond to criticism.

I.3 Overview of climate change through global decision-makers' positions

Climate change is a long-term change in the Earth's climate. It is caused by natural factors such as differences in the Earth's orbit around the Sun, volcanic eruptions and solar fluctuations, as well as human actions such as the burning of fossil fuels, deforestation and intensive cultivation.

(<https://climate.nasa.gov/resources/global-warming-vs-climate-change/> Visited on April 4th, 2023)

Climate change causes strange phenomena on Earth surface, i.e the growth in the average temperature of the Earth, the melting of glaciers, the increase in sea level, the change of precipitation patterns, and the intensification of extreme weather phenomena such as hurricanes, storms and droughts.

Climate change has major effects on natural ecological community and human communities, menacing food security, public health, biodiversity and the livelihoods of the

most vulnerable citizens. It is usually due to the flux in greenhouse gases in the air, mainly carbon dioxide (CO₂) emitted by human activity such as flaming fossil fuels for power generation, industry, agriculture, transport and deforestation.

Climatologists state that we started breaking CO₂ records since 1950 and we have not stopped since that. They state that human activity is 95 % the cause. Humans have been burning more and more of fossil fuels like oil and coal to power homes, factories, cars and airplanes... The populations has grown threefold over the last seven decades, and we are using animal products that also emit another harmful substance known as methane.

(<https://www.youtube.com/watch?v=5yMzdDI0OBo/> Visited on April 4th, 2023)

So all these kinds of gases are associated in the air, and when the daylight gets into the earth, the planet gets hotter and we call it the “greenhouse effect”. It is happening so far quickly, that the UN organization announced that if it overcomes the 1.5 °C by the end of the century, we would live in a very critical situation. Back in 2016, world leaders signed “The Paris Agreement” ⁽¹⁾ so leaders set their own targets on how much CO₂ they emit but CO₂ level is still going up.

(<https://www.youtube.com/watch?v=dcBXmj1nMTQ&t=185s./> Visited on April 6th,2023)

Even though, many chiefs have contributed to climate change, both intentionally and unintentionally. Among them, we may find the ancient president Donald TRUMP. During his mandate, TRUMP rolled back many environmental regulations, withdrew the US from The Paris Agreement in June 2017, and carried the fossil fuel industry including coal, oil, and natural gas by diminishing regulations and opening up public lands for oil and gas drilling.

In 2019, the Amazon forest experienced a record number of fires, leading to widespread condemnation and calls for action to protect the rainforest.

(<https://www.youtube.com/watch?v=dcBXmj1nMTQ&t=185s./> Visited on April 8th,2023)

¹⁰ The Paris Agreement is an international treaty, which aims at limiting global warming to well below 2°C above pre-industrial levels.

Vladimir PUTIN, the current President of Russia, has been a key figure in discussions related to climate change and fossil fuels. As a major global supplier of oil and gas, Russia has a significant stake in the debate on energy transition and the transition to a low-carbon economy and one of PUTIN's key arguments in favor of fossil fuels is their economic importance to Russia. Oil and gas exports are a major source of revenue for the country, accounting for a significant portion of its GDP. PUTIN has argued that reducing fossil fuel production would harm the Russian economy and lead to job losses. However, he said, according to a Kremlin transcript “I'm convinced the conservation of forests and other natural ecosystems is a key component of international efforts to tackle global warming and reduce greenhouse gas emissions”.

(<https://www.reuters.com/business/environment/putin-tells-cop26-forest-conservation-vital-curbing-climate-change-2021-11-02/> Visited on April 8th, 2023)

These actions were widely criticized by environmentalists and we may find, among them, Greta THUNBERG. She is a Swedish environmental activist who is well known for her activism on climate change. She first obtained international attention when, at the age of 15, she began protesting outside the Swedish Parliament, demanding action to address climate change. Since then, she has become a prominent voice in the climate movement, inspiring millions of people around the world to take action on this urgent issue.

(<https://www.bbc.com/news/uk-england-london-67155290/> Visited on april 8th, 2023)

THUNBERG has talked at numerous international events, including the United Nations Climate Action Summit, where she became widely known for her pointed critique of world leaders for their lack of action regarding this problem,. She said then, “*Our house is falling apart and our leaders need to start acting accordingly, because at the moment they are not*” to the members of the European Parliament. She has also used social media to raise consciousness and promote action on climate change, with millions of followers on platforms such as Twitter and Instagram. In addition to her activism, THUNBERG has also been involved in numerous

environmental campaigns and initiatives. She has worked with organizations such as *Greenpeace* and *Fridays for Future*, and has been involved in campaigns to promote divestment from fossil fuels and to protect forests as well as other ecosystems.

One of the most significant results of THUNBERG's activism has been the increased attention and focus on the urgency of addressing climate change. Her speeches and public appearances have helped to bring this issue to the forefront of the global conversation, and have increased public awareness of the devastating consequences of inaction on climate change. She has played a significant role in inspiring a new cohort of activists who are deeply committed to addressing the challenges posed by climate change.

In recent years, we have seen a growing number of countries committing to ambitious climate targets and implementing policies to reduce greenhouse gas emissions. We find Naomi KLEIN, a Canadian author who is known for her book "*This Changes Everything: Capitalism vs. The Climate*", which explores the relationship between climate change and capitalism, arguing that the current economic system is incompatible with the urgent need to reduce carbon emissions and transition to a sustainable economy.

In September 2014, KLEIN published a book where she argues that the extractive, profit-driven nature of capitalism has led to the exploitation of natural resources, and the marginalization of vulnerable communities, exacerbating the effects of climate change. She calls for a new economic model that prioritizes the well-being of people and the planet over profit, and emphasizes the need for collective action to achieve this transformation.. The book has been praised for its comprehensive analysis of the complex issues surrounding climate change and its clear call to action. It has influenced the climate movement and has been credited with inspiring the concept of a *Green New Deal*, which seeks to address climate change while also creating jobs and promoting social justice.

“ We have not done the things that are necessary to lower emissions because those things fundamentally conflict with deregulated capitalism, the reigning ideology for the entire period we have been struggling to find a way out of this crisis ”. (KLEIN, 2014:18)

To sum up, it is evident that climate change ranks among the most urgent global issues of our era. The scientific consensus is clear: the Earth's climate is changing at an unusual rate due to human activities, particularly the emission of greenhouse gases from burning fossil fuels. The impacts of these transformations are already manifesting across the globe, including rising sea levels, more frequent and severe weather events, and the loss of biodiversity. The need to address climate change has never been more urgent. The world must take bold action to reduce greenhouse gas emissions and transformation to a more sustainable economy. This will require a collective effort by governments, businesses, civil society, and individuals around the globe.

I.4 Ecotranslation and translator challenges regarding ecoterms

Translation has become a major focus of interest in the recent field of ecology, thanks to researchers such as Michael CRONIN. In his work, especially in his book "Translation and Ecology in the Anthropocene" published in 2017, CRONIN expands the concept of ecological translation. CRONIN builds on a lecture given by *Clive Scott* at the University of Exeter in 2015 and offers his own definition of ecological translation. This expanded definition explores the intersection of translation and ecology, highlighting the role of translation in dealing with environmental concerns in the current era known as the Anthropocene.

