COMPARATIVE ANALYSIS OF MACHINE TRANSLATION AND HUMAN TRANSLATION: A QUALITATIVE STUDY OF QUAID-E-AZAM MUHAMMAD ALI JINNAH'S SPEECH

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ABSTRACT

The emergence of artificial intelligence (AI) has sparked extensive debate within the academic community regarding its potential opportunities and challenges. In academic filed AI is using to perform various activities. Different AI tools are used for translation purpose as well. This investigative study is carried out to comparison between machine translation and human translation in order to know the emerging patterns (similarities and differences). The study is based on qualitative research and to conduct the study one speech of Quaide Azam Muhammad Ali Jinnah has been selected as a sample of the study to find out efficiency, accuracy, cultural and contextual understanding. The study also aims to know about the significance of human translation and the strength and drawbacks of machine translation. Moreover, the study highlights that human translation is important due to the protection of cultural and historical perspectives about a text. This study applies Nida's Dynamic Equivalence Theory (1964) to make a comparison between human translation and machine translation. Dynamic Equivalence is a translation approach that prioritizes equivalent meaning and effect between the source and target texts.

Keywords: *machine translation, human translation, accuracy, efficiency, contextual understanding and cultural understanding*

INTRODUCTION

Language translation is an interdisciplinary filed which has brought a tremendous revolution in the field of academia. It offers unparalleled speed and efficiency in translation (Hutchins, 20025). However, in the modern period after the arrival of AI and other tools of translation, so many challenges and weaknesses have also emerged in the field of translation. Apart from them, we cannot ignore the understanding of cultural, historical and contextual aspects of translation while translating the source text ST into target text TT using AI or other machine translations, which are very significant for correct translation (Munday, 2012).

Moreover, translation is not simply referred to the replacement of words of source language SL into any target language TL but it is series of grammatical competence. In other words, translation is not easy process rather it is complex process which needs linguistic competence, cultural, social and contextual knowledge (Bassnett, 2014).Furthermore, language is integral part of culture and to translate any source text into target text with its true spirit, the background

knowledge of the cultural aspects of both languages is mandatory for equivalent meaning. Equivalence can be achieved when culture is prioritized (Nida, 1964).

We cannot deny the importance of machine translation in academia, however, it has been observed in the past studies that human translation performs better function than machine translation on account of focusing on contextual, cultural and historical understanding of a text (Kenny, 2011). Keeping in view the crucial importance of machine translation in academia, to understand the text like human translation, machine translation should promote contextual awareness, advancement in artificial intelligence and linguistic analysis (Munday, 2012). Keeping the above all facts in mind, in order to compare human translation with machine translation to understand the value of human translation as well as the advantages and disadvantages of machine translation, the researchers have carried out this particular study. The study looks at Quaide Azam Muhammad Ali Jinnah's speech to determine its effectiveness, precision, and cultural and contextual awareness.The study emphasizes how crucial human translation is for preserving a text's cultural and historical meanings. This qualitative study compares machine translation and human translation using Nida's Dynamic Equivalence Theory (1964). A translation strategy known as "dynamic equivalence" places emphasis on the source and target texts' comparable meaning and impact.

1.1 Research Objectives
The present study intents to:
1. Compare machine and human translation accuracy in preserving cultural significance.
2. Evaluate Nida's Dynamic Equivalence Theory in human vs. machine translation.
3. Identify machine translation limitations and strategies for enhancement.

1.2 Rationale of the Study
This study compares machine translation and human translation. It focuses on the importance of human translation that protects cultural, historical and contextual meaning in translation. It analyses the speech of Quaide Azam Muhammad Ali Jinnah and applies Nida's Dynamic Equivalence Theory. Though machine translation has efficiency and speed (Hutchins, 2002), but it has its limitations in the protection of cultural, textual and historical meanings in translation (Munday, 2012), and competence (Bassnett, 2014). Research has shown that human translation performs better function than machine translation on account of focusing on contextual, cultural and historical understanding of a text (Kenny, 2011). Dynamic Equivalence is a translation approach that prioritizes equivalent meaning and effect between the source and target texts (Nida, 1964). This qualitative study addresses the gaps in machine translation, highlighting the significance of human translation in maintaining the essence and impact of original texts, particularly in culturally significant contexts (Freitag et al., 2021).

1.3 Research Questions
1. How accurate are machine and human translations in preserving culturally significant texts, specifically Quaid-e-Azam Muhammad Ali Jinnah's speech?
2. To what extent does Nida's Dynamic Equivalence Theory support the superiority of human translation over machine translation in conveying emotional resonance and original intent?
3. What are the primary limitations of machine translation, and what strategies can enhance its performance in preserving cultural and historical perspectives?

