

Fantasy across Languages: Revising MateCat's Machine Translations from Arabic into English and French

الأدب العجائبي عبر اللغات: مراجعة الترجمات الآلية لميت كات من العربية إلى الإنجليزية والفرنسية

Nor-el-houda ZEGHBA¹, Rami BOUOUDEN²

¹Badji Mokhtar Annaba University, (Algeria), zeghbanorelhouda19@gmail.com

²Translation and Language Didactics Laboratory (Tradil), Badji Mokhtar Annaba University, (Algeria), ramibouou@gmail.com

Received: 27/08/2025

Accepted: 13/11/2025

Published: 28/12/2025

Abstract:

Machine translation has become a central concern in contemporary translation studies, raising debates about its accuracy, limitations, and potential to complement rather than replace human translation. This study evaluates the quality of MateCat's machine translation of Amr Abdelhamid's fantasy novel, *Land of Zicola*. This work poses unique challenges due to its imaginative setting and culture-specific elements. The research applies the Horguelin and Pharand (2009) approach to revise MateCat's outputs into English and French, assessing their accuracy through selected samples. After outlining key theoretical and conceptual aspects of revision, the study conducts an applied analysis to compare both translations. The results emphasise that revision is an essential stage in the translation process, allowing errors to be detected and corrected, thereby enhancing overall quality. The study concludes with the development of a fantasy-specific terminological database, intended as a practical tool to support future research in literary translation and post-editing.

Keywords: Revision; Machine Translation; MateCat; Fantasy; Terminological Database.

ملخص:

أصبحت الترجمة الآلية محل اهتمام رئيس في دراسات الترجمة المعاصرة، وقد أثار هذا جدلا حول دقتها وحدودها وإمكانية تعزيز الترجمة البشرية بدلاً من استبدالها، وتُقيم هذه الدراسة جودة الترجمة الآلية التي أجراها برنامج ميت كات لرواية عمرو عبد الحميد "أرض زيكولا"، فيطرح هذا العمل تحديات فريدة نظراً لبيئته العجائبية وعناصره الثقافية الخاصة. وقد اعتمد منهج هورغلين وفاراند في هذا البحث لمراجعة مخرجات ميت كات إلى الإنجليزية والفرنسية، وتقييم دقتها بناءً على عينات مختارة. وبعد تحديد الجوانب النظرية، أجرى الباحثان تحليلاً تطبيقياً لمقارنة الترجمتين، في حين تظهر النتائج أن المراجعة مرحلة أساسية في عملية الترجمة لأنها تسمح بكشف الأخطاء وتصحيحها بغية تعزيز الجودة الشاملة. وتُختتم الدراسة بتطوير قاعدة بيانات مصطلحية مخصصة للأدب العجائبي لتكون أداة عملية لدعم الأبحاث المستقبلية في الترجمة الأدبية وعملية التحرير اللاحق.

كلمات مفتاحية: مراجعة، الترجمة الآلية، مايت كات، الأدب العجائبي، قاعدة بيانات مصطلحية.

1. INTRODUCTION

With the rise of technological tools, the translator's tasks have expanded. Translators increasingly depend on intelligent tools that streamline their work, yet their core responsibility of reviewing remains essential. This evolution underscores the importance of revision and editing in ensuring translation quality through the application of scientific models and practical approaches that avoid subjective or improvised work. The revision operation complements the translation process and ensures its quality. This task is typically handled by a third party, known as the *revisor*, who either identify problematic areas and improve coherence, or adapts it to meet the needs of the intended audience. This point is emphasized by Horguelin & Pharand (2009), who state: “*We are poor proofreaders of our own texts, as we are overly familiar with their content, which leads us to read them globally. As for self-revision, it is preferable to entrust it to someone else*” (p. 30). It is worth noting that the difficulty of revision tends to increase when the text belongs to the creative texts, which leads us to identify all fundamental aspects relevant to the revision process, including the classification of errors, the clarification of revision methods and their practical applications, based on well-defined criteria and levels in order to apply them effectively. For this, we chose a tool that integrates machine translation and artificial intelligence tools, aligning with the digital shift, to produce a high-quality output in a short time, and to evaluate how machine translation compares to human translation, which, as our research shows, failed to translate the selected samples adequately. This difference will lead us to revise and assist the machine in translating selected samples from this fantasy¹ novel, to construct viable alternatives. In this context, machine translation and its post-editing become a targeted professional training activity for translation graduates. Based on this rationale, the following research question is proposed:

- How capable is machine translation of preserving hybrid linguistic registers and overcoming cultural nuance, and how much does revision contribute to enhancing its quality based on rigorous methodological standards?