“ Eco-translation covers all forms of translation thinking and practice that knowingly engage with the challenges of human-induced environmental change. One of the challenges indeed ,is how to apprehend the agents and objects of this change“ (CRONIN, 2017:12)

Translators are responsible for accurately conveying the meaning and intent of a text from the source language to the target language. To achieve this, they must employ various translation procedures or techniques that are appropriate for the particular context. These procedures range from literal translation to cultural adaptation and transcreation, and the translator must have the knowledge to choose the right one for the job. Choosing the right translation procedure depends on several factors, including the type of text being translated, the target audience, the purpose of the translation, and the desired outcome.

Translators must be able to choose the right translation procedure that best suits the context and purpose of the text. This requires a deep understanding of both the source and target languages, as well as cultural and linguistic nuances. The translator must be able to weigh the advantages and disadvantages of each translation procedure and choose the one that accurately conveys the meaning and intent of the original text. Ultimately, the success of a translation project depends on the translator's ability to choose the right procedure and deliver a high-quality translation that meets the needs of the target audience.

(<http://www.polyglotscorner.wordpress.com/> Visited on April10,2023)

1.5 Definition of subtitling

According to DIAZ CINTAS & REMAEL (2014) : "Subtitling may be defined as a translation practice that consists of presenting a written text, generally on the lower part of the screen. It endeavors to recount the original dialogue of the speakers, as well as the discursive elements that appear in the image (letters, inserts, graffiti, inscriptions, placard, ...) and the information that is contained on the sound track (songs, voices off). In some languages like Japanese, cinema subtitles are presented on the side of the screen. All subtitles programs are made up of three main components, the spoken word, the image and the subtitles, the interaction of these three components along with the viewer's ability to read both the image and the written text at a particular speed, and the actual size of the screen, determine the basic characteristics

of the Audiovisual medium. Subtitles must appear in synchrony with the image and dialogue, provide a semantically adequate account of the source language dialogue and remain displayed on screen long enough for the viewers to be able to read them." (REMAEL & DIAZ CINTAS, 2014 :32)

Subtitling refers to the practice of converting the spoken conversations in audiovisual material into written text displayed on the screen. However, subtitling differs from the translation of written texts. TORNQVIST (1998) in his book " The problem of subtitling " mentioned the main differences between translating written texts and subtitling which can be stated as the criteria of subtitling field and he states: "normally, a reader of translated novel does not compare the target text with the source text while in subtitling this automatically happens. Especially when the viewer speaks the source language" (TORNQVIST, 1998:.10)

And now, we move on to "Machine Translation" which is advanced machine learning and artificial intelligence (AI) technologies to translate automatically video titles, descriptions and subtitles from the original language into the target one.

The machine translation feature on YouTube utilizes machine learning and artificial intelligence to generate translations that are as constant to the source content as possible while ensuring readability and clarity in the target language. This approach permits YouTube to provide a more understandable viewing experience for a global audience.

Machine translation on YouTube has had a significant influence on the accessibility and dissemination of political discourses and content. In the realm of politics, clear and accurate communication is essential, and YouTube's machine translation feature assists bridge language barriers, making political speeches more accessible to a global audience.

However, it's important to account that machine translation, while a valuable tool, may not always express the full nuance and context of political speeches, which can be highly sensitive and subject to interpretation. Therefore, spectators and political stakeholders should

exercise critical thinking and consider consulting human translations and experts when needed for a more comprehensive understanding of political content on YouTube.

Actually, machine translation tools can give reasonably correct translations for straightforward and common phrases or sentences. Nevertheless, they often struggle with idiomatic expressions, context-specific nuances, and complex text. Only biotranslators excel in understanding the broader context and cultural subtleties of a language.

(<https://www.getblend.com/blog/what-is-automatic-translation/> Visited on May 25,2023)

I.6 Subtitling procedures in comparative stylistics of Vinay and Darbelnet

Vinay and Darbelnet's Comparative Stylistics is a linguistic approach and methodology that focuses on the translation process, particularly in the context of literary and poetic texts. Jean-Paul Vinay and Jean Darbelnet are two Canadian scholars who introduced this approach in their work "Stylistique comparée du français et de l'anglais" (1958), which was later translated into English as "Comparative Stylistics of French and English" (1995).

The main idea behind Comparative Stylistics is to analyze and compare the stylistic choices made by authors in different languages, with the goal of providing guidelines for translators to preserve the stylistic features and nuances of the source text in the target language. The approach involves identifying specific linguistic and stylistic features in the source text and finding equivalent expressions or structures in the target language. .Vinay and Darbelnet proposed that every translation involved fundamental procedures. Here are the procedures they proposed.

I.6.1 Direct translation

Vinay and Darbelnet's direct translation techniques aims to preserve the literal meaning and structure of the source text in the target language, and it includes the following techniques :

I.6.1.1 Borrowing

According to Cambridge dictionary the word borrowing is:

To take and use a word or idea from the source language to the target language

"Trahisant une lacune, généralement une lacune métalinguistique (technique nouvelle concept inconnus), l'emprunt est le plus simple de tous les procédés de traduction"

(Vinay et Darbelnet ,1958 :47)

"يعكس هذا الأسلوب نوعا من الاقتدار اذ يلجا إليه المترجم عندما تعوزه المصطلحات -أي عندما لا يوجد مقابلة في اللغة

المستهدفة لكلمة أو مصطلح في اللغة المتن سواء للتعبير عن تقنيه جديدة أو مفهوم غير معروف وهو ابسط الأساليب"

(بيوض؛ 2003: 67)

For example: the term *carbon* is translated into كربون in Arabic

I.6.1.2 Calque

According to the same dictionary: It is “ A word taken from one language and translated in a literal or word for word way to be used in another

" Le calque est un emprunt d'un genre particulier : en emprunte a la langue étrangère le syntagme mais on traduit littéralement les éléments qui le composant"

(Vinay et Darbelnet ,1958 :47)

Calque is a borrowing of a particular kind: it takes the phrase from a foreign language but translates its elements literally. (Our translation)

For example: the term *skyscraper* is translated into *grate-ciel* in French

I.6.1.3 Literal translation

"الترجمة الحرفية أو الترجمة كلمة بكلمة لدى فيني و داربلني هي الانتقال من اللغة المتن إلى اللغة المستهدفة للحصول على نص

صحيح من الناحيتين التراكيبة والدلالية : تلك تفيد المترجم بالاختيارات اللسانية فقط " (بيوض؛ 2003: 77)

Literal translation refers to a translation technique where the emphasis is on maintaining a word-for-word correspondence between the source language and the target language, aiming to

reproduce the linguistic and syntactic elements closely without significant adaptation or rephrasing.

Such as: Water boils at 100 degrees Celsius translated into الماء يغلي عند 100 درجة مئوية in Arabic

.

1.6.2 Oblique translation

We only develop in the next subtitles the procedures we think relevant in the process of subtitling a corpus like ours:

1.6.2.1 Transposition

It is a technique that includes switching out one word class for another without altering the content. It addresses grammatical modifications. Two different types of transposition exist: namely obligatory and optional transposition. Obligatory transposition involves necessary changes in linguistic structures during translation to maintain target language norms. Optional transposition, on the other hand, allows flexibility in adapting elements of the source text to the target language without compromising clarity or fidelity.

(<https://www.ciol.org.uk/translation-techniques/> Visited on October 10 ,2023

Like: The experiment revealed a significant correlation between temperature and reaction rate translated into كشفت التجربة عن ترابط كبير بين درجة الحرارة ومعدل الاستجابة in Arabic

1.6.2.2 Modulation

Using a phrase that is different in the source and target languages to convey the same idea from a new point of view.

