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Exploring Appraisal Trends in Newspaper Opinion Pieces Surrounding Machine Translation

Bachelor's thesis in Language Studies with Teacher Education
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Abstract

This small-scale study investigates how attitudes toward Machine Translation (MT) are expressed in anglophone newspaper opinion pieces. By using descriptive discourse analysis and Martin and White's (2005) appraisal theory, the study identifies and categorizes evaluations of MT to determine whether the attitudes are predominantly positive or negative. The findings reveal that attitudes towards MT across the respective opinion pieces are nuanced. All stakeholders express both appreciations of MT's convenience and concerns regarding its accuracy and contextual understanding. In addition, the study also finds a trend of skepticism over time, particularly concerning the use of MT in professional contexts. Despite these insightful findings, limitations of the study, such as the small sample size and the narrow focus on opinion pieces are acknowledged, and the study is therefore not considered generalizable.

Sammendrag

Denne små-skala studien ser på hvordan holdninger til maskinoversettelse kommer til uttrykk i meningsinnlegg publisert i engelskspråklige aviser. Ved å anvende en deskriptiv diskursanalyse, samt Martin og White (2005) sin evalueringsteori, identifiserer og kategoriserer studien evalueringer av maskinoversettelse for å avgjøre om holdningene i meningsinnleggene er positive eller negative. Funnene fra studien peker på at holdninger til maskinoversettelse hovedsakelig kommer til uttrykk som nyanserte. Aktørene verdsetter lettvintheten med maskinoversettelse, samtidig som de deler bekymringer rundt hvorvidt oversettelsene er korrekte, og om verktøyet håndterer kontekst på en tilstrekkelig måte. I tillegg viser resultatene en tendens til økende skepsis over tid og særlig med hensyn til bruken av maskinoversettelse i profesjonelle sammenhenger. Til tross for studiens innsiktsfulle funn, anerkjennes det at studiens begrensede utvalg og det smale fokuset på meningsinnlegg begrenser studiens generaliserbarhet.

List of acronyms

MT = Machine Translation

GT = Google Translate

NMT = Neural Machine Translation

SMT = Statistical Machine Translation

SFL = Systemic Functional Linguistics

1.0 Introduction

MT services like GT have become crucial in enabling communication across languages. In recent years, NMT have transformed the landscape of MT technology. Unlike the initial SMT technology, NMT considers the entire sentence of a unit for translation, instead of translating words and phrases independently (Le & Schuster, 2016). In other words, the neural network model is more efficient than the statistical model for translation in terms of determining the context of the language input (Le & Schuster, 2016). Today, NMT is widely applied to most MT services, including GT.

Given that MT developments are on the rise and Google Translate is the most used free MT service online (Poibeau, 2017), there is considerable interest in exploring what type of attitudes individuals have towards MT technology. The objective of the present study is therefore to address the question: What kinds of attitudes are expressed toward MT in anglophone newspaper articles? Through an examination of the language used in opinion pieces, this study seeks to uncover patterns of appraisal and identify the overall balance of either positive or negative attitudes toward machine translation services. To answer the research question, this study employs discourse analysis as its main methodology. Within this analytical framework, I use Martin and White's (2005) attitude resource to describe the evaluative language used in the discourse.

2.0 Literature review

Attitudes toward MT have been studied through different approaches within various contexts. Carvalho et.al (2023) examine attitudes toward MT among tourists, related to demographics and travel behavior. Through a quantitative approach, analyzing data gathered from both tourists and language tourists, Carvalho et.al's study shows that positive views of MT are associated with younger age, lower education, poorer language skills, and a perception of English as a lingua franca. Conversely, language tourists who rate MT as less important tend to have formal language skills and engage more in cultural and local activities during trips.

Groves and Mundt (2021) contribute to the literature on attitudes towards MT in education. Their study explores the attitudes of academic staff towards the use of MT in internationalized higher education. The study uses a qualitative approach, interviewing academic staff at two UK-based universities with a high percentage of international students enrolled. They find that while the use of MT as a reading aid is generally accepted, its use as a writing resource is more controversial due to concerns about academic integrity and language development (Groves & Mundt, 2021). An appraisal-driven study by Ganwan and Khairunnisa

(2023) explores attitudes towards MT in education. Their study provides an examination of Arabic language lecturers' perceptions of GT usage in academia. Through surveys and interviews with ten lecturers, their study employs Martin and White's (2005) appraisal theory to analyze the data. Findings of emotional and evaluative responses reveal a nuanced view among lecturers, with both positive and negative perceptions of GT's utility for academic tasks. In broad terms, the positive aspects were grounded in the perceptions of GT as user-friendly and affordable, and they demonstrated appreciation towards the voice feature. Negative evaluations were driven by challenges such as literal translations and cultural-specific contexts and words.