2. Theoretical Background

According to Hutchins & Somers (1992), machine translation can be classified into four main types: 1. Fully automatic high-quality translation which is carried out

¹ There is a confusion in translating the term *fantasy*, as some have rendered it as « الخيال » which is inaccurate rendering. The term « الخيال » primarily corresponds to *fiction*, not *fantasy*. This distinction is confirmed by Todorov in his study, where he points out that “*fantasy builds an unreal world from the start without needing such hesitation between a natural or supernatural explanation*” (Thomét, 2016). Hence, the more accurate translation is « الأدب العجائبي » rather than « الخيال ». Hussain (2021) argues that a fantasy text “*embraces imaginative creation, enabling the formation of sensory or intellectual images that differ from reality while simultaneously reflecting it. It resonates closely with memory, moving from the real toward the imaginary to underscore paradox and highlight inherent contradictions*” (p. 433).

without any human intervention; 2. machine-aided machine translation where the human intervenes at certain stages to improve the output, 3. machine-aided human translation in which the translator relies on digital tools like translation memories, 4. traditional human translation which is entirely dependent on human effort without technological support. These categories signal the progression of human-machine collaboration, which has contributed to some extent in facilitating the translator's work. Nevertheless, revision and the human touch remain critical to guarantee the accuracy and quality of the output.

As for the translation tool adopted in this study, *MateCat* was selected. *MateCat* is a free and open- source online CAT tool that supports over 200 languages, making it accessible to both students and professional translators. It also enables efficient project management and enhances productivity through its integration of translation memory. (MateCat, n.d.)

To further illustrate the significance of this tool, Bououden and Kohil (2022) observed that *MateCat* constitutes an advanced solution in the field of machine translation based on translation memory. They highlighted that *MateCat* stores previous translations and automatically retrieves them when needed, which contributes to terminology consistency and reduces repetitive effort, especially in collaborative translation projects. These tools address the increasing demand in the translation industry for both speed and quality. However, they cannot replace human intervention, particularly in the revision phase.

In this context, revision stands as a key pillar of the present study. According to Horguelin and Brunette (as cited in Lee, 2006), revision is defined as “a careful examination of the text in order to make it conform to recognised linguistic and functional standards.” This definition underlines the dual perspective of revision: both linguistic and functional, depending on the purpose of the text.

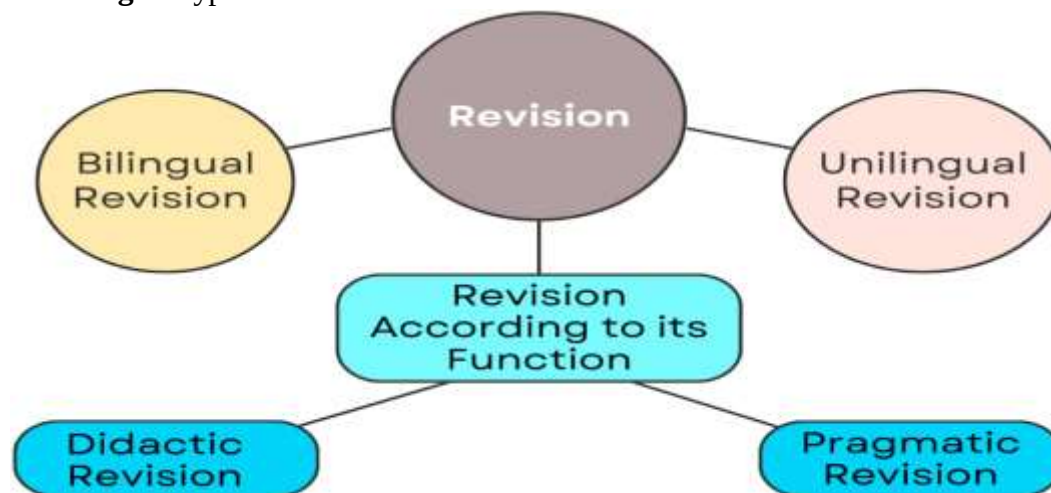
On the other hand, Lee (2006) emphasised the importance of the target audience, arguing that revision should be adapted to the needs and expectations of the audience. This perspective highlights the communicative dimension of translation (Lee, 2006). However, this definition overlooks the role of the target text in favour of the source text. In response, the European standard (Robert, 2014) provided a more equitable definition; she defines revision as a comprehensive comparison between the source and target texts, ensuring the translation's suitability for its intended function, and suggesting necessary corrective actions.