For example: she spilled the beans is translated into كشفت الورقة in Arabic.

1.6.2.3 Expansion

« L'étauffement est le renforcement d'un mot qui ne suffit pas lui-même et qui a besoin d'être épaulé par d'autres. » (Vinay & Darbelnet, 1958 : 109)

Expansion is the enhancement of a word that is not sufficient to convey the meaning on its own but requires additional words. (Our translation)

This is when words are added in order to preserve meaning. This can be due to differences in sentence structure, grammar or terminology.

(<https://www.intertranslations.co.uk/what-are-the-main-techniques-of-translation/> Visited on October 15,2023)

To illustrate: *Worsrt drought* is translated into أسوأ موجة جفاف in Arabic

I.6.2.4 Explicitation Vérifiez l'orthographe de ce concept et écrivez-le pareil que dans la table des matières

« Procédé qui consiste à introduire dans LA des précisions qui restent implicites dans LD, mais qui se dégagent du contexte ou de la situation » (Vinay & Darbelnet,1958 :.9)

" A procedure that consists in introducing in the target language details that remain implicit in the source language, but become clear through the relevant context or situation." (Our translation)

I.7 Subtitling a political speech: techniques and constraints

Numerous methods are used to guarantee precise and efficient communication in subtitling. Below, you will find some commonly employed techniques and limitations.

1.7.1 Subtitling techniques

We propose in the following subtitles seven (07) subtitling techniques:

1.7.1.1 Time coding

It means that subtitles are synchronized with the audio and displayed on the screen for a specific duration. Time coding ensures that the subtitles appear and disappear at the appropriate moments, in line with the spoken dialogue.

1.7.1.2 Caption placement

Subtitles are positioned on the screen in a way that doesn't obstruct important visuals or on-screen text. They are typically placed at the bottom of the screen, allowing viewers to read the subtitles without missing out on the visual content. Text Formatting: Subtitles use specific formatting techniques to enhance readability. This includes selecting suitable font styles and sizes, ensuring good contrast between the text and background, and utilizing bold or italic formatting to emphasize certain words or expressions.

1.7.1.3 Line length

Subtitles are designed to fit within a specific line length , typically limited to two (2) lines . This ensures that the text doesn't overcrowd the screen and can be easily read and comprehended within the given time frame.

“An ideal subtitle is a sentence long, with the clauses of which it consists placed on separate line”.

1.7.1.4 Condensation and paraphrasing

Subtitling often requires condensing the spoken dialogue to fit within the limited space and time available. Translators paraphrase the original text while retaining its essence to maintain clarity and coherence in the subtitles. Punctuation and Timing: Subtitles incorporate appropriate punctuation marks to convey the intended meaning accurately. Additionally, the timing of the subtitles is adjusted to match the rhythm and pace of the spoken dialogue, ensuring a natural and seamless viewing experience.

1.7.1.5 Language Adaptation

Subtitling involves adapting the language and expressions to suit the target audience. This may include converting idiomatic expressions or cultural references into equivalents that are more familiar to the target viewers.

I.7.1.6 Subtitle Duration

The duration of each subtitle is carefully timed to ensure that viewers have enough time to read and comprehend the text comfortably. Subtitles are adjusted to account for the average reading speed of the target audience.

I.7.1.7 On-Screen Text and Graphics

Subtitles also cover on-screen text, such as signs, labels, or written messages within the video. This ensures that viewers have access to all relevant information and maintains a comprehensive understanding of the content.

(<https://translathoughts.com/2018/04/the-process-of-subtitling/> Visited on April 15, 2023)

I.7.2 Subtitling constraints

We want to develop in the following subtitles, the main constraints that translators in the audiovisual field have to face when accomplishing their task.

I.7.2.1 Time constraints

As stated in the subtitling characteristics, the maximum duration of the subtitle on the screen is six (6) seconds. This puts some pressure on the translator to use the most accurate terms that fit the meaning while not requiring a large number of characters.

(<https://translathoughts.com/2018/04/the-process-of-subtitling/> Visited on May 8, 2023)

I.7.2.2 Space constraints

Adhering to the subtitle space (2 lines, 70 characters) can be difficult sometimes. The translation must not take up more screen real estate than is required. As a result, there are restrictions on the number of characters per line and their placement on the screen. These specifications are usually included in a style guide provided by the client. The maximum number of lines per subtitle and the maximum number of characters per line should be specified in this instruction.

I.7.2.3 Reading speed

Subtitles should be displayed on the screen long enough for viewers to read and comprehend the text comfortably. Translators need to consider the average reading speed of the target audience and adjust the subtitle duration accordingly.

I.7.2.4 Text length

Translated subtitles often require condensing the original dialogue to fit within the limited space and time available. This can be challenging, as translators need to maintain the essence of the message while using concise and clear language.

I.7.2.5 Cultural constraints

Because subtitling deals with audiovisual materials, differences in cultural norms between countries emerge through the use of language and translating from one language to another (Toury, 1995: 38). Humor is the most common type of cultural challenge for subtitlers, because in some TV shows, such as the American series 'Friends,' laughter is more important than meaning. International jokes, which can be translated literally and are simple to understand, are one type of humor. The main cultural challenge for translators is local or national jokes and their sub community jokes.

(<https://translathoughts.com/2018/04/the-process-of-subtitling/> Visited on May 2, 2023)

I.7.2.6 Audiovisual synchronization

Subtitles must be synchronized with the spoken dialogue and corresponding visual cues. This requires careful timing and alignment to ensure that the subtitles appear and disappear at the appropriate moments, in line with the audio and visuals.

I.7.2.7 Linguistic limitations

Subtitling involves translating spoken language into written text. Some languages may have word order differences or limitations in expressing certain concepts concisely. Translators must overcome these linguistic challenges to convey the intended meaning effectively.

Translators must strike a balance between conveying the meaning accurately, adhering to technical requirements, and providing an accessible and engaging viewing experience for the audience.

The first chapter focuses on the inclusion of the climate change issue in political speeches and its subsequent translation. We have, first, given a brief definition of the political speech. Moreover, we have talked about distinctive features of a political speech. In addition to this, we made a summary of the stance of international policymakers on the topic of climate change. At the end, we made a specific research to identify the main challenges faced by translators regarding eco terms and how specialists suggest procedures in order to overcome the difficulty they represent within the translation. The last but not least challenge that translators face when they deal with such a corpus concerns the subtitling of political speeches when it comes to the topic of ecology. This is all what helped us clarify the whole context surrounding our corpus and now, we move on to our practical part.

II. Chapter 2

*An applied analytical study of Obama's
speech on Youtube*

The second chapter aims at investigating major problems when subtitling a political speech from English into Arabic. Therefore, it particularly attempts to analyze the main challenges to consider during the subtitling process and the eventual solutions and strategies to adopt in order to overcome these. First, we will present the corpus, and then introduce the orator Barack OBAMA. We end up analyzing subtitles in selected sequences of the speech's video on Youtube. A chart of selected passages with our suggested translation is added as well.