1.4 Research Gap
Various researchers have conducted their researches about machine translation and human translation. However, there is still a gap in the comparative analysis of the speech, especially about the speech of Quaide Azam Muhammad Ali Jinnah, that he presented at Dhaka university in 1948 during a convocation. The previous studies have focused either on human translation (Kenny, 2011; Bassnett, 2014) or machine translation (Munday, 2012; Hutchins, 2002). Anyway, a detailed analysis of both machine translation and human translations is lacking. The aim of this study is to complete this gap in order to explore cultural sensitivity, contextual, and contextual and historical awareness of machine and human translations. It provides an insight that how machine translation can be strengthened in future.

1.5 Research Delimitations and Limitations

The study is delimited to comparative analysis of human and machine translation. The study analyses the speech of Quaide Azam Muhammad Ali Jinnah that he presented at Dhaka university. The study is limited to the single speech of Quaide Azam Muhammad Ali Jinnah. The study applies Nida's Dynamic Equivalence Theory. It overlooks other theoretical frameworks. Additionally, the study excludes other influential factors such as linguistic register, idiomatic expressions, and technical terminology.

2. Literature Review

According to Kenney (2022), the process of transmitting the text of the source language into target language is known as translation. The language from which the text is transmitted is source langue and the message which is transferred into the language is called target language. It is included not only words but the use of langue in context and real life. It can be in written or spoken form. Moreover, translation is used to connect people together and facilitate communication around different cultures. On the other hand, the transferring of the text of source language into target language automatically is called machine translation. Machine translation also has similarities with human translation, but it has small differences as well. It is created by computerized system without the assistance of human.

Machine Translation has been improved and an important change has come in the improvement of its methods. It has gone under significant changes over the years. It was starting with an approach called indirect approach in 1950s. This approach includes looking up the equivalent of words in a dictionary and breaking down words into their basic form. In this approach, a word with multiple endings is changed into its base form (Lee & Liao, 2011).

However, in spite of the advancement of machine translation, it has been remained as field of suspicion and doubt. It has more weaknesses than its advantages (Hutchins, 2003). Though machine translation has weaknesses and faces criticism, it also has its significance due its consistency, completion of paragraphs and sentences. If it makes errors in translation, humans also make mistakes (Gross, 1992).

Similarly, Xiu and Xeauyin (2018) found that Information, knowledge and ideas are conveyed by translation. It is a persuasive and impressive source between different various cultures. It plays an important role in the maintenance of harmony and peace. Human translation is preferred due to sense for sense and word for word translation. The access of machine translation is limited to word for word translation. It does not focus on cultural, social and contextual meaning.

Freitag, Markus, et al (2021) explore in their study that it is very difficult to evaluate machine translation. it because of the identification of the correct translation in different translations that which one is the most reasonable and valid. This type of translation sometimes creates ambiguity and uncertain situation in meaning. It has limitation and it does not reflect the original message of the source language. On the contrary of that, human translation is reliable and accurate. Moreover, it identifies the reasonable translation easily and avoids ambiguity, confusion and uncertainty and as well as it conveys the original message of the source language.

This qualitative study compares machine translation and human translation. It analyses the speech of Quaide Azam Muhammad Ali Jinnah to explore the importance that human translation protects historical, cultural and contextual aspects in translation, and the limitation of machine translation that is confined to word for word translation. The study applies Nida's Dynamic Equivalence Theory. Importance has been given to human translation due to its originality, accuracy, cultural and contextual preservation of meaning of the text in translation. The research addresses the limitations of machine translation, including ambiguity and uncertainty, emphasizing the need for contextual awareness and linguistic competence. The findings contribute to the field of translation studies, informing strategies to enhance machine translation's performance and underscoring human translation's value in maintaining the essence and impact of original texts, particularly in culturally significant contexts.

3. Research Design and Methodology

This study is based on qualitative approach aiming to compare machine translation with human translation to find out the advantages of human translation and the weaknesses of machine translation. To carry out the study, Nida's

Dynamic Equivalence Theory has been applied as a theoretical framework.

In order to conduct this study a speech of Quaid-e-Azam Muhammad Ali Jinnah has been selected as a sample of this study. Moreover, to translate the text to find out the result of both MT software (Google Translate) and HT (expert human translators) have been used. In addition to that, the translated speech of Quaide Azam Muhammad Ali Jinah has been taken from Nayab notes of Grade 11th. The translator is Qazi Ihsan Ullah (M. A English, M.Ed). The translated texts are analyzed using content analysis to identify cultural, historical, and contextual inaccuracies.