The study by Liu et al. (2022) investigates perceptions of MT among translation instructors and learners in Hong Kong and their attitudes related to ethics of use, quality, and its influence on translation competence acquisition. Through surveys and semi-structured interviews, the researchers found that most respondents valued the convenience and efficiency of MT tools and platforms, with learners using them as a supporting tool, not as a replacement for human translators due to their concern about MT accuracy. This echoes findings from Xu & Wang (2011), who discovered that Chinese translation students rely on electronic resources for convenience rather than accuracy, despite being aware of their shortcomings, as online resources are perceived to enhance translation efficiency (Xu & Wang, 2011, p. 79).

In her MA thesis, Arntz (2024) employs a corpus-driven discourse analysis and appraisal theory to explore online discourse surrounding MT and AI. By comparing the attitudes of various stakeholders: the public, language service providers (LSPs), and language software companies, the study identifies overlapping evaluations among stakeholders towards MT including quality, the need for human translators, and the business aspect. Moreover, the study finds that the public expressed cautious pessimism, that LSPs demonstrated cautious optimism, and the software companies were more positive towards MT and showed cautious optimism. Overall, the study finds the public to be focused on morality and the potential consequences of MT and AI, while LSPs stressed the significance of human translators for quality, and software companies emphasized the integration of MT as a business strategy for better efficiency.

Unlike studies that explore the influence of MT services on language learning, this research centers on the context in which individuals inhabit negative and positive attitudes towards MT in newspaper opinion pieces. Opinion pieces often reveal how the writer articulates a position towards a question or a subject. This approach will contribute to the existing body of knowledge but also provide insights into how individuals take a stance towards MT in the public media sphere.

3.0 Theoretical framework

Appraisal theory is grounded in the school of SFL and we can use it to analyze how individuals evaluate or take a stance through our use of language in a text (White, 2015, p.1). The appraisal framework was developed by Martin and White (2005) and is a continuation of what the SFL theory of Halliday (1994) calls the interpersonal metafunction (White, 2015, p.1). The appraisal framework was developed as a tool to examine how texts communicate positive or negative evaluations, how language is used to make these evaluations stronger or weaker in intensity or directness, and how speakers or writers interact with previous speakers or potential respondents when expressing their opinions or evaluations (White, 2015, p.1). These meaning-making resources, or different ways of expressing evaluations, are together called ‘the language of evaluation’ because they all reveal the speaker’s/ writer’s personal and evaluative involvement in the text. This involvement is revealed as they take a stance either toward phenomena (the entities, happenings, or states of affairs) being construed by the text or toward metaphenomena (propositions about these entities, happenings, and states of affairs) (White, 2015, p.1). This study will mainly be concerned with how the writer evaluates the *phenomenon* Machine Translation through their use of language.

Appraisal, or ‘the language of evaluation’ is made up of three meaning-making resources: attitudes, engagement, and graduation (White, 2015, p.1). These resources together make up a comprehensive framework for understanding evaluative language. However, in my small-scale study, I attempt to only employ the system of attitude as the theoretical framing when analyzing the data. The attitude resource alone allows for a focused examination of attitudes expressed by the writer. Employing the two other resources could offer depth and valuable insights into the writer’s personal investment and interaction with the topic. Such considerations would be more beneficial in broader studies exploring attitudes with explicit attention to factors such as political engagement or level of education. Prioritizing attitudes in this research allows for a focused analysis of how MT is appraised in newspaper opinion pieces, aligning with the study’s objectives and practical constraints.

The Attitudinal perspective in the appraisal literature refers to evaluative/attitudinal meaning that positions addressees to take a positive or negative stance towards something (White, 2015, p.2). Attitudinal meanings are divided into three sub-systems; Affect, Judgement and Appreciation (See Figure 1).