I.1 Presentation of the corpus “President Obama Speaks on Climate Change”

The US 44th President Barack Obama has shared his vision for a comprehensive plan to reduce carbon emissions, get our country ready for the effects of climate change, and lead the world in fighting it. In this plan, President Obama explains his plans for a many-sided approach to deal with the problem of carbon pollution and its wide-ranging effects. This plan aims to cover all aspects and include everyone to protect the environment and help the world achieve this important goal.

Additionally, president Obama's strategy emphasizes the critical need to make our country ready for the imminent effects of climate change. Admitting that these impacts are already happening, the plan proposes investing more in getting ready for these changes. This means making our buildings and roads stronger against higher sea levels, stronger storms, and other problems caused by the changing climate. By putting more resources into making our country more resilient and better at recovering from these challenges, the goal of the plan is to reduce the vulnerability of our communities and environment to the effects of a shifting climate.

The video is officially published on Youtube by THE OBAMA WHITE HOUSE official channel, and its original title is :*President Obama speaks on climate change* .

This speech was delivered by the US former President Barack Obama on June 25th, 2013 in Georgetown University and it lasts around 49 minutes.

(<https://www.youtube.com/watch?v=cMT87OP21mo&t=1304s/> Visited on April 1,2023)

In our study, this video was filled with eco terms, which compelled us to translate them. After listening to the speech, we were able to extract some of the terms used for our analysis. Our goal is to study and analyze how the translator succeeds in translating ecoterms. What strategies can they use? Why do they choose one strategy over another? Do they succeed in their choice despite all the constraints and challenges posed by subtitling? We selected some prominent terms as examples to work on.

II. 2 Introducing the orator Barack OBAMA

Barack Hussein Obama II was born in August 4, 1961. He is an American politician who served as the 44th president of the United States from 2009 to 2017. A member of the Democratic Party, he was the first Afro-American president. Obama previously served as a U.S. senator representing Illinois from 2005 to 2008, as an Illinois state senator from 1997 to 2004, and as a civil rights lawyer and university lecturer.

Obama was born in Honolulu, Hawaii. He attended Occidental College and transferred to finish his undergraduate studies at Columbia University, graduating in 1983. He later worked as a community organizer in Chicago. In 1988, Obama enrolled in Harvard Law School, where he was the first black president of the *Harvard Law Review*. He became a civil rights attorney and an academic, teaching constitutional law at the University of Chicago Law School from 1992 to 2004. He also went into elective politics. Obama represented the 13th district in the Illinois Senate from 1997 until 2004, when he successfully ran for the U.S. Senate. In 2008, after a close primary campaign against Hillary Clinton, he was nominated by the Democratic Party for president and chose Joe Biden as his running mate. Obama was elected president, defeating Republican nominee John McCain in the presidential election and was inaugurated on January 20, 2009. Nine months later, he was named the 2009 Nobel Peace Prize laureate, a decision that drew a mixture of praise and criticism.

Obama's first-term actions addressed the global financial crisis and included a major stimulus package to guide the economy to recover from the Great Recession, a partial extension of George W. Bush's tax cuts, legislation to reform health care, a major financial regulation reform bill, and the end of a major U.S. military presence in Iraq. Obama also appointed Supreme Court justices Sonia Sotomayor and Elena Kagan, the former being the first Hispanic American on the Supreme Court. He ordered the counterterrorism raid which killed Osama bin Laden and downplayed Bush's counterinsurgency model, expanding air strikes and making extensive use of special forces while encouraging greater reliance on host-government militaries. Obama also ordered military involvement in Libya in order to implement UN Security Council Resolution 1973, contributing to the overthrow of Muammar Gaddafi.

After winning re-election by defeating Republican opponent Mitt Romney, Obama was sworn in for a second term on January 20, 2013. In his second term, Obama took steps to combat climate change, signing a major international climate agreement and an executive order to limit carbon emissions. Obama also presided over the implementation of the Affordable Care Act and other legislation passed in his first term, and he negotiated a nuclear agreement with Iran and normalized relations with Cuba. The number of American soldiers in Afghanistan fell dramatically during Obama's second term, though U.S. soldiers remained in the country throughout Obama's presidency. Obama promoted inclusion for LGBT Americans, culminating in the Supreme Court's decision to strike down same-sex marriage bans as unconstitutional in *Obergefell v. Hodges*.

Obama left office on January 20, 2017, and continues to reside in Washington, D.C. His presidential library in Chicago began construction in 2021. Since leaving office, Obama has remained active in Democratic politics, including campaigning for candidates in various American elections, such as his former vice president Joe Biden in his successful bid for president in 2020. Outside of politics, Obama has published three bestselling books: *Dreams*

from *My Father* (1995), *The Audacity of Hope* (2006) and *A Promised Land* (2020). Rankings by scholars and historians, in which he has been featured since 2010, place him in the middle to upper tier of American presidents.

(<https://www.theguardian.com/>

Visited on September 6th, 2023)

II.3 Analysis of subtitles in selected video extracts from the corpus “President Obama Speaks on Climate Change”

Rajoutez ici 1 ou 2 phrases pour expliquer comment vous faites pour analyser, combien d'extraits (votre démarche)

II.4.I. 1st Video extract (time indication: 02:43 _03:09)

“Even the astronauts were amazed. “ It makes you realize” Lel would say, “just what you have back there on earth .And around the same time we began exploring space,scientists were studying changes taking place in the earth’s atmosphere.

حتى رواد الفضاء اندهشوا.يقول ليل" هذا يجعلك تدرك فقط ما لديك هناك على الأرض "وفي نفس الوقت الذي بدأنا فيه استكشاف الفضاء كان العلماء يدرسون التغيرات التي تحدث في الغلاف الجوي للأرض.

As we can see in the extract, the subtitles are synchronized with the audio. It appeared precisely when needed to match the spoken dialogue's timing. This process maintains a seamless alignment between subtitles by associating each subtitle with a particular moment in the audio track, viewers can read the translated text precisely when the corresponding dialogue is spoken and this process is known as “Time Coding”. The translation is respected and is enough correct to allow the spectator read and understand the text comfortably. We notice that the translation of the first paragraph of the speech above cited began at the same moment than the audio.

The procedure used here is literal translation

However, the sentence “it makes you realize” Lel would say does not make sense, because the word LEL referred to James Lovell “who is an astronaut and former NASA astronaut” , according to Britannica.

(<https://www.britannica.com/biography/Jim-Lovell/> Visited on October 20, 2023)

Because, the transcription of videos on YouTube can change over time. YouTube has a feature that automatically transcribes the audio of a video into text. It's important to note that the quality of the transcription can depend on factors such as the clarity of the audio, language spoken, and the presence of background noise.

(<https://youtu.be/skmjxrb4BvA/> Visited on October 20, 2023)

Our translation:

يقول لوفيل "هذا يجعلك تدرك فقط ما لديك هناك على الأرض"

II.3.II 2nd Video extract (time indication: 38:24 _38:40)

“President Xi of China and I reached an important agreement to jointly phase down our production and consumption of dangerous hydrofluorocarbons, and we intend to take more steps together in the months to come. It will make a difference uh It’s a significant step in the reduction of carbon emissions.”

أنا و الرئيس الصيني شي جين إلى اتفاق مهم للخفض التدريجي المشترك لإنتاجها و استهلاكها لمركبات الهيدروفلوروكربون الخطرة؛ و نحن نعتزم اتخاذ المزيد من الخطوات معا في الأشهر القادمة، أنيأتي سيحدث فرقا آه. إنها خطوة مهمة في الحد من انبعاث الكربون.