4. Theoretical Framework

The study applies Nida's Dynamic Equivalence (Nida, 1964) which focuses on equivalent meaning and the impact between source text and target text. This theory emphasizes to convey the tone and intent of original message over formal equivalence or word for word translation. During translation, understanding of cultural, historical, contextual and social contexts are required for dynamic equivalence in both source and target texts (Bassnett, 2014). Similarly, to convey the correct message, it is necessary for the translators to have linguistic and cultural competence (Munday, 2012). Moreover, to convey emotional resonance, translators must preserve the tone and style of original text (Venuti, 2008). To convey meaning over literal translation, idiomatic expression should be translated (Hutchin, 2002). The adaptation of culture is important for the assurance of effectiveness and relevance (Kenny, 2011).

In this study, Nida's Dynamic Equivalence Theory informs the comparative analysis of machine translation (MT) and human translation (HT) of Quaid-e-Azam Muhammad Ali Jinnah's speech. By evaluating translations through this theoretical lens, the study examines how MT and HT convey cultural, historical, and contextual nuances.

5. Analysis and Discussion

In "Responsibilities of Youth," Muhammad Ali Jinnah addresses graduates, emphasizing their pivotal role in shaping the future of Pakistan. He acknowledges the challenges faced by the youth as they transition from academic success to real-world responsibilities in a newly independent state. Jinnah underscores the importance of unity and discipline, advocating for a constructive spirit over militaristic fervor previously necessary for freedom. He asserts that true freedom entails responsibilities to serve the state and fellow citizens, urging graduates to embrace this duty with integrity and dedication. Throughout, he reinforces the message that the creation of Pakistan is not just a political milestone but a call to actively participate in nation-building.

Paragraph 1

"Mr. Chancellor, Ladies and Gentlemen, when I was approached by the Vice-Chancellor with a request to deliver the Convocation Address, I made it clear to him that there were so many calls on me that I could not possibly prepare a formal Convocation Address on an academic level. (Jinnah, 1-3)".

Machine Translation

نوجوانوں کی ذمہ داریاں
" جناب چانسلر، خواتین و حضرات، جب مجھ سے کانووکیشن کا خطاب دینے کی درخواست کے ساتھ وائس چانسلر سے رابطہ کیا گیا، تو میں نے ان پر واضح کیا کہ مجھ پر اتنے کالز آئے ہیں کہ میں باضابطہ کانووکیشن کی تیاری نہیں کر سکتا۔ "

Human Translation

"جناب چانسلر، خواتین وحضرات!
جب وائس چانسلر نے اس درخواست کے ساتھ مجھ سے رابطہ کیا کہ کہ میں کانوو کیشن سے خطاب کروں، تو میں نے یہ اس پر واضح کردیا کہ میں اتنا مصروف ہوں کی تعلیمی سطح پر ایک رسمی کانووکیشن تیار نہ کرسکوں گا۔"

Analysis

We have taken the first paragraph (mentioned in Paragraph 1) of the speech of Qaid e Azam Muhammad Ali Jennah and translated it through machine translation as well as human translation. After comparing both translations it has been observed that, generally, machine translation protects the core meaning but it does not capture the idiomatic meaning. It has translated the sentence "There were so many calls one me" into مجھ پر اتنے کال آئے ہیں (I have received so many calls), which sounds awkward and ignores idiomatic meaning. Moreover, it has not translated the sentences in natural way that weakens impression in reading the text. On the other hand, human translation maintains clarity and reflects the original meaning of the text. It has changed the sentence idiomatically for better impression which feels more natural. The

meaning of "There were so many calls on me" was translated as "میں اتنا مصروف ہوں" (I am so busy).

Paragraph 2

"First of all, let me thank the Vice-Chancellor for the flattering terms in which he referred to me. Mr. Vice-Chancellor, whatever I am, and whatever I have been able to do, I have done it merely as a measure of duty which is incumbent upon every Musalman to serve his people honestly and selflessly (Jinnah, 7-10)"

Machine Translation

"سب سے پہلے، میں وائس چانسلر کا شکریہ ادا کرتا ہوں جس میں انہوں نے میرا حوالہ دیا۔ جناب وائس چانسلر، میں جو کچھ بھی ہوں اور جو کچھ بھی کر سکا ہوں، میں نے اسے محض ایک فرض کے طور پر ادا کیا ہے جو ہر مسلمان پر فرض ہے کہ وہ اپنے لوگوں کی ایمانداری اور بے لوث خدمت کرے۔"