Based on the points outlined above, revision is the practical process through which a reviser intervenes in a translated text by comparing it with the source, conducting detailed checks and assessments, and ensuring semantic alignment between the two versions. It also involves identifying and correcting errors to enhance translation quality and make the required improvements.

3. Types of Revision

Horguelin and Pharand (2009) distinguished several essential forms of revision, each serving a specific purpose in the process. These forms are outlined and explained as follows:

Fig.1. Types of Revision and their Function in the Translation Process



Source: Horguelin & Pharand, 2009, Figure, pp. 3-4

This above model is structured along two parallel dimensions: Linguistic and functional. Linguistically, we have the monolingual revision, which focuses on the target text alone, or bilingually, where a direct comparison between the source and target texts is conducted. Functionally, revision may be either pragmatic, focused on aligning the translation with its intended purpose and context of use, or didactical, aimed at enhancing learners' translation skills within a training environment. This model serves as a theoretical foundation for identifying revision types and determining their appropriate use according to the nature of the translation task and the institutional or didactical contexts..

4. Levels and Standards of Revision

Still with Horguelin and Pharand (2009), the revision process operates on several levels, each targeting a distinct aspect of translation quality. The semantic level focuses on meaning accuracy and on avoiding the “error triad”: Mistranslation, meaning shift, and nonsense. The terminological level evaluates idiomatic and figurative expressions, taking into account the nature and context of the target language. The stylistic level aims to preserve consistency of style and tone between source and target texts.

On the other hand, the cultural level deals with intercultural differences and cultural symbols that may require targeted adaptation. The allusion level focuses on the translation of slogans and titles with symbolic significance. In contrast, the sub-textual level aims to articulate implied meanings explicitly, considering the target audience’s needs, excluding aspects managed in the semantic and terminological levels.

Furthermore, there are five main standards for translation quality: 1. Accuracy

which measures semantic equivalence between the original and the translated text; 2. Correction which focuses on identifying and amending errors; 3. Readability which ensures clarity and ease of comprehension, 4. Tone which preserves stylistic harmony with the type of discourse; 5. Audience Adaptation evaluates the extent to which the translation effectively addresses the target readers' expectations and communicative needs.

5. Methodology

This study adopted a descriptive-comparative methodology combined with analytical procedures to align with the study's scope and aims. It commences with a theoretical overview in which revision procedures were defined, paving the way for the practical part. Subsequently, the source text and the two MateCat translations into English and French were carefully reviewed. Drawing on translational competence and refined linguistic awareness, we were able to identify and select samples with apparent deficiencies. These samples were presented in comparative tables of source and target texts; each selected sample was revised in line with the standards and levels of the "minimal revision" process, accompanied by explanatory feedback. The concluding section presented the results, statistical tables, and graphical representations demonstrating how revision enhanced machine translation quality. This enabled an objective analysis of its ability to handle creative texts and its limitations compared to human intervention.

6. Results

6.1 Sample- 01: Stylistic Level: MateCat's Translation of the Linguistic Register

Table 1. First Sample from MateCat's Translation

Source Language (Arabic)	Target Language (English)	Target Language (French)
-أنت عايز تتجوز مني؟! -أيوة -فسأله مجددا : -وأنت عملت إيه في حياتك؟! ص:06	- You want to marry me?! - Yes. He asked him again: - What have you done in your life ?!	- Tu veux m'épouser ?! - Oui. Il lui demanda à nouveau : -Qu'avez-vous fait dans votre vie ?!