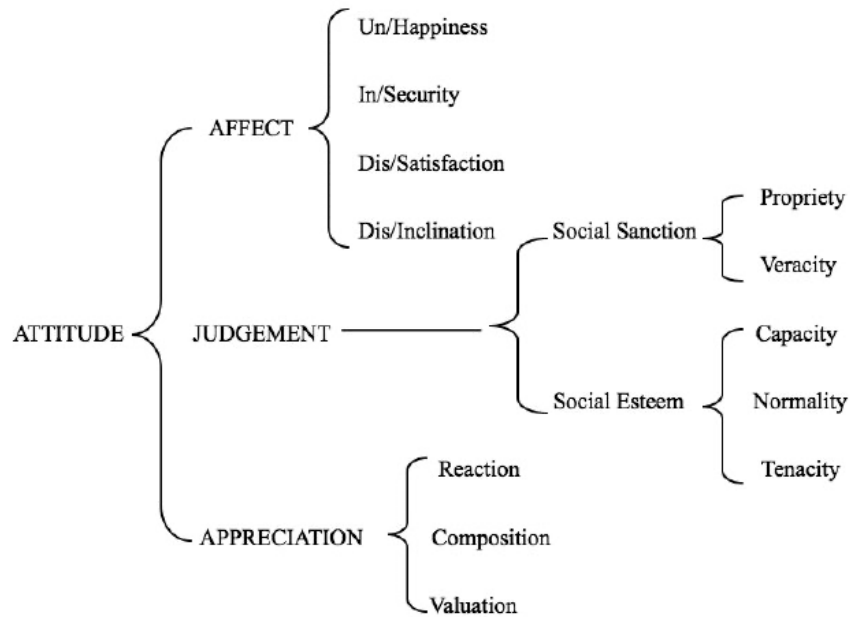


Figure 1: Typology of attitude subsystems (Liu & thompson, 2009).

The subsystems of ‘Attitude’ are interconnected and are all motivated by affectual response (Liu & Thompson, 2009). The subsystem of ‘Affect’ is the writer’s emotional response towards an event or a thing, person, or situation (Liu & Thompson, 2009). ‘Judgement’ institutionalizes affectual positioning with respect to human behavior. (Liu & Thompson, 2009). In broad terms, this resource involves evaluating whether actions or processes align with accepted standards of behavior or morality. ‘Appreciation’ institutionalizes affectual position with respect to product and process, and is an aesthetic evaluation of objects, entities, and presentation (Liu & Thompson, 2009).

4.0 Methodology

This study employs descriptive discourse analysis to examine the attitudinal patterns found in newspaper opinion pieces surrounding the use of MT. Discourse analysis aims to study the organization of language “above the clause,” focusing on larger linguistic units like written text (Budd and Raber, 1996, p. 217). Meaning is understood as the intersection of intent and interpretation that result from the messages exchanged in discourse, indicating that stances taken in discourse are socially constructed (Budd and Raber, 1996, p.217). Description is therefore an inevitable part of any discourse analysis, as it examines the language in-use, emphasizing how language carries meaning within a specific context (Budd and Raber, 1996,

p.217). The appraisal framework has been adopted to a diverse range of discourse studies, with both critical and descriptive goals. Teresa Oteíza, a researcher in discourse analysis and Systemic Functional Linguistics, has written an article about the application of the appraisal framework to discourse analysis (Oteíza, 2017). Oteíza justifies this possibility thus: “The appraisal framework is a powerful tool for engaging with discourse analysis because of the possibilities that it offers with regard to the systematization of interpersonal meanings” (Oteíza, 2017, p. 469).

Data were collected from various newspapers from the anglophone area. The search terms ‘Google Translate Opinion’ and ‘Opinion Machine Translation’ were put into the Google Search engine. The author selectively read through the retrieved results and focused on opinion pieces, which offer a clear identification of who is sending the message. Five articles from different stakeholders were selected: Article 1 (McClelland, 2015) provides a personal perspective, and article 2 (Skapinker, 2015) offers a personal perspective but with prospects for the business industry. Equally, article 3 (Whitaker, 2007), article 4 (Lotz & Wallmach, 2021), and article 5 (Bellos, 2010) represent translators’ and translation scholars’ perspectives.

To conduct a qualitative examination of these opinion pieces in newspapers, Oteíza's (2017) justification for using the appraisal framework to engage with the material was adopted. The analysis was performed through Martin and White's (2005) attitude resource, which provides an overview of interpersonal evaluations expressed towards MT. The occurrences of affect, judgment, and appreciation were identified in the opinion pieces. These occurrences were then coded and categorized into the subcategories of attitude using NVivo – a qualitative software program. Since the coding process aimed to investigate how appraisers position themselves towards MT, both positive and negative appraisals were included as well. The findings were summarized in a table in the analysis section. Empirical findings were further supported by quotes, anecdotes, or opinions that illustrate the different subcategories of attitude.