Subtitles are strategically positioned on the screen to avoid blocking crucial visuals or on-screen text, usually appearing at the screen's lower part. This technique referred as “Caption Placement”. As we can see, in the video (our corpus) from the minute 38:24 to 38:40, the caption in this extract has been placed in the lower part and this technique is especially important for viewers who are deaf or hard of hearing, such as UH (in the transcription) translated into هأ in Arabic.

The procedure used here is literal translation.

However the sentence “It will make a difference uh” which appeared in the subtitle as أن يأتي is illegible , because YouTube has a feature that automatically transcribes the audio of a video into text and this transcription may vary.

Our translation: سيحدث فرقا

II.3.III 3rd Video extract (time indication: 26:27 - 27:10)

“I know some republicans in Washington dismiss these jobs, but those who do need to call home because 75 percent of all wind energy in this country is generated in republican districts (laughter) and that, may explain why, last year, republican governors in Kansas and Oklahoma and Iowa-Iowa, by the way, a state that harnesses almost 25 percent of its electricity from the wind, helped us in the fight to extend tax credits for wind energy manufacturers and producers. (applause), tens of thousands of good jobs were on line, and those jobs were worth fighting for .

اعلم أن بضع الجمهوريين من واشنطن يرفضون هذه الوظائف، لكن أولئك الذين يفعلون ذلك يحتاجون إلى الاتصال بوطنهم لأن 75 بالمائة من إجمالي طاقة الرياح في هذا البلد يتم توليدها في المناطق الجمهورية (ضحك) وهذا قد يفسر لماذا في العام الماضي، ساعدنا الحكام الجمهوريون في كانساس و أوكلاهوما و ايووا و ايووا بالمناسبة هي ولاية تشتهل ما يقرب من 25 بالمائة من الكهرباء من الرياح، في الكفاح من أجل توسيع نطاق الضرائب إعمادات لمصنعي ومنتجي طاقة الرياح (تصفيق) كانت هناك عشرات الآلاف من الوظائف الجيدة على المحك وكانت تلك الوظائف تستحق النضال .

The length of the subtitles are adapted to the correct length required, it is limited to two lines for each sentence translated. The lines number is respected as we can see in the video where we find two (2) lines with maximum seventy (70) characters and without missing any information from the audio, like the words (applause) and (laughter) in the transcription, respectively translated into Arabic by (تصفيق) and (ضحك).

This is a crucial subtitling technique which is called “Line Length” and which refers to managing the number of characters and words to ensure the readability and synchronization with the audio.

The paragraph has been translated literally. Nevertheless, the sentence “I know some republicans in Washington dismiss these jobs, but those who do need to call home because 75 percent of all wind energy in this country is generated in republican districts” translated into علم أن بضع الجمهوريين من واشنطن يرفضون هذه الوظائف، لكن أولئك الذين يفعلون ذلك يحتاجون إلى الاتصال بوطنهم لان 75 بالمئة من إجمالي طاقة الرياح في هذا البلد يتم توليدها في المناطق الجمهورية in Arabic is confusing.

Because here the president discussed the importance of creating jobs in the renewable energy sector. He mentioned that 75 percent of all wind energy in the United States is generated in Republican districts, despite some Republicans dismissing these jobs. The phrase "but those who do need to call home" implies that despite the dismissal of certain jobs by some Republicans in Washington, there is a recognition that these jobs are essential and require attention or support. So , the word “call” translated into الاتصال has no sense

Our translation:

أنا أعلم أن بعض الجمهوريين في واشنطن يتجاهلون هذه الوظائف، ولكن أولئك الذين يحتاجون إلى العودة إلى الوطن، لأن 75 في المئة من طاقة الرياح في هذا البلد تتم إنتاجها في المناطق الجمهورية

II.3.IV 4th Video extract (time indication: 21:20 to 21:42)

“ Recently, more than 500 businesses, including giants like GM and Nike issued a Climate Declaration, calling action on climate change, one of the great economic opportunities of the 21st century” Walmart is working to cut its carbon pollution by 20 percent and transition completely to renewable energy.”

في الأونة الأخيرة أصدرت أكثر من 500 شركة بما في ذلك شركات عملاقة مثل جنرال موتورز ونايك إعلانا بشأن المناخ واصفة العمل بشأن تغير المناخ بأنه احد الفرص الاقتصادية من القرن الحادي والعشرين تعمل شركة Walmart على خفض التلوث الكربوني بنسبة 20 بالمائة و الانتقال بالكامل إلى الطاقة المتجددة .

In this paragraph the word GM which is “an American multinational automotive manufacturing company headquartered in Detroit, Michigan” translated into جنرال موتورز in Arabic, because machine translation relies on algorithms to process and interpret language. The appearance of "جنرال موتورز" for "GM" may be a result of the algorithm's interpretation of the abbreviation. And for the word Walmart which is a brand name. In English, brand names are often written with specific capitalization, and this style may be maintained in the transcription and subtitles to preserve the brand's identity and recognition. And this is maybe due to linguistic limitations.<https://investor.gm.com/static-files/6ac492ca-6a4f-462e-9de8-0e2a7d471327/>

Visited on October 21,2023

II.3.V 5th Video extract (time indication: 5:30-5:36)

“ Midwest farms were parched by the worst drought since the Dust Bowl

أصيبت مزارع الغرب الأوسط بالجفاف بسبب أسوأ موجة جفاف منذ عاصفة الغبار

The duration of each subtitle is carefully timed six (6) seconds for each subtitle, and the subtitles are adjusted taking into account the average reading speed of the audience. This synchronization ensures that the subtitled text aligns with the speaker's rhythm, if the speech is delivered slowly and deliberately, subtitles in Arabic should also be displayed for an extended period and this subtitling technique is entitled “Subtitle duration”. As illustrated in the excerpt, audio duration has been kept at six(6) seconds from 5:30 to 5:36.

And the strategy used here is expansion

The expansion technique involves adding words or phrases to the translation to convey the meaning of the original text more accurately. In this case, the Arabic translation expands on the

original sentence by adding details about the severity of the drought and its impact on Midwest farms. The phrase "أسوأ موجة جفاف منذ عاصفة الغبار" translates to "the worst drought since the Dust Bowl," which is an expansion of the original sentence

II.3.VI 6th Video extract (time indication: 0:00-0:34)

(applause)

“ The president : Thank you , Georgetown! Everybody, please be seated. And my first announcement today is that you should all take off your jackets . (laughter) I’m going to do the same (applause) it’s not that sexy , now.(laughter) it is good to be back on campus, and it is a great privilege to speak from the steps of this historic hall that welcomed Presidents going back to George Washington.”

(تصفيق)

الرئيس: شكرا لك جورج تاون!

الجميع يرجى الجلوس. و إعلاني الأول اليوم هو انه يجب عليكم جميعا خلع ستراتكم

(ضحك)

سأفعل نفس الشيء

الأمر ليس مثيرا إلى هذه الدرجة الآن.

(ضحك) من الجيد أن أعود إلى الحرم الجامعي و انه لشرف عظيم أن أتحدث من درجات هذه القاعة

التاريخية التي رحبت بالرؤساء العائدين إلى جورج واشنطن

Subtitles go beyond just spoken dialogue by additionally including visible text on the screen, such as signs, labels , or written messages within the video. This approach called “On-Screen Text and Graphics” ensures that viewers are provided with all the essential information, allowing them to maintain a complete understanding of the content. As demonstrated in the passage, there are some words like (laughter) and (applause) which did not appear in the audio

but appeared in the subtitles .This technique approves that spectators did not miss any information.