It is first noted that the original segment in this sample is written in the Egyptian dialect rather than in Modern Standard Arabic. It appears as an interrogative sentence within a dialogue between the characters of the novel "أنت عايز تتجوز مني؟" meaning "Do you want to marry me?" As for "أيوة", it corresponds to the Arabic expression of acceptance "Yes". Regarding "وأنت عملت إيه في حياتك؟", it means "What achievements have you made in your life?"

The analysis also reveals that the author's use of both the question mark and the exclamation mark serves to intensify the expression of astonishment and emotional impact. As for the interrogative sentence "أنت عايز تتجوز مني؟" it is expressed in the colloquial register. In contrast, the English and French versions employ the casual register, which is considered less formal than the formal one.

The translation of proper names remains a major challenge in translation, as it reflects differences in linguistic categorization and cultural perception. Arabic tends to use a single general term for each category, while English and French distinguish between various types, each carrying specific cultural and identity values. Neglecting these nuances may alter the intended meaning and cause translation shifts. As stated by Kalashnikov (2006) “proper names should either be translated according to their original pronunciation or rendered by an equivalent in the target language.” This theoretical principle finds a clear illustration in the case of the sentence “أنت عايز تتجوز؟! منى؟” rendered in the Egyptian dialect, it shows that the proper noun *Mouna* was inaccurately rendered in both the English and French target texts as the pronoun “I,” which represents a semantic distortion. In this case, the automatic translation system failed to recognize *Mouna* as a proper noun referring to a character’s name and instead translated it as a first-person pronoun. In MateCat, translation segments that are automatically validated as 100% correct are visually displayed in green within the interface, indicating that this rendering was fully accurate, as it matched the public translation memory. However, in another Arabic example, the same proper noun *Mouna* was transliterated into the target language, and that version was likewise marked as 100% correct.

The occurrence of this error may be linked to inadequate coding, which led to a significant shift in meaning, or from reliance on a public database that requires substantial reprogramming across multiple aspects. This underscores the necessity of incorporating Arabic diacritic marking, involving both short and long vowels, into the system’s design to enable the program to function with greater precision.

The word “أبوة” was rendered as “yes,” although it belongs to a colloquial register. In contrast, the intended context required a formal register and rendering it as “yes” in this context is therefore inappropriate, as it fails to achieve equivalence between the registers (see Table 2 below).

The expression “أنت عملت إيه في حياتك”, drawn from a colloquial register, was rendered into English and French in a formal register. In the French version, the pronoun “*Vous*” reflects politeness, although in French, this pronoun aligns more closely with formal than with colloquial usage. While the English version accurately conveyed the propositional meaning, it did not match the register used in the source text (see Table 1 above).

The translation of linguistic registers is among the challenges faced by translators in the translation process. As Balatçı (2012) confirmed that “registers are conveyed into the target language through the element of style” (p. 24). The limitation of MateCat becomes apparent in its tendency to rely on automatic and literal processing within a formal register, thereby hindering proper register equivalence.

6.2 Revision Standards

- **Accuracy:** This standard was not met in either translation due to the absence of an appropriate linguistic register, especially regarding the proper noun

"Mouna," which resulted in an inaccurate and erroneous meaning in the sentence.

- **Correction:** This is attributed to the lack of the linguistic register itself, which is responsible for achieving equivalence between the original text and its translation. This is due to the program, which does not include this functionality in its general database.
- **Readability:** The meaning was not sufficiently precise because the proper noun "Mouna" was mistranslated, which reversed the meaning and confused the reader.
- **Tone:** the use of an inappropriate linguistic register, shifting between formal and colloquial, may cause confusion for the reader.
- **Audience Adaptation:** The word-for-word translation combined with an inappropriate register caused confusion and a sense of awkwardness for the target audience, potentially leading to misunderstanding.

Hence, we present below suggested equivalents in English and French following the revision process:

Table 2. Suggested Equivalents in English and French for sample one

<i>Commentary in English</i>	<i>Commentary in French</i>
-Do you wanna Marry Mouna ?!	-Tu veux te marier avec Mouna ?!
- Yeah	-ouais
He asked him again:	Il lui demanda à nouveau :
-What did you do in your life ?!	-Et toi, qu'est-ce que t'as fait dans ta vie ?!