The rationale behind the coding process was linked to the theoretical framework, although with some deviations from the components of the attitude resource presented in Figure 1. This was necessitated by the interconnected nature of the attitude resource. The affect category focused on identifying emotional tone and engagement in contexts where the writer appraised MT. Instances of affect were primarily coded based on linguistic indicators signifying emotions as presented in Figure 1. With consideration of nuances in language, implicit cues such as connotation, tone, and rhetorical devices were also coded affect. When coding for judgment, the focus shifted from evaluations of human behavior to assessments of the process performed by MT. These assessments encompassed whether the MT output or technology

adhered to linguistic and cultural standards of translation and communication, and how they compared to human translations. Judgments were coded based on expressions of admiration, critique, praise, or condemnation, drawing from sources such as White (2015), Liu & Thompson (2009), and Oteíza (2017). Finally, drawing from the same sources, evaluations fell under the category of appreciation when the writer reacted either positively or negatively to the composition and quality of MT. Aesthetic evaluations were identified as appreciation, and the overlapping theme of performance was here related to how the writer valued either the technology or its role in facilitating communication.

5.0 Analysis

For this analysis, five opinion pieces from various anglophone newspapers which represent different perspectives are examined. The following sections will present findings from the analysis of Martin and White's attitude resource including the subsystems of affect, judgment, and appreciation. This will be followed by a presentation of general trends, providing an overview of positive and negative evaluations of MT in all opinion pieces.

5.1 Affect

Table 1 summarizes the occurrences of 'affect,' the emotive language used in the context of appraising MT across the different opinion pieces. Included in the table are the subcategories of affect that were identified.

Opinion Piece	Affect	Instances	Subcategories identified
Article 1 (2015)	Total	11	Security, Happiness Unhappiness, Dissatisfaction
	Positive	5	
	Negative	6	
Article 2 (2015)	Total	8	Satisfaction, Insecurity, Dissatisfaction
	Positive	3	
	Negative	5	
Article 3 (2007)	Total	6	Happiness, Satisfaction, Dissatisfaction
	Positive	4	
	Negative	2	
Article 4 (2021)	Total	1	Insecurity
	Positive	0	
	Negative	1	
Article 5 (2010)	Total	6	Satisfaction, Insecurity
	Positive	5	
	Negative	1	

Table 1: Affect in opinion pieces.

Positive affectual responses towards MT were identified in almost all five opinion pieces. In article 1, written from a personal perspective, the writer generally used a richer, emotive language compared to the other opinion pieces. The writer expressed emotions of happiness, particularly when describing GT’s role in facilitating communication and enabling her relationship with he who is now her husband. Security is only identified in article 1 and becomes prominent by how the writer appraises GT with phrases such as “[t]ranslation had validated our gut feelings” and “our distance, though painful, felt safe.” The former implies that GT translations were efficient enough to enable deeper communication between the two and contributed to a feeling of security by affirming their feelings towards each other. The latter suggests that despite the physical distance, there was a perceived safety in their relationship, indicating that the use of MT provided a sense of security in their life situation.

Articles 2, 3, and 5 demonstrated a pattern of affectual responses, driven by happiness and satisfaction. Adverbs followed by adjectives describing the nature of the tool or the technology behind MT were recurrent in evaluations. Notably, the phrases “truly impressive” and “sufficiently impressive”, alongside adjectives like “wonderful development” and “fabulous tool,” indicated satisfaction and admiration towards improvements of MT. Conversely, article 4 lacked positive emotive language, which indicates that the writers do not appraise MT with a clear emotive tone.

Negative emotional responses were also prevalent in the material. In articles 1-3, where dissatisfaction was identified, the writers highlight concerns about the quality and accuracy of

MT. For example, in article 3 the writer underlines that “[f]ree online services, up to now, have been *rudimentary*,” and “the results have usually ranged from *fair to dire*.” As for insecurity – which has a more implicit nature – the writers react to the unreliable facets of MT output, and express that they feel insecure relying on it. In article 4, written by translation scholars, insecurity is thus expressed as: “[i]f we do choose to use machine translation, we will undoubtedly still need human intervention (post-editing) to ensure that our translation is fit for purpose – that it really connects with and engages the intended audience.” This stance indicates a lack of confidence in the ability of MT alone to produce high-quality and contextually accurate translations without human expertise. Similarly, the writer of article 2, expresses insecurity of applying MT for professional business needs and emphasizes the security of using human translators for important tasks.

5.2 Judgment

Table 2 summarizes instances of ‘Judgment’ across the different opinion pieces. Subcategories are not included, but examples of evaluations identified as judgment will subsequently be provided.