II.4. Some mistranslated passages and ecoterms in the corpus

In this part, we are going to analyze ten examples selected from our corpus; each example will be given in a chart of three columns. In the first column, you find timing, which is the exact moment of the selected sentence. The second column shows the sequence in the source language (English), then, the third column mentions the subtitling of the same sentence in the target language (Arabic). After that, we gave a small explanation of the sentence and we assess each example according to Vinay and Darbelnet approach. Furthermore, we suggest our own translation to each example.

II.4.I Example one

Time indication	Source language	Traget language
04:47 to 04:49	All weather events are affected by a warming planet	تتأثر جميع الأحداث الجوية بكوكب دافئ

This sentence means that the increase in temperature is influencing weather events.

After understanding the context in which the term was mentioned in the source language, we move on to discovering its meanings in the target language after decrypting it.

According to the electronic dictionary “Oxford”, we have observed that the term “Warming planet” is composed of the root “warm”

Warm: (adjective)at a fairly high temperature in a way that is pleasant, rather than being **hot** or cold

(<https://www.oxfordlearnersdictionaries.com/definition/english/the-oxford-english-dictionary> / Visited on October 27,2023 at 10:30 p.m)

And the suffix “ing” , according to the same dictionary :

Ing: (suffix) action or process, instance of an action or process

To form the root Warm+ the suffix ing the term “ Warming”

We suggest to translate the term into ارتفاع درجات الحرارة في الكوكب for translation instead of the terms we found in dictionaries. However, all these terms refer to the same concept.

Warming planet:refers to the unusually rapid increase in Earth's average surface temperature over the past century, primarily due to the greenhouse gases released by human activities such as burning fossil fuels.

(<https://earthobservatory.nasa.gov/features/GlobalWarming> / Visited on October 27,2023 at 08:00 p.m)

Our translation:

جميع الأحداث الجوية تتأثر بارتفاع درجات الحرارة في الكوكب

Hence, we have translated the term “warming planet” using the **explicitation** technique of Vinay and Darbelnet (1958).

II.4.II Example two

Time indication	Source language	Traget language
08:40 to 08:46	I refuse to condemn your generation and our future generations to a planet that's beyond fixing	أرفض أن أدين جيلك وأجيال مستقبلنا بكوكب لا يمكن إصلاحه

The word "الحكم" in the provided translation is not the most suitable term in this context. The term "الحكم" typically refers to "judgment" or "ruling," which does not fully capture the intended meaning of "condemn" in the original English sentence.

A more appropriate term to convey the meaning of "condemn" in this context would be "أدين" or "أدين بـ" which directly translates to "condemn" in the sense of expressing strong disapproval or censure.

Our translation:

"أرفض أن أدين جيلكم و الأجيال القادمة بالعيش في كوكب لا يمكن إصلاحه"

The strategy used here is explicitation. The implicit meaning of "condemn" in the original English sentence is made explicit in Arabic.

II.4.III Example three

Time indication	Source language	Traget language
15:37 to 15:45	Others have shifted to burning cleaner natural gas instead of dirtier fuel sources	و تحول آخرون إلى حرق الغاز الطبيعي النظيف بدلا من مصادر الوقود الأكثر فذارة

In the provided translation the word "تحول" (shifted) is not the most suitable term in this context. A more appropriate term to convey the meaning of "shifted" in the context of transitioning to burning cleaner natural gas would be "انتقل" (transitioned). These terms better capture the intended meaning of the shift to cleaner natural gas as described in the original English sentence.

Additionally, the word "فذارة" (dirtier) does not fully convey the nuanced meaning of "dirtier" in the context of comparing fuel sources. A more precise term to convey the comparative degree of "dirtier" would be "أكثر تلوثاً" (more polluting).

Therefore, a more accurate translation would be:

"و انتقل آخرون إلى حرق الغاز الطبيعي النظيف بدلا من مصادر الوقود الأكثر تلوثاً"

The translation procedure used here is modulation.

II.4.IV Example four

Time indication	Source language	Traget language
26:30 to 26:31	Those who do need to call home	أولئك الذين يفعلون ذلك يحتاجون إلى الاتصال بوطنهم

The phrase "but those who do need to call home" implies that despite the dismissal of certain jobs by some Republicans in Washington, there is a recognition that these jobs are essential and require attention or support. So, the word "call" translated into الاتصال has no sense because it refers to communication or contacting

Our translation:

لكن أولئك الذين يحتاجون إلى العودة إلى الوطن

The procedure used here is modulation

II.4.V Example five

Time indication	Source language	Traget language
30:36	We are going to set that goal	نحن ذاهبون لتحديد هذا الهدف

The word "ذاهبون" in the translation "نحن ذاهبون لتحديد هذا الهدف" does not accurately convey the intended meaning of "are going" in the context of setting a goal. The term "ذاهبون" typically refers to "going" or "heading" rather than specifically "are going" as in the present continuous tense.

A more appropriate term to convey the meaning of "are going" in the present continuous tense would be "سنقوم" to specifically denote the ongoing action of setting a goal.

Therefore, a more accurate translation would be:

سنقوم بتحديد هذا الهدف

The procedure used here is transposition, which is employed to convey the action of setting a goal in Arabic, ensuring that the intended meaning is accurately conveyed while adjusting the grammatical structure to align with the target language.

II.4.VI Example six

Time indication	Source language	Traget language
01:05 to 01:07	And I want to say thank you to the Hoyas in the house	و أريد أن اشكر عائلة هوياس في المنزل

The term "Hoyas" in the context should not be translated as "عائلة" (family) in Arabic. Instead, it should be translated as "فريق الهوياس" or "الهوياس" to specifically denote the Georgetown University basketball team.

The term "Hoyas" refers to the Georgetown University men's basketball team, known as the "Georgetown Hoyas." The team is a prominent collegiate athletics program representing Georgetown University in NCAA Division I men's intercollegiate basketball and the Big East Conference. The nickname "Hoyas" has been associated with the team since the 1920s and is a well-recognized and established name in the realm of college basketball.

(<https://www.hoyabasketball.com/history/hoia.htm/> Visited on october 30,2023)

Therefore, a more accurate translation would be: "وأريد أن أشكر فريق الهوياس في المنزل"

The translation procedure used is "modulation". In this case, the translation involves a change in the point of view to convey the gratitude towards the Georgetown University men's basketball team known as the "Hoyas" .

II.4.VII Example seven

Time indication	Source language	Traget language
32:50 to 32:52	The overwhelmingly republican legislature in Texas	أغلبية ساحقة من الجمهوريين في ولاية تكساس

The term "الجمهوريين" in the translation "أغلبية ساحقة من الجمهوريين في ولاية تكساس" does not accurately convey the intended meaning of "republican legislature." The term "الجمهوريين" refers to "the Republicans" (plural form of the word Republican)

Republicans: one of the two major political parties, the other being the Democratic Party.

<https://www.britannica.com/topic/Republican-Party/>

Visited on October 27, 2023)

Not "republican legislature." The phrase "republican legislature" refers to a legislative body that is predominantly composed of members affiliated with the Republican Party

And it should be translated as "السلطة التشريعية الجمهورية" in Arabic to accurately convey the intended meaning.