Human Translation

"سب سے پہلے تعریفی الفاظ میں میرا ذکر کرنے پر مجھے وایس چانسلرصاحب کا شکریہ ادا کرنے دو۔ مسٹر وایس چانسلر میں جو کچھ بھی ہوں ا ور میں جو کچھ کرنے کے قابل رہاہوں، میں نے یہ سب کچھ محض اپنا فرض سمجھ کر کیا ہے جو ہر مسلمان پر فرض ہے کہ وہ دیانتداری اور خلوص کے ساتھ اپنے لوگوں کی خدمت کرے۔"

After translating the paragraph 2 using both (machine and human) translation methods it has been observed that words and phrases are directly translated by machine translation from English to Urdu. It focuses on surface meanings but lacks natural meaning and cultural response which is valued by Nida's Dynamic Equivalence Theory. For example, the phrase "Mr. Vice-Chancellor" has been translated as "جناب وائس چانسلر", which retains respect but it is not conversational but feels formal. "As a measure of duty which is incumbent upon every Musalman", has been translated very simply without additional words. On the contrary of that, human translation, has translated the text in contextual and refined manner which supports Nida's Dynamic Equivalence views. For example, the phrase تعریفی "الفاظ میں میرا ذکر کرنے پر" ("for mentioning me in such flattering terms") conveys the original meaning, respect and humbleness have been captured by it. This shows originality and adds effect in communication. The use of " دیانتداری اور "ایمانداری اور بے لوث" instead of "خلوص کے ساتھ indicates cultural and familiar meanings instead of literal meaning. The use of " خلوص and "ایمانداری اور بے لوث" instead of "کے ساتھ brings a more culturally familiar resonance. The tarnation of the word "خلوص" (sincerity) and "دیانتداری" (honesty) express deep association with cultural context.

Paragraph 3

"In addressing you I am not speaking here to you as Head of the state, but as a friend, and as one who has always held you in affection. Many of you have today got diplomas and degrees and I congratulate you. Just as you have won the laurels in your university and qualified yourselves, so I wish you all success in the wider and larger world that you will enter (Jinnah, 11-14)."

Machine Translation

آپ کو مخاطب کرتے ہوئے میں یہاں آپ سے ریاست کے سربراہ کی حیثیت سے نہیں بلکہ ایک دوست کی حیثیت سے بات کر رہا ہوں اور ایک ایسے شخص کی حیثیت سے جس نے آپ کو ہمیشہ پیار سے رکھا ہے۔ آپ میں سے بہت سے لوگوں نے آج ڈپلوما اور ڈگریاں حاصل کی ہیں اور میں آپ کو مبارکباد پیش کرتا ہوں۔ جس طرح آپ نے اپنی یونیورسٹی میں اعزازات حاصل کیے ہیں اور خود کو اہل بنایا ہے، اسی طرح میں آپ کو اس وسیع اور وسیع دنیا میں کامیابی کی خواہش کرتا ہوں جس میں آپ داخل ہوں گے۔

Human Translation

آپ سے خطاب کرتے ہو یے میں آپ سے بحیثیتِ ریاستی سربراہ مخاطب نہیں ہوں بلکہ بحیثیت ایک دوست مخاطب ہوں، اور ایک ایسے فرد کی حیثیت سے جس نے ہمیشہ آپ سے محبت کی ہے۔ آپ میں سے بہت سے (طلباء) نےآج ڈپلوم اور ڈگریاں حاصل کرلیں ہیں، اور میں آ پ کو مبارکباد دیتا ہوں۔ جس طرح آپ لوگوں نے تعلیم حاصل کرکے یونیورسٹی میں کامیابیا ں اور تمغات حاصل کی ہیں اسی طرح میں وسیع تر اورعملی زندگی میں آپ کے کامیابی کے لیے دُعا گو ہوں جس میں تم داخل ہوں گے۔

Analysis

After translating the paragraph 3 using both translation methods it has been observed that the cultural aspect has been left by machine translation. Words have been translated literally and there is no natural flow in this translation when it is compared to Nida's Dynamic Equivalence Theory. The phares "as a friend" is translated as "ایک دوست کی حیثیت سے", has been translated correctly but there is the lack familiarity and warmth foe Urdu audience. The sentence, "آپ کو ہمیشہ پیار سے رکھا ہے", directly translates to "held you in affection," has also has reflects the same weakness. There is a repetition in the sentence " آپ کو اس وسیع اور وسیع دنیا میں کامیابی میں

کی خواہش کرتا ہوں" (I wish you success in the wider and larger world), which weakens the natural flow of spoken Urdu. On the other hand, the human translation achieves its originality in translation and reflects cultural aspect in translation. For example, instead of "ایک دوست کی حیثیت سے" (a literal "as a friend"), the human translation uses the phrase "بحیثیت ایک دوست مخاطب ہوں", which makes the sentence more genuine and personal.