Opinion Piece	Judgment	Instances	Percentage covered in article
Article 1 (2015)	Total	5	5.80 %
	Positive	1	0.80 %
	Negative	4	5 %
Article 2 (2015)	Total	6	24 %
	Positive	1	4 %
	Negative	3	13.40 %
	Neutral	2	6.60 %
Article 3 (20077)	Total	10	9.90 %
	Positive	3	2.50 %
	Negative	5	3.40 %
	Neutral	2	4 %
Article 4 (2021)	Total	6	18.40 %
	Positive	1	1.10 %
	Negative	4	15.40 %
	Neutral	1	1.90 %
Article 5 (2010)	Total	18	14.90 %
	Positive	5	2.50 %
	Negative	7	7.50 %
	Neutral	6	4.90 %

Table 2: Judgement in opinion pieces.

When examining judgment trends across all opinion pieces, common themes and notable differences emerge. Articles 2 and 4 predominantly express negative judgments, whereas articles 5 and 3 offer a more balanced evaluation, reflecting a nuanced perspective. Article 1, in contrast, indicates a negative trend but covers a substantially lower percentage than articles 2 and 4.

Negative evaluations through judgment are primarily driven by a critique of MT's performance, often in comparison to stakeholders' expectations for human communication and translation. A common critique found in all opinion pieces is MT's inability to translate context. The appraiser in article 1 highlights how the output is problematic in terms of clarity, often leading to miscommunication between those communicating with MT. Article 2 criticizes MT for being inadequate for use in professional business settings and underscores the need for human translators to ensure efficient and quality-proof translation. From a translator's perspective, article 3 points out limitations of MT, mentioning context, but also grammatical errors and culturally inappropriate translations. This is evident in the writer's reaction to the output he got when using GT to translate a literary piece "[t]he results were bizarre, but it does contain rather a lot of swearwords." Similarly to article 2 and 3, the writers of articles 4 and 5 also stress the need for human translators for critical tasks and criticize how one possibly can rely fully on translations where there is no transparency of how the data emerges and how it is trained to produce the translations.

Positive judgments of MT were also found in the opinion pieces. Overall, they emphasized MT's effectiveness and alignment with social expectations, often by highlighting the comparability of MT's performance to human performance. For instance, in article 2 the writer states that "Google translate voice feature may be better than some of these discussions. Many of the nuances may be lost – but they are often lost anyway when people are not speaking their own language", acknowledging the existing imperfections in human communication and suggesting that MT can perform on par with humans in facilitating understanding. Similarly, in article 3 the writer stresses that "its [GT's] legendary bloopers are often no worse than the errors made by hard-pressed humans," aligning with the understanding of errors being a natural part of translation work, as translators often work under high pressure.

These judgments, negative and positive, together express admiration of MT's ability to produce output that can be understood. However, the output is criticized for being too literal and in lack of contextual accuracy. While acknowledging that MT and human translators have flaws, these judgments highlight that MT can be a reliable and effective tool in many cases of

use. However, an important note is that MT should not be used alone as a substitute for human translators when communicating critical information.

5.3 Appreciation

Table 3 below summarizes instances of ‘Appreciation’ across the five opinion pieces. Overall, the table shows, in line with the nature of appreciation as a subsystem of attitude, that passages identified as appreciation is generally more positive than negative. This indicates that the aesthetic evaluation of MT tools and features tends to be positively described and that the writers, despite judging the accuracy and reliability of MT, value the accessibility of MT technology.

Opinion Piece	Appreciation	Instances	Percentage covered in article
Article 1 (2015)	Total	6	10.70 %
	Positive	6	10.70 %
	Negative	0	
Article 2 (2015)	Total	7	17.45 %
	Positive	5	10.35 %
	Negative	2	7.10 %
Article 3 (2007)	Total	7	9.30 %
	Positive	6	7.85 %
	Negative	0	
	Neutral	1	1.45 %
Article 4 (2021)	Total	3	6.45 %
	Positive	3	6.45 %
	Negative	0	
Article 5 (2010)	Total	6	7.68 %
	Positive	4	5.50 %
	Negative	1	1.18 %
	Neutral	1	1 %

Table 3: Appreciation in opinion pieces.