6.3 Sample 2 - Terminological Level: MateCat's Translation of Figurative Expressions and Idioms

Table 3. Second Sample from MateCat's Translation

Source Language (Arabic)	Target Language (English)	Target Language (French)
وكان المدينة أصبحت مدينة الموتى..	As if the city has become the city of the dead...	Comme si la ville était devenue la ville des morts.

This segment in Arabic is presented as a figurative expression in the form of a condensed simile. The author here identifies the simile tool: *كأن* (as if), the tenor (the city), and the vehicle (the city of the dead), with the point of comparison omitted. We observe that MateCat's translation of this figurative expression was accurate and provided only one option. However, it was translated literally into the target languages, English and French, as follows: "As if the city has become the city of the dead", "Comme si la ville était devenue la ville des morts". There is only one issue here: the repetition of the word "city," which appeared in the Arabic text and was transferred as it is into both the French and English translations; however, it does not affect the intended meaning.

Despite the use of literal translation, the translation proves effective in both enriching the target language and preserving the cultural imagery embedded in the

source text. However, from a cultural adaptation perspective, equivalent idiomatic expressions could have been selected, such as “Comme si la ville est devenue un vrai cimetière” in French and “The city has become like a ghost town” in English, to better align the magnitude of the city’s desolation and the eerie silence that prevails within it.

6.4 Revision Standards

- **Accuracy:** Despite the use of literal translation, the figurative expression was rendered accurately and clearly into English and French.
- **Correction:** The avoidance of redundancy in the target language would have ensured a translation quality standard.
- **Readability:** Despite the redundancy, the meaning is clear and easily understood in the target language.
- **Tone:** The intended impact was successfully achieved in the target language, enriched by elements of the source culture.
- **Audience Adaptation:** The translation was attentive to the target reader’s needs, maintaining an unambiguous meaning.

It is worth noting that while MateCat’s translation could be retained, suggesting more suitable alternatives would better ensure translation quality:

Table 4. Suggested Equivalents in English and French for sample 02

<i>Commentary in English</i>	<i>Commentary in French</i>
The city has become like a ghost town	Comme si la ville est devenue un vrai cimetière

6.5 Sample 03 – Cultural Level: MateCat’s Translation of Cultural and Religious Specificities

Table 5. Third Sample from MateCat’s Translation

Source Language (Arabic)	Target Language (English)	Target Language (French)
لا يعلم، فلم يجد سوى أن يتوجه بالدعاء إلى الله أن يأخذ أباه...ص7	He does not know, so he found nothing but to pray to God to take her father...	Il ne sait pas, alors il n'a rien trouvé d'autre que de prier Dieu de prendre son père...

This passage conveys Khaled’s hopelessness to the point of wishing for Mona’s father’s death, so that he could marry her. In this regard, this expression “لا يعلم، فلم يجد” was transferred word-for-word into the target languages “to pray to God to take her father” in English and “que de prier Dieu de prendre son père” in French, which failed to reflect the intended meaning.

According to *Al-Maany* dictionary (n.d.), the verb «يأخذ» was translated literally into its direct equivalent, even though it carries multiple meanings in Arabic. It can mean “to take,” “to seize,” “to obtain,” or other context-specific senses...

In this segment, the phrase «أن يأخذ الله» is a culturally bound expression in Arabic that implies wishing for someone’s death. However, this expression is unfamiliar in

English and French, so human intervention is needed to make the meaning clear and avoid confusing the reader.

6.6 Revision Standards

- **Accuracy:** The use of literal translation prevented the accurate transfer of meaning into both target languages.
- **Correction:** The lack of semantic encoding in MateCat's system led to a failure to consider the target text's cultural context.
- **Readability:** The inadequately constructed and ambiguous phrasing undermines textual clarity, prompting interpretive uncertainty for the reader.
- **Tone:** Because of literal transfer, the translation failed to preserve the tone of the source text.
- **Audience Adaptation:** Due to semantic inaccuracies, the translation conveyed a meaning that did not align with the target audience's needs.

Hence, we present below suggested equivalents in English and French following the revision process:

Table 6. Suggested Equivalents in English and French for sample 03

<i>Commentary in French</i>	<i>Commentary in English</i>
Il ne sait pas, alors il n'a rien trouvé que de souhaiter qu'il aille au diable...	He does not know, but he reached the point where he wishes he would kick the bucket...