The choice of "تمغات حاصل کی ہیں" (earned laurels and honors) rather than simply "اعزازات حاصل کیے ہیں" (won laurels) has added achievement of deeper sense and shows recognition for academic purposes.

Paragraph 4

"Many of you have come to the end of your scholastic career and stand at the threshold of life. Unlike your predecessors, you fortunately leave this university to enter life under a sovereign and independent state of your own. It is necessary that you and your other fellow students fully understand the implications of the revolutionary change that took place on the birth of Pakistan." (Jinnah, 15-18)

Machine Translation

آپ میں سے بہت سے لوگ اپنے تعلیمی کیریئر کے اختتام" کو پہنچ چکے ہیں اور زندگی کی دہلیز پر کھڑے ہیں۔ اپنے پیشروؤں کے برعکس، آپ خوش قسمتی سے اس یونیورسٹی کو اپنی خود مختار اور خود مختار ریاست کے تحت زندگی میں داخل ہونے کے لیے چھوڑ دیتے ہیں۔ یہ ضروری ہے کہ آپ اور آپ کے دیگر ساتھی طلباء پاکستان کی پیدائش پر رونما ہونے والی انقلابی تبدیلی کے مضمرات کو پوری طرح سمجھیں۔"

Human Translation

آپ میں سے اکثر طلباء اپنے تعلیمی منزل تک پہنچ چکے ہیں اور زندگی کی چوکٹ پر کھڑے ہیں۔ اپنے اسلاف کے برعکس آپ خوش قسمتی سے یونورسٹی سے فارغ ہو کر ایک خود مختار اور آزاد زندگی میں داخل ہو جاؤگے۔ یہ ضروری ہےکہ آپ خود اور آپ کے دوسرے طالب علم ساتھی اس انقلابی تبدیلی کے اثرات (نتائج) پوری طرح سمجھے ہیں جو پاکستان کی تخلیق کے موقع پر نمودار ہویں۔

Analysis

After translating this paragraph 4 through both translation methods it has been observed that Machine translation has translated the word "students(طلبا) into "people (لوگ)", which does not mean people but it means students. There is the lack of clarity and confusion in meaning. It has not captured the historical context of the text.

However, dynamic equivalence is conveyed by human translation. The translation has captured the context of the historical context which is the creation of Pakistan.

Paragraph 5

"We have broken the shackles of slavery; we are now a free people. Our State is our own State. Our government is our own Government, is of the people, responsible to the people of the state and working for the good of the state. Freedom, however, does not mean license. It does not mean behave as you please and do what you like, irrespective of the interests of other people or of the state." (Jinnah, 19-23)

Machine Translation

ہم نے غلامی کی بیڑیاں توڑ دی ہیں۔ اب ہم آزاد لوگ ہیں۔ ہماری ریاست ہماری اپنی ریاست ہے۔ ہماری حکومت ہماری اپنی حکومت ہے، عوام کی ہے، ریاست کے لوگوں کے لیے ذمہ دار ہے اور ریاست کی بھلائی کے لیے کام کر رہی ہے۔ تابم آزادی کا مطلب لائسنس نہیں ہے۔ اس کا مطلب یہ نہیں ہے کہ آپ جیسا چاہیں برتاؤ کریں اور جو آپ چاہتے ہیں کریں، دوسرے لوگوں یا ریاست کے مفادات سے قطع نظر۔

Human translation

ہم نے غلامی کے زنجیروں کو توڑ دیا ہے، اب ہم آزاد ہیں، ہماری ریاست ہمادری اپنی ریاست ہے۔ ہماری حکومت اپنی حکومت ہے ، عوام کی حکومت ہے۔ ریاست کے عوام کو جوابدہ حکومت ہے اور ریاست کی فلاح کے لیے کام کرتی ہے۔ تابم آزادی کا مطلب لائسنس نہیں ہے۔ اس کا مطلب یہ نہیں ہے کہ اب تم جو کچھ کرنا چاہو کر سکتے ہو ، دوسرے لوگوں یا ریاست کے مفادات سے قطع نظر۔

Analysis

The translation of paragraph 5 using both translation method it has been observed that Machine translation does not have freedom in words selection in translation. It translates according to the installed data. On the other hand, human translation has the selection of choice words and looks at the contextual and situational meaning. Moreover, the two translations have similarities due to the use of simple words.