Positive evaluation identified as appreciation tends to exist in the context of describing MT services and their features, and how they work efficiently in terms of speed, accessibility, and the possibilities such tools have for facilitating communication. The writer of article 2

highlights the convenience of MT, despite ungrammatical output, stating “[h]owever ropey the results (and yours might be better), visual translation is quite an achievement” and “[t]he truly impressive feature of Google Translate is its voice option (...). It is meant to be a pocket size interpreter.” Moreover, on the note of availability and speed, the author of article 5 appraises MT positively by noting how “Machine translation has proved helpful in more urgent situations as well,” highlighting the rapid development of an MT system for Haitian Creole during the 2010 Haiti earthquake.

In article 3, the writer emphasizes the increased accessibility to texts in other languages using GT, illustrated by the phrase “it can make Arabic newspapers and other writing on the internet far more accessible, increase international understanding, and so on”. Additionally, the writer appreciates the possibility of human interference on the platform, stating “[o]ne of the advantages of the Google system is that (...). Readers who don't like Google's translation are invited to suggest a better one.” This implies a belief that human knowledge can improve MT output. Similarly, this works the other way around, as the translation scholars behind article 4 underline the possibility of improving translation efficiency and consistency by incorporating MT technology, such as computer-aided translation tools in their practice.

Moving from professional and societal applications, the writer of article 1 inherits another perspective as she shares her personal experiences with MT. A frequent and consistent theme was how she appreciated GT's role in enabling her relationship, as well as how the regular use of the translation device enabled language learning, which benefitted her life in the long run.

5.4 General trends

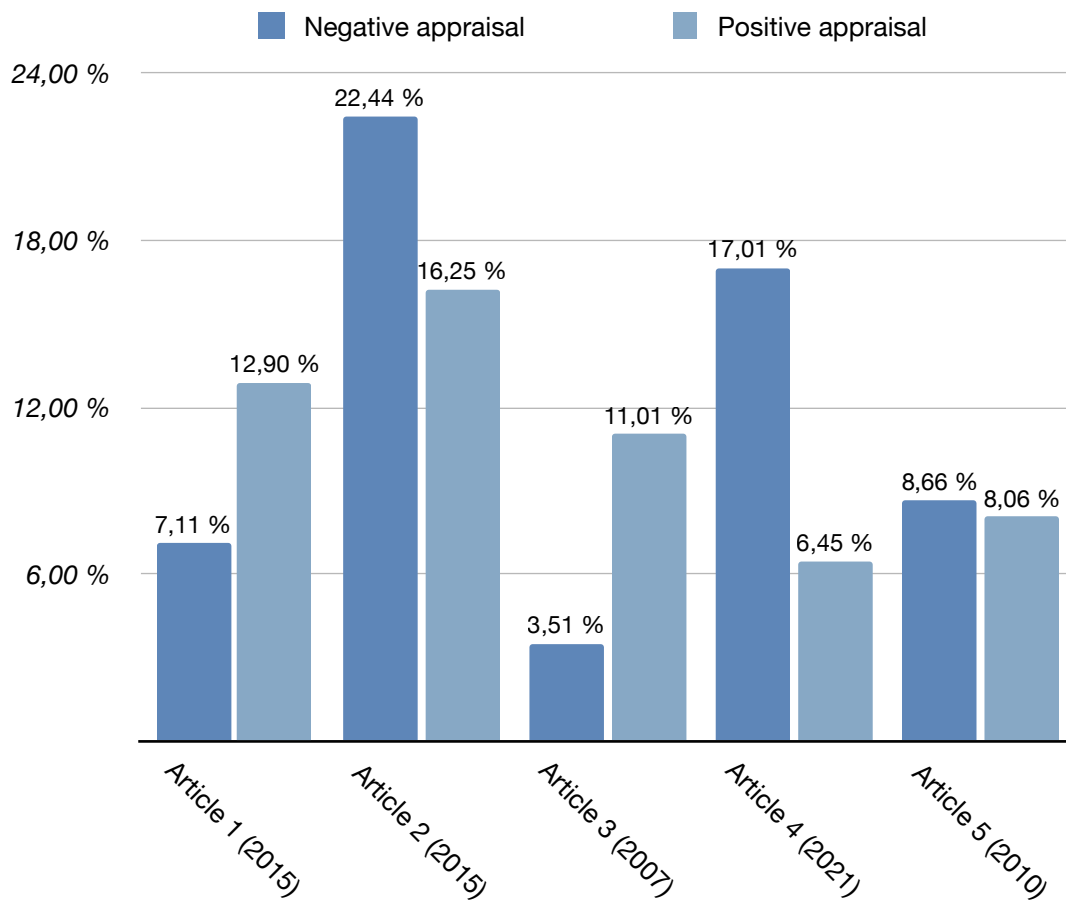


Figure 2: Distribution of negative and positive appraisal in all opinion pieces

The chart in Figure 2 illustrates the distribution of positive and negative appraisals in the five opinion pieces. The writer of article 2 stands out with the highest level of evaluative language towards MT and GT. Article 2, with a business perspective is more negative and skeptical compared to the positive stance taken in article 1, where the writer emphasizes the benefits of MT for personal communication across linguistic barriers. Similar to article 2, article 4 also exhibits a substantial amount of negative appraisal towards MT. In contrast, articles 1 and 3 show a distinctive positive trend in appraising MT, while article 5 offers a more nuanced view, as the evaluative language alternates between positive and negative aspects.