Therefore, a more accurate translation would be: "أغلبية ساحقة من السلطة التشريعية الجمهورية في ولاية تكساس"

However, The addition of "ولاية" (state) in the translation "ولاية تكساس" is due to the fact that in Arabic, the term "تكساس" (Texas) is often accompanied by "ولاية" to denote the state of Texas. This is a common practice in Arabic to specify the state or province when referring to a location. Therefore, "ولاية تكساس" is the appropriate way to refer to the state of Texas in Arabic as it can be understood by non native speakers.

The procedure used here is modulation.

II.4.VII Example eight

Time indication	Source language	Traget language
3:51 to 3:54	That science, accumulated and reviewed over decades	إن العلوم تراكمو مراجعته على مدى عقود من الزمن

The Arabic translation "تراكم و مراجعته على مدى عقود من الزمن" for "accumulated and reviewed over decades" does not accurately convey the intended meaning of "reviewed" in Arabic. The term "مراجعته" implies a singular act of review, whereas the original English phrase "reviewed" suggests a continuous or repeated action over an extended period.

Our translation: "تلك العلوم، التي تراكمت وتمت مراجعتها على مدى عقود"

The translation procedure used here is transposition.

II.4.VII Example nine

Time indication	Source language	Traget language
3:24	Wildfire	حرائق الغابات

Regarding the translation of "wildfire" into Arabic, the term "حرائق الغابات" is not entirely accurate because it specifically refers to "forest fires" and these fires can be ignited by natural causes such as lightning, volcanic eruptions, and spontaneous combustion, as well as human activities like arson, machinery sparks, and discarded cigarette butts. According to "Collins dictionary".

(<https://www.collinsdictionary.com/us/dictionary/english/forest-fire/> Visited on October 25,2023)

A more suitable term for "wildfire" in Arabic is "حريق هائل". This term encompasses the broader meaning of "wildfire," which includes rapidly spreading fires occurring in wildland areas, not limited to forests.

The procedure used here is calque

One example of a wildfire around the world caused by climate change is the Australian bushfires that occurred in 2019 and 2020. These bushfires were fueled by a combination of factors, including drought, high temperatures, and strong winds, which were exacerbated by climate change. The fires burned over 18 million hectares of land, destroyed thousands of homes, and killed an estimated one billion animals. The Australian bushfires highlighted the devastating impact of climate change on the environment and the urgent need for action to address its causes and effects.

(<https://disasterphilanthropy.org/disasters/2019-australian-wildfires/>

Visited on October 25, 2023)

II.4.VII Example ten

Time indication	Source language	Traget language
3:10 to 3:15	Now scientists had known since the 1800s that greenhouse gases like carbon dioxide trap heat	عرف العلماء منذ القرن 19 أن الغازات الدفيئة مثل ثاني أكسيد الكربون تحبس الحرارة

The term "trap heat" in the Arabic translation "ثاني أكسيد الكربون تحبس الحرارة" is not the most accurate representation of the scientific concept.

Greenhouse gases, such as carbon dioxide, retain heat in the atmosphere through a process known as the greenhouse effect. When solar radiation reaches the Earth's surface, some of it is absorbed and re-emitted as infrared radiation. Greenhouse gases in the atmosphere, including carbon dioxide, methane, and water vapor, absorb this infrared radiation and re-radiate it in all directions, including back toward the Earth's surface. This process effectively traps heat within the Earth's atmosphere, contributing to the warming of the planet.

(<https://scied.ucar.edu/learning-zone/how-climate-works/greenhouse-effect/>)

Visited on

October 28, 2023)

A more precise translation for "trap heat" in this context would be "يحتجز الحرارة." This translation better reflects the scientific understanding of how greenhouse gases, such as carbon dioxide, retain heat in the atmosphere.

Our translation:

عرف العلماء منذ القرن 19 أن الغازات الدفيئة مثل ثاني أكسيد الكربون تحتجز الحرارة

The translation strategy used here the technique of calque. In this case, the translation of "trap heat" into "تحتجز الحرارة" is a calque, as it directly translates the English phrase into Arabic.

After contextualizing our study in this second (practical) chapter through the presentation of our corpus, then the introduction of the orator Barrack Obama, we analyzed some selected examples and looked closely to the extracts. We concluded that machine translation while increasingly reliable, is still prone to errors that can have significant consequences. These errors can be classified into various types, including morphological, semantic, lexical, syntax, and orthographic errors. It is important to keep in mind that they might not always capture the full meaning or flow of what someone is saying.

Conclusion

This study conducted on President Obama's speech about climate change and its Youtube auto generated Arabic translation sheds light on the subtleties and challenges of subtitling a political speech with a strong ecological impact. It underscores the difficulties faced by audio visual translators, ranging from respecting time constraints to navigating diverse cultures and reducing word counts. While literal translation is a commonly used procedure, it may not always capture the nuances of political speech effectively.

The study delves into the complexities of the audiovisual translating of a political speech from English to Arabic, highlighting the importance of understanding cultural and linguistic nuances while respecting the constraints of subtitling. In a world where effective communication is paramount, the role of translation, particularly in political contexts, remains pivotal in fostering global understanding and engagement.

We could find all along our research the way to answer our problematic and confirm the hypotheses we suggested at the beginning: the difficulties that the translator faces when subtitling diverse from respecting time limit to experiencing various cultures to word count reduction. The translator uses direct translation procedures for a successful translation of ecoterms from English into Arabic.

We also managed to identify the main challenges and the most important difficulties for any translator when subtitling a political discourse within the framework of *Eco translation*.

As we answer the research questions afore cited, we found that:

- Subtitling a political discourse is difficult regarding time. In fact, a subtitle's minimum length is one second, and its maximum length is roughly six seconds. Time management and word count reduction go hand in hand during the translation process;
- Subtitling process is one of the most difficult tasks for the translator, this is due to the stages that require great efforts and accuracy.

- Rendering cultural passages is a major difficulty in subtitling. Every translator faces the difficulty of cultural adaptation. When translating such a speech from a foreign language to a local one, we have to make sure the result reflects the receiver's values, standards, and cultural characteristics;
- Reduction of words: there are numerous constraints while translating subtitles. One of them is that most subtitles are limited to two lines.
- Denotative and connotative meaning of words is an impediment to the translator.
- Political and ideological connections account for different translation techniques in this aspect;
- Literal translation and borrowing can help translating ecoterms when exact equivalents are unavailable. Translators should also recourse to explanative translation in order to convey the meaning;
- Consulting a reliable dictionary is almost necessary to ensure an accurate and meaningful translation;
- The frequent use of scientific abbreviations is common; hence, prudence must be exercised when translating them;
- Subtitles must be concise and fit within the time constraints of the on-screen dialogue. Translators face the challenge of conveying complex ecological terms effectively within limited space and time;
- The ecological guide is characterized by accuracy and fluency, as it is an entirely different style from the literary one. It addresses the mind and aims to provide pure information and statistics;
- Translators need to ensure that the translated ecological terms are contextually relevant and accurately convey the intended meaning, considering the specific ecological context in the source language;
- Translating an ecological term is a challenging endeavor that requires expertise and precision;

- Translating ecological terms heavily relies on literal translation to convey the terms from English to Arabic.