6.7 Sample – 04 Target Audience's Level: The Impact of Different Translation Errors on the Reader

Table 7. Fourth Sample from MateCat's Translation

Source Language (Arabic)	Target Language (English)	Target Language (French)
في اليوم التالي استيقظ كل من خالد وجده مبكرا كما تعودا دائما؛ فخالد لديه عمله المبكر، وجده لا ينام بعد صلاة الفجر، ويظل يقرأ في كتاب الله حتى ينهض خالد فيتناولوا إفطارهما سويا.. ص12	The next day, each of Khaled woke up and found him early, as you always do. Khaled has his early work, and he found him not sleeping after the dawn prayer, and he keeps reading in the Book of God until Khaled gets up and we do not break their fasts together...	Le lendemain, chacun de Khaled s'est réveillé et l'a trouvé tôt, comme vous le faites toujours. Khaled a ses premiers travaux, et il l'a trouvé ne dormant pas après la prière de l'aube, et il continue à lire dans le Livre de Dieu jusqu'à ce que Khaled se lève et que nous ne rompions pas leurs jeûnes ensemble...

This passage is presented in a narrative and descriptive tone, describing the daily routine of Khaled and his grandfather. Although the structure in the source text was clear, both translations fail to maintain its clarity due to the omission of the term *grandfather*, which was replaced with a verb that changed the meaning.

The phrase "كما تعودا دائما", which refers to Khaled and his grandfather, was mistranslated through the use of the second-person pronoun (you – vous) instead of (they – ils), which affected the grammatical coherence of the sentence structure.

The source text contains a religious reference, “كتاب الله,” which was transferred in the target texts (English and French) as “God’s book” – “livre de Dieu.” This literal translation may lead to ambiguity, which may confuse readers and lead them to seek clarification about which book is meant. The results in English would primarily refer to the Torah or to Walter Wangerin’s (1996) famous work, as well as other texts that are entirely unrelated to the intended meaning of the source passage. Similarly, a search for “livre de Dieu” in French would return various references, for example, the Torah, the Psalms, and the Quran.

The phrase “Book of God” could refer to various holy books, but the author’s frequent use of expressions like “صلاة الفجر,” “إن شاء الله,” and “توكلنا على الله” makes it evident that he is a Muslim and he is referring to the Quran.

In the phrase “فيتناولوا إفطارهما سوياً,” clearly refers to Khaled and his grandfather. While the structure in the source text was entirely clear, the translation conveyed the meaning incorrectly, shifting to the pronoun “we” in the negative form and using unclear sentences, which contradicted the original sense in both the English and French versions, as in: “we do not break their fasts together”, “et que nous ne rompions pas leurs jeûnes ensemble.”

6.8 Revision Standards

- **Accuracy:** The mistranslation of pronouns undermined the semantic accuracy, leading to a nonsensical translation.
- **Correction:** The omission of the semantic unit “his grandfather” combined with inaccurate pronoun rendering led to a distortion and shift in meaning.
- **Readability:** word-for-word translation and inaccurate pronoun transfer hindered clarity, leading to misinterpretation of the intended meaning.
- **Tone:** The absence of both stylistic fidelity and meaningful coherence compromised the translation’s ability to reproduce the source’s intended tone.
- **Audience Adaptation:** The translation is not understandable for the target reader, leading to a nonsensical interpretation.

Hence, we present below suggested equivalents in English and French following the revision process:

Table 8. Suggested Equivalents in English and French for sample 04

<i>Commentary in French</i>	<i>Commentary in English</i>
Le lendemain, Khalid et son grand-père se sont réveillés tôt comme d’habitude ; Khalid avait son travail tôt, et son grand-père ne dormait pas après la prière de l’aube, continuant à lire le Coran jusqu’à ce que Khaled se lève, puis ils prenaient leur petit-déjeuner ensemble.	The next day, both Khaled and his grandfather woke up early as they always did; Khaled has his early work, and his grandfather did not sleep after dawn prayer, continuing to read the Quran until Khalid got up, and then they eat their breakfast together.

7. Comparison of the Two Translations

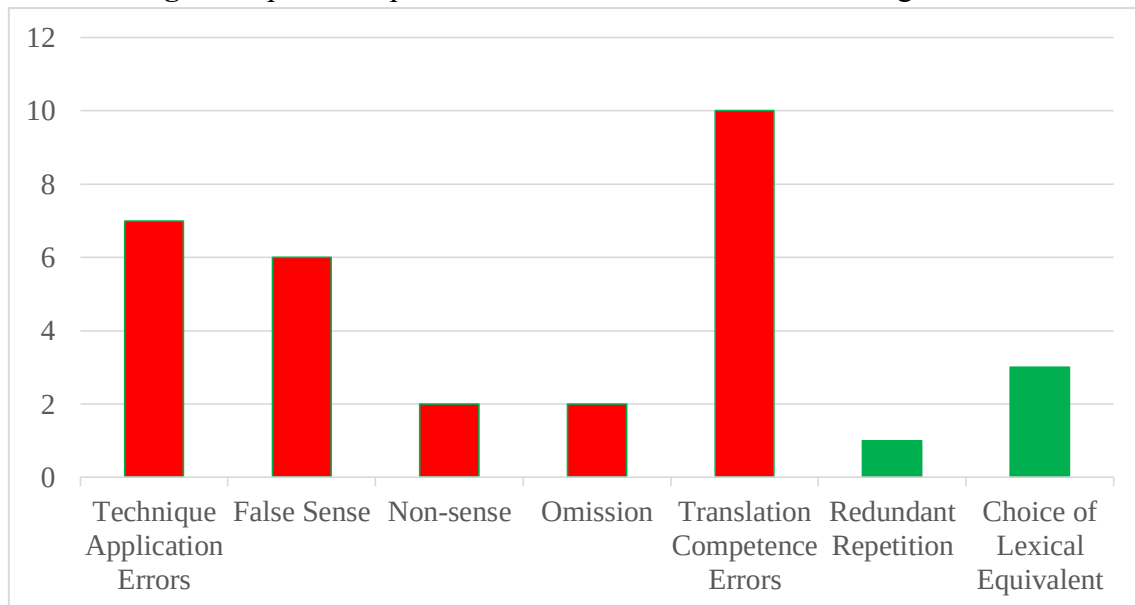
The application of the revision method to the selected samples revealed a distinct similarity between the English and French translations, in terms of syntactic structure and the nature of the errors identified. It was shown that both translations repeated the

same errors in multiple segments, necessitating that the audience, especially Arabic readers, consult the original text to comprehend it fully. This is particularly evident in the rendering of the proper noun “Mouna,” one of the novel’s main characters, which was translated in both target languages into the pronoun “I” (me in English) and (moi in French) such an illogical shift can confuse Arabic readers, who may interpret it as a deliberate narrative technique rather than the translation error. Non-Arabic speakers may struggle to comprehend the intended meaning; they will notice the awkward style and unusual structures, which reduce the text’s quality and aesthetic impact.

In terms of cultural expression transfer, the analysis revealed that cultural adaptation was almost entirely lacking, due to the system’s reliance on literal translation and word-by-word rendering without considering the intended contextual meaning. The analysis also identified several passages of unjustified semantic omissions and pronoun mistranslation, which led to their classification under “mistranslated meaning” or “nonsensical passages”.

After presenting and analysing these qualitative observations, the results will now be graphically represented, quantifying the extent of errors to enhance the scientific precision ensured by statistical analysis. The two types of errors are distinguished using a colour code: translation errors are coded in red, while grammatical and morphological errors appear in green.

Fig.2. Graphical Representation of Translation Errors in English and French



The bar chart represents the translation errors identified in the English and French versions of all analysed samples, totalling 31 errors. The red bars indicate translation errors, while linguistic errors are marked in green. It is worth noting that all errors affected the overall translation quality, leading to a loss of textual clarity as well as disrupted reader comprehension.

To sum up, the analysis revealed through the systematic analysis of the selected samples, the importance of applying the principles and levels of revision to identify,

rectify and comment on errors. We also found that literal translations of cultural references led to further misrepresentations (false sense). Hence, fantasy works should be written in Modern Standard Arabic. In addition, we examined the translation of the well-known Arabic novel *Land of Zicola*, emphasizing that the revision process is essential to ensure quality and to convey the intended meaning to the audience.