The chart highlights significant differences in attitudes across and among stakeholders. Articles 3,4 and 5, written by translation scholars and translators, show a variation in attitudes as article 3 is positive, article 4 is negative, and article 5 is nuanced. Temporal trends are also evident in the chart. The more recent opinion pieces tend to be more negative towards MT,

while earlier articles from 2007 and 2010 generally present either positive or nuanced evaluations. This suggests a shift towards greater reluctance toward the use of MT, and more critical evaluation of MT over time, particularly in professional contexts.

6.0 Discussion

The objective of this study was to address the question: What kinds of attitudes are expressed towards Machine Translation (MT) in anglophone newspaper articles? The analysis revealed that attitudes towards MT are nuanced, encompassing both positive and negative evaluation across the three attitude subsystems: affect, judgment and appreciation.

The emotive responses ranged from happiness and satisfaction, particularly with MT's role in facilitating communication, to dissatisfaction and insecurity regarding the quality and reliability of MT services. In evaluations identified as judgments, negative opinions were mostly driven by the same critique of MT, focusing on MT's inability to handle context, cultural nuances, and the need for human expertise in critical tasks. Additionally, positive judgments highlighted MT's effectiveness in less critical cases of use. Lastly, appreciation involved frequent positive appraisals of MT's features and accessibility, stressing the technology's role in making foreign text accessible and aiding in communication during urgent situations, as well as making the translation process more efficient for translators.

Moreover, the distribution of positive and negative appraisal shown in Figure 2, suggest that there is a diversity of attitudes among translation scholars. Even though they all agree on the importance of human translators for quality, they showcase different stances in the overall picture. This may point at the lack of a common ground, or a consensus, regarding the value and reliability of MT. However, this can possibly be explained by the temporal trends revealed in the chart. Figure 2 suggest a trend towards increasing skepticism of MT over time, particularly in professional contexts. Earlier articles (e.g., Whitaker, 2007; Bellos, 2010) showed a more positive or balanced view of MT, while more recent pieces (e.g., Skapinker, 2015; Lotz & Wallmach, 2021) expressed concerns about relying on MT without human expertise. This shift might be explained in a growing recognition of MT's shortcomings in handling nuance and context, despite the update from SMT to NMT. The earlier articles were written around the advent of MT services like GT, which can reflect the initial admiration and appreciation for a technology which enables faster communication. Today, concerns such as professional integrity, as highlighted by Groves and Mundt (2021), may override this admiration for computer technology.

Ultimately, the findings across all opinion pieces underscores that perspectives of MT are nuanced, which can be mirrored by findings from previous literature on the topic. First, Groves and Mundt (2021) observed that MT is accepted as a reading aid in education, but that its use as a writing aid is controversial. This parallels the critique found in the opinion pieces regarding MT's reliability, as well as the understanding of MT as a tool that is convenient in personal communication and for getting the gist of a text. Ganawan and Khairunnisa (2023) highlighted both positive and negative perceptions among Arabic language lecturers, driven by factors such as user-friendliness and challenges with literal translations. This duality is echoed in the newspaper opinion pieces as well, where MT's accessibility is praised, but its contextual accuracy is questioned.

Despite variations between stakeholders, there is a shared perception across the opinion pieces that MT can be a great tool if it is used in the right way. This aspect aligns with the findings of Liu et al (2022), who found that translation students valued MT for its convenience and efficiency, but primarily as a supporting tool, and not as a replacement of human translators. Moreover, Arntz (2024) found varying attitudes among different stakeholders. Interestingly she found that language service providers, such as translators, stressed the importance of human translators for quality, which aligns with the attitudes identified in articles 3-5.