Paragraph 6

Text: "A great responsibility rests on you, and on the contrary, now more than ever, it is necessary for us to work as a united and disciplined nation. What are now required of us all is constructive spirit and not the militant spirit of the days when we were fighting for our freedom. It is far more

difficult to construct than to have a militant spirit for the attainment of freedom. It is easier to go to jail or fight for freedom than to run Government. Let me tell you something of the difficulties that we have overcome and of the dangers that still lie ahead." (Jinnah, 24-30)

Machine Translation

ایک بہت بڑی ذمہ داری آپ پر عائد ہوتی ہے، اور اس کے برعکس، اب پہلے سے کہیں زیادہ ضروری ہے کہ ہم ایک متحد اور نظم و ضبط والی قوم کے طور پر کام کریں۔ اب ہم سب سے جس چیز کی ضرورت ہے وہ تعمیری جذبہ ہے نہ کہ ان دنوں کا عسکری جذبہ جب ہم اپنی آزادی کے لیے لڑ رہے تھے۔ آزادی کے حصول کے لیے جنگجو جذبہ رکھنے سے زیادہ اس کی تعمیر کرنا مشکل ہے۔ جیل جانا یا آزادی کی جنگ لڑنا حکومت چلانے سے زیادہ آسان ہے۔ میں آپ کو ان مشکلات کے بارے میں کچھ بتاتا ہوں جن پر ہم نے قابو پایا ہے اور ان خطرات کے بارے میں جو ابھی بھی سامنے ہیں۔

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Human Translation

اب آپ پر بڑی ذمہ داری عائد ہوتی ہے بلکہ اس کے برعکس اب پہلے سے بہت زیادہ۔ یہ ہمارے لیے لازمی ہے کہ ہم ایک متحد اور منظم قوم کی طرح کام کرے۔ اب ہم سب کے لیے یہ ضروری ہے کہ ہم تعمیری سوچ اپنائے نہ کہ اس زمانے کا جارحانہ جذبہ جب ہم آزادی کی جنگ لڑ رہے تھے۔ آزادی حاصل کرنے کے لیے جارحانہ جذبے کی بجائے تعمیری سوچ رکھنا زیادہ مشکل کام ہے۔ حکومت چلانے کے مقابلے میں جیل جانا یا آزادی کے لیے لڑنا زیادہ آسان ہے۔ مجھے ان مشکلات کے بارے میں بتانے دو جن پر ہم نے قابو پایا ہے اور ان خطرات کے بارے میں جو ابھی آگے آنے والے ہیں۔

Analysis

After translating the paragraph 6 through both translation methods it has been observed that the structure has been prioritized over context in machine translation. The use of such translation results in stilted language and the translation loses its fluency. Sentence like " ایک بہت بڑی ذمہ داری آپ پر عائد ہوتی ہے" sounds unnatural and neglects the economic and political context of Pakistan. In contrast, human translation focuses on text over structure. In this type of translation, the text does not lose it fluency and maintain natural flow.

Discussion

This part discusses strength of human translation and the weaknesses of machine translation based on Nida's Dynamic Equivalence Theory. The analysis investigates that human translation reflects cultural, contextual and historical aspects and machine translation reflects only literal and surface meaning. There is natural flow and fluency in human translation but machine translation lacks this quality. Human translation captures idiomatic meanings but machine translation lacks this property.

Nida's Dynamic equivalence Theory is considered basic model for the analysis of translation studies. It emphasizes the meaning and the impact of the meaning on the target audience instead of literal accuracy. (Nida, 1964). The principle related to meaning and its impact on the target audience has been improved by other scholars. They focused on natural fluency and cultural familiarity in the target language instead of literal meaning (House, 2015; Munday, 2012).

In the machine translation of Jinnah's "Responsibilities of Youth," machine translation protects the core meaning but it does not capture the idiomatic meaning. It has translated the sentence "There were so many calls one me" into مجھ پر اتنے کال آئے ہیں (I have received so many calls), which sounds awkward and ignores idiomatic meaning. Moreover, it has not translated the sentences in natural way that weakens impression in reading the text.