To end up this research, we want to draw attention to the fact that global movement to address climate change is growing stronger every day, with millions of people around the world demanding action and taking steps to reduce their carbon footprint. We deeply recommend more research from future students on *Ecotranslation*. New technologies and innovations are also emerging to help to reduce emissions and build a more sustainable future. While the challenges ahead are significant, we must not lose sight of the opportunities that exist to create a better world for ourselves and for future generations. By working together and taking action on climate change, we can build a more just, sustainable, and resilient world for all. The time to act is now, and we must act decisively and urgently to address this critical global challenge.

Glossaries

1. English/Arabic Glossary of Eco terms

- A -	
Acid Rain	أمطار حمضية
Agro Ecology	إيكولوجية البيئة الزراعية
Air	هواء
Anthropogenic Removal	إزالة بشرية
- C -	
Carbon	كربون
Carbon Dioxide	ثاني أكسيد الكربون
Carbon Emissions	إنبعاث الكربون
Carbon Pollution	تلوث كربوني
Clean Energy	طاقة نظيفة
Climate	مناخ
Climate Change	تغير المناخ
Climate-Smart Agriculture	زراعة ذكية مناخيا
Coal Plants	مصانع الفحم
-D-	
Desertification	تصحّر
Droughts	جفاف
- E -	
Earth	أرض
Earth's Atmosphere	غلاف الأرض الجوي
Ecological Compensation	تعويض بيئي
Energy Transition	انتقال الطاقة

Environmental Audit	تدقيق بيئي
-F-	
Fires	حرائق
Floods	فيضانات
Fossil Fuels	وقود حفري
Fuel	وقود
Fuel Supplies	إمدادات الوقود
-G-	
Greenhouse Gas Emissions Assessment	تقييم انبعاث الغازات الدفيئة
Greenhouse Gases	غازات الاحتباس الحراري
-H-	
Heat Wave	موجة حرارية
Hurricane	إعصار
Hybrid	هجين
Hydrofluocarbon	الهيدروفلوكربون
-L-	
Low Carbon	منخفض الكربون
Lunar Orbit	مدار القمر
-M-	
Methane Emissions	انبعاث الميثان
-N-	
Natural Barriers	حواجز طبيعية
Natural Gas	غاز طبيعي
Natural Storm Barriers	حواجز العواصف الطبيعية

Nitrous Oxide	أكسيد النتروز
Nuclear Power Plants	محطات الطاقة النووية
-P-	
Planet	كوكب
Pollution	تلوث
Power Grids	شبكات الكهرباء
Power Plants	محطات توليد الطاقة
-R-	
Renewable Energy	طاقة متجددة
Renewable Gas	غاز متجدد
-S-	
Sea Level	مستوى سطح البحر
Seawalls	حوائط بحرية
Solar Panels	ألواح الشمسية
Solar Power	طاقة شمسية
Space	فضاء
Storm	عاصفة
Sun	شمس
-T-	
Transition Fuel	وقود انتقالي
-W-	
Warming Planet	ارتفاع درجات الحرارة في الكوكب
Wildfire	حريق هائل
Wind	رياح
Wind Energy	طاقة الرياح

Wind Turbines	محطات توليد الطاقة الريحية
-Z-	
Zero Carbon	صفر كربون
Zero Carbon Wind	رياح خالية من الكربون
Zero Waste	صفر نفايات

2. مسرد عربي/ إنجليزي لمصطلحات الإيكولوجيا

- أ -	
Acid Rain	أمطار حمضية
Agro Ecology	إيكولوجية البيئة الزراعية
Anthropogenic Removal	إزالة بشرية
Carbon Emissions	انبعاث الكربون
Earth	أرض
Energy transition	انتقال الطاقة
Fuel Supplies	إمدادات الوقود
Hurricane	إعصار
Netroze oxide	أكسيد النتروز
Solar panels	ألواح الشمسية
Warming Planet	ارتفاع درجات الحرارة في الكوكب
Methane emissions	انبعاث الميثان
- ب -	
Carbon pollution	تلوث كربوني
Climate change	تغير المناخ
Desertification	تصحّر
Ecological compensation	تعويض بيئي
Environmental audit	تدقيق بيئي
Greenhouse gas emissions assessment	تقييم انبعاث الغازات الدفيئة
Pollution	تلوث
- ج -	
Carbon dioxide	ثاني أكسيد الكربون

- ج -	
Droughts	جفاف
- ح -	
Fires	حرائق
Natural barriers	حواجز طبيعية
Seawalls	حوائط بحرية
Wildfires	حرائق الغابات
Natural storm barriers	حواجز العواصف الطبيعية
- ر -	
Wind	رياح
Zero Carbon Wind	رياح خالية من الكربون
- ز -	
Climate-Smart Agriculture	زراعة ذكية مناخيا
- ش -	
Power Grids	شبكات الكهرباء
Sun	شمس
- ص -	
Zero carbon	صفر كربون
Zero waste	صفر نفايات
- ط -	
Clean energy	طاقة نظيفة
Renewable energy	طاقة متجددة
Solar power	طاقة شمسية

Wind energy	طاقة الرياح
- ع -	
Storm	عاصفة
- غ -	
Earth's atmosphere	غلاف الأرض الجوي
Greenhouse gases	غازات الاحتباس الحراري
Natural gas	غاز طبيعي
Renewable gas	غاز متجدد
- ف -	
Floods	فيضانات
Space	فضاء
- ك -	
Carbon	كربون
Planet	كوكب
- م -	
Climate	مناخ
Coal Plants	مصانع الفحم
Heat Wave	موجة حرارية
Low carbon	منخفض الكربون
Nuclear Power Plants	محطات الطاقة النووية
Wind Turbines	محطات توليد الطاقة الرياحية
Power Plants	محطات توليد الطاقة
Sea level	مستوى سطح البحر
Lunar Orbit	مدار القمر

- ٥ -	
Hybrid	هجين
Air	هواء
Hydrofluocarbon	الهيدروفلوكربون
- و -	
Fossil Fuels	وقود حفري
Fuel	وقود
Transition fuel	وقود انتقالي

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ملخص

هدف هذا البحث هو تحليل الصعوبات المصطلحية في سترجة خطاب سياسي ذي طابع إيكولوجي بين اللغتين الإنجليزية و العربية. كما يسعى إلى إبراز الإستراتيجيات و التقنيات التي يمكن للمترجم استخدامها للتغلب على هذه التحديات و تحقيق سترجة سليمة مقارنة بما هو مقترح على اليوتوب بالاعتماد على التوليد الألي للسترجة. و تتمثل مدونة هذه الدراسة في خطاب الرئيس الأمريكي الرابع و الأربعين باراك أوباما حول تغير المناخ، كما تشمل سترجته على اليوتوب إلى اللغة العربية. **الكلمات المفتاح:** السترجة، المصطلح الإيكولوجي، الخطاب السياسي، أساليب الترجمة.

Abstract

The aim of this research is to analyze terminological difficulties in subtitling a political speech with an ecological context between English and Arabic languages. It seeks to highlight strategies and techniques that translators can employ to overcome these challenges and achieve accurate subtitling, compared to what is proposed on Youtube through automatic subtitle generation. The corpus of this study is the speech of the forty-fourth President of the United States, Barack Obama on climate change, including its subtitling into Arabic.

Keywords: subtitling , ecoterms, political speech , translation procedures.