Recognising that the translation of fantasy literature requires precise terminology and conceptual clarity, we concluded this work by creating a specialised terminological database using Microsoft Access, containing the main terms identified throughout the translation and revision process.

According to Majma‘ Al-Lugha Al-‘Arabiyya bi Al-Qahira (1995), a database is defined as “a collection of data stored in files that identify the logical relationships between different types.” It is managed by specialised software known as Database Management Systems (DBMS), such as Microsoft Access, Oracle, Trados Multiterm, and AntConc.

These systems perform a crucial role in supporting translators; they enhance translation quality and promote consistency, particularly with technical or literary texts. This allows the translator to manage data flexibly, whether by adding, modifying, or deleting entries, and guarantee secure access to stored data at any time, ensuring that the information remains accessible and protected from loss or damage.

A notable example of the importance of such databases in the translation process is the use of *AntConc* in creating bilingual glossaries. In this context, certain studies have used the TED Talks corpus to extract English-Arabic collocations through systematic procedures, including frequency analysis, result ranking, and translation insertion, and publication of the final glossary.

Fig.3. Example table extracted from the glossary of collocation

ID	Frequency	Headword	Collocation	Arabic Translation
1	37	ability	academic ability	قدرة أكاديمية
2	2	ability	athletic ability	قدرة رياضية
3	1	ability	cognitive ability	قدرة إدراكية
4	2	ability	grand ability	مقدرة قصوى
5	1	ability	have ability(ies)	(ات) لديه قدرة
6	3	ability	musical ability	قدرة موسيقية
7	3	ability	technical ability	قدرة تقنية
8	2	ability	unique ability	قدرة فريدة
9	56	access	get access	يحصل على
10	9	access	have access	يصل إلى
11	12	access	need access	يحتاج الوصول
12	6	access	open access	مُتاح للجميع
13	4	act	patriot act	فعل وطني
14	6	act	simple act	تصرف بسيط
15	2	action	physical action	إجراء مادي
16	14	action	take action	يتخذ إجراء، يتصرف
17	4	activity	economic activity	نشاط اقتصادي
18	3	activity	physical activity	نشاط بدني
19	2	actor	governmental actor	جهة حكومية
20	2	actor	great actor	ممثل بارع

Source: Issa, Al-Jabri, & Abushmaes, 2022, Figure, p.454

In line with this approach, we established a specialised terminological database in the field of fantastic literature, using *Microsoft Access*. The procedure included opening the software, creating a new database, setting up tables with specified data types, identifying the primary key, and entering and structuring the data according to precise terminological standards.

Fig.4. Example Table Extracted from The Glossary of Collocations

Table1 - Access

Fichier Accueil Créer Données externes Outils de base de données Aide Table Champs Table Rechercher des outils adaptés

Affichage Affichages

Copier Copier Régénérer la mise en forme Presse-papiers

Filtre Filtre Croissant Décroissant Trier et filtrer Supprimer un fil

Actualiser tout Nouvelles Enregistrer Enregistrer

Rechercher Rechercher

Revenir à la taille du formulaire Fenêtre

Calibri (Détail) 11 Mise en forme du texte

Tous les objets...

Rechercher...

Tables Table1

الترجمة في اللغة العربية	الترجمة في اللغة الإنجليزية	الأصل في اللغة العربية
er avec Mouna ?!	Do you wanna marry Mouna ?!	أنت عايز تتجوز من مونا؟
Yeah	Yeah	أيوه
à nouveau s'en tait, qu'est-ce que t'a fait dans ta vie. He asked him again :	He asked him again, but he reached the point where he wishes to stop for some time... Can you cope living in silence..	فأسأله مجدداً وأنت عملت فيه في حياتك؟ لا أعلم، لأنه بعد بسوى أن يتوجه بالبدء إلى الله أن يأخذ أياها
à nouveau je vais épouser Mouna, je veux dire	Then he looked at him again : I'm gonna marry Mouna, I mean I'm Mouna's father has turned you down a lot why did you wanna be the hero this time?	صمت خاليد قليلاً، تنظر تعيش لوحداك ثم أكمل وكأنه يوضح كلامه : صمت خاليد
mais jouer le