According to Nida's Dynamic Equivalence, to achieve the same impact in the target language, effective translation should adapt source expression (Nida, 1964). Larson (1984) further argues that that natural flow and idiomatic translation should be preferred over literal translation. In contrast, human translation maintains clarity and reflects the original meaning of the text. It has changed the sentence idiomatically for better impression which feels more natural. The meaning of "There were so many calls on me" was translated as " میں اتنا مصروف ہوں" (I am so busy). This supports Nida's and Larson's views on the primacy of meaning over direct lexical equivalence.

Words and phrases are directly translated by machine translation from English to Urdu. It focuses on surface meanings but lacks natural meaning and cultural response which is valued by Nida's Dynamic Equivalence Theory. For example, the phrase "Mr. Vice-Chancellor" has been translated as "جناب وائس چانسلر", which retains respect but it is not conversational but feels formal. "As a measure of duty which is incumbent upon every Musalman", has been translated very simply without additional words. On the contrary of that, human translation, has translated the text in contextual and refined manner which supports Nida's Dynamic Equivalence views. For example,

the phrase "تعریفی الفاظ میں میرا ذکر کرنے پر" ("for mentioning me in such flattering terms") conveys the original meaning, respect and humbleness have been captured by it. This shows originality and adds effect in communication. Newmark (1988) stresses that to ensure effective communication in translation, in formal context tone is important. House (2015) suggests that emotional resonance should not be lost in translation. Therefore, human translation has maintained this quality while machine translation has lost it.

The cultural aspect has been left by machine translation. Words have been translated literally and there is no natural flow in this translation when it is compared to Nida's

Bassnett (2013) argues that effective translation encompasses cultural context and to engage readers, emotional nuance is important. In line with Nida's theory, the human translation opts for the phrasing " بحیثیت ریاستی سربراہ مخاطب نہیں بوں بلکہ بحیثیت ایک دوست مخاطب بوں," which reflects the conversational tone intended in the original English text. By creating a sense of closeness, the human translation embodies the core of dynamic equivalence, resonating with Urdu-speaking listeners and making Jinnah's words more impactful.

When discussing the impact of Pakistan's independence, Jinnah's phrase, "Many of you have come to the end of your scholastic career and stand at the threshold of life," was translated by machine as " آپ میں سے بہت سے لوگ اپنے تعلیمی کیریئر کے اختتام کو پہنچ چکے ہیں". Machine translation has translated the word "students (طلبا) into "people (لوگ)", which does not mean people but it means students. There is the lack of clarity and confusion in meaning. It has not captured the historical context of the text. However, dynamic equivalence is conveyed by human translation. The translation has captured the context of the historical context which is the creation of Pakistan. According to Nida (1964), contextual understanding of a text is important in translation. In human translation, context was taken into account and machine translation has lost it.

In translating "A great responsibility rests on you," the machine translation translates this as " ایک بہت بڑی ذمہ داری آپ پر عائد ہوتی ہے," maintains a literal equivalence only. Nida (1964) and Munday (2012) argue that dynamic equivalence aims to convey the essence of a statement, beyond only literal meaning. The human translation, instead, refines the phrase to "اب آپ پر بڑی ذمہ داری عائد ہوتی ہے," which conveys the weight and immediacy of Jinnah's address to the youth in a way that sounds less formal and more relatable to the target audience. House (2015) highlights that such idiomatic adjustments improve accessibility, a key principle of dynamic equivalence, especially in motivating and instructing audiences.

Findings

The analysis of Jinnah's "Responsibilities of Youth" reveals that human translation supports Nida's Dynamic Equivalence Theory than machine translation. It, successfully adapts meaning in such a way that reflects cultural, contextual, and historical aspects. In many cases, machine translation maintains the literal meaning of words but lacks to convey natural fluency and idiomatic expression. For example, sentence like "There were so many calls on me" was translated literally in machine translation, and has lost its idiomatic meaning, while human translation opts for "میں اتنا مصروف ہوں" (I am so busy), which captures the contextual and implied meaning. This supports Nida's principle that the target language must reflect not only surface meaning but the impact of the original expression on its audience.

Furthermore, phrases addressing cultural aspects and conversational tones—such as Jinnah's friendly appeal to students—were better protected in human translation. For example, the sentence "بحیثیت ایک دوست مخاطب ہوں" (as a friend addressing you) in human translation focuses the implied tone of warmth and connection, while the machine translation lacks this quality. As highlighted by Nida (1964) and further supported by House (2015), emotional resonance and cultural familiarity play crucial roles in achieving effective communication, particularly in formal and instructional contexts such as Jinnah's address. It was found that human translation emphasizes historical, cultural and idiomatic aspect in translation and machine translation only carries literal meaning. It was also found that human translation focuses to translate the text in such a way which main maintains natural fluency and emotional appeal and machine translation lacks this quality in translation.