7.0 Conclusion

This study explored attitudes towards MT in anglophone newspaper opinion pieces using descriptive discourse analysis and Martin and White's attitude resource from their appraisal theory. The findings revealed a range of positive and negative evaluations, expressing satisfaction with MT's convenience and accessibility, but concerns over its accuracy and contextual understanding. Temporal trends indicate increasing skepticism towards MT over time, especially in professional contexts. However, the study has a limited sample size, focuses on anglophone sources, and rely on textual evidence, which ultimately constrains its generalizability. Based on these limitations, this study does not claim to represent public attitudes towards MT but identifies and describes attitudinal trends in opinion pieces from various anglophone newspapers. Future research on attitudes towards MT should have a broader scope and a larger sample size to provide a comprehensive understanding of public attitudes towards MT across diverse contexts. Moreover, future research could conduct a similar study where temporal trends are analyzed and discussed further.

8.0 Bibliography

- Arntz, G. (2024). *Translation technobabble: An exploration of online discourse about machine translation and artificial intelligence using corpus-driven discourse analysis and appraisal theory* [MA Thesis, Utrecht University].
<https://studenttheses.uu.nl/handle/20.500.12932/46042>
- Bellos, D. (2010, March 20). I, Translator. *The New York Times*.
<https://www.nytimes.com/2010/03/21/opinion/21bellos.html>
- Budd, J.M., Raber, D. (1996). *Discourse analysis: method and application in the study of information* (2nd ed, vol. 33, pp. 217-226).
<https://www.sciencedirect.com/science/article/pii/S0306457396850072>
- Carvalho, I., Ramires, A. & Iglesias, M. (2023). Attitudes towards machine translation and languages among travelers. *Inf Technol Tourism*, 25, 175–204. <https://doi.org/10.1007/s40558-023-00253-0>
- Groves, M., & Mundt, K. (2021). A ghostwriter in the machine? Attitudes of academic staff towards machine translation use in internationalised Higher Education. *Journal of English for Academic Purposes*, 50, 100957. <https://doi.org/10.1016/j.jeap.2021.100957>
- Gunawan, F. & Khairunnisa, A. (2023). Lecturer's Perception of Google Translate as an Academic Tool: Appraisal Analysis. *Indonesian Journal of EFL and Linguistics*, 8(1), 137- 149.
- Le, Q.V., & Schuster, M. (2016, September 27). A Neural Network for Machine Translation, at Production Scale. *Google Research [Blog]*.
<https://blog.research.google/2016/09/a-neural-network-for-machine.html>
- Liu, K., Kwok, H.L., Liu, J. & Cheung, A.K.F. (2022) Sustainability and Influence of Machine Translation: Perceptions and Attitudes of Translation Instructors and Learners in Hong Kong. *Sustainability* 2022, 14, 6399. <https://doi.org/10.3390/su14116399>
- Liu, X., & Thompson, P. (2009). Attitude in Students' Argumentative Writing: A Contrastive

Perspective. *Language Studies Working Papers*.

Lotz, S., & Wallmach, K. (2021, September 30). Context, human connection and the issue with online translation apps. *news24*.

<https://www.news24.com/news24/opinions/columnists/guestcolumn/opinion-context-human-connection-and-the-issue-with-online-translation-apps-20210930>

Martin, J. R., & White, P. R. R. (2005). *The language of evaluation: Appraisal in English*. Palgrave Macmillan.

McClelland, M. (2015, March 13). Love in translation: He spoke French. I spoke English. Google to the rescue. *The Washington Post*. https://www.washingtonpost.com/opinions/love-in-translation/2015/03/13/759964a2-c773-11e4-a199-6cb5e63819d2_story.html

Oteíza, T. (2017). The appraisal framework and discourse analysis. In T. Bartlett & G. O'Grady (Eds.), *The Routledge Handbook of Systemic Functional Linguistics* (pp. 458-472). Routledge.

Poibeau, T. (2017). *Machine Translation*. The MIT Press

Skapinker, M. (2015, August 5). Google Translate: good enough to use in business? *Financial Times*. <https://www.ft.com/content/8cae0fec-3aac-11e5-bbd1-b37bc06f590c>

Whitaker, B. (2007, April 7). Found in translation. *The Guardian*. <https://www.theguardian.com/commentisfree/2007/apr/04/foundintranslation>

White, P. R. R. (2015). Appraisal Theory. In K. Tracy (Ed.), *The International Encyclopedia of Language and Social Interaction* (1st ed., pp.1-7). John Wiley & Sons, Inc. <https://doi.org/10.1002/9781118611463/wbielsi041>

Xu, M. & Wang, C. (2011). Translation students' use and evaluation of online resources for Chinese-English translation at the word level. *Translation & Interpreting Studies*, 6(1), 62-86.



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