Conclusion

This analysis has highlighted the main differences between machine translation and human translation by the lens of Jinnah's "Responsibilities of Youth" speech. The study applied Nida's Dynamic Equivalence Theory. It was found that machine translation focuses on literal and surface meaning. There is no fluency and natural flow in machine translation. It does not reflect cultural, historical, contextual and social aspects in translation. It does not have emotional resonance to attract the readers. On the other hand, machine human translation maintains natural flow and fluency and focuses on cultural, historical, contextual and social aspects in translation. It has emotional resonance which ultimately undermines the text's impact on the target audience. According to Nida's Dynamic Equivalence, to achieve the same impact in the target language, effective translation should adapt source expression (Nida, 1964). Larson (1984) further argues that natural flow and idiomatic translation should be preferred over literal translation. In contrast, human translation maintains clarity and reflects the original meaning of the text. Machine translation does not have freedom in words selection in translation. It translates according to the installed data. On the other hand, human translation has the selection of choice words and looks at the contextual and situational meaning. The adherence to Nida's Dynamic Equivalence Theory underscores the necessity of focusing on meaning and cultural context in translation, affirming that successful communication transcends mere lexical equivalence.

Recommendations

Based on findings, several recommendations can be made to improve the quality of translations. More work is required to develop machine translation in such a way to have command over contextual, cultural and historical context of the text in translations. To convey the original message of the source language into target language, the translators must possess the knowledge of both languages. Translation programs should emphasize the importance of cultural competence and emotional resonance in translation. Training translators to recognize and convey these elements can improve their ability to produce impactful translations.

To bridge the gap between machine translation's efficiency and the emotional depth of human translation, it is advisable to implement a hybrid approach. Involving human translators to review and refine machine-generated translations can enhance overall quality and ensure cultural sensitivity. Additional studies should explore the effectiveness of machine translation in different contexts, such as literature, legal texts, and medical communications. This research could provide a deeper understanding of when and how to best utilize machine translation versus human translation.

By acknowledging the strengths and limitations of both machine and human translation, we can foster more effective communication across languages, cultures, and societies. This study not only contributes to the existing body of translation studies but also underscores the critical role that cultural and contextual awareness plays in successful translation practices.

REFERENCES

Bassnett, S. (2014). Translation studies at a crossroads. In *The Known Unknown of Translation Studies* (pp. 17-27).

Freitag, M., et al. (2021). Experts, errors, and context: A large-scale study of human evaluation for machine translation. *Transactions of the Association for Computational Linguistics, 9,* 1460-1474. https://doi.org/10.1162/tacl_a_00436

Gross, A. (1992). Limitations of computers as translation tools. In J. Newton (Ed.), *Computers in Translation: A Practical Appraisal* (pp. 41-52). London: Routledge.

Hutchins, J. (2003). Computer-based translation systems and tools. Retrieved October 15, 2009, from http://www.hutchinsweb.me.uk/BCS-NLT-2003.pdf

Hutchins, J. (2007). Machine translation: A concise history. In *Computer Aided Translation: Theory and Practice* (pp. 29-70).

Kenny, D. (2018). Machine translation. In *The Routledge Handbook of Translation and Philosophy* (pp. 428-445). Routledge. https://doi.org/10.4324/978131516948 7-31

Kenny, D. (2022). Human and machine translation. In *Machine Translation for Everyone: Empowering Users in the Age of Artificial Intelligence* (pp. 18-23). https://doi.org/10.4324/9781003230917-3

Larson, M. L. (1984). *Meaning-based Translation: A Guide to Cross-language Equivalence.* Lanham, MD: University Press of America.

Lee, J., & Liao, P. (2011). A comparative study of human translation and machine translation with post-editing. *Compilation & Translation Review, 4*(2), 105-118. https://doi.org/10.1007/s11462-011-9183-3

Munday, J. (2012). *Introducing Translation Studies: Theories and Applications.* London: Routledge.

Newmark, P. (1988). *A Textbook of Translation.* Prentice-Hall.

Nida, E. A. (1964). *Toward a Science of Translating, with Special Reference to Principles and Procedures Involved in Bible Translating.* Leiden: E.J. Brill.

Xiu, P., & Xeauyin, L. (2018). Human translation vs. machine translation: The practitioner phenomenology. *Linguistics and Culture Review, 2*(1),13-23. https://doi.org/10.21744/lingcure.v2n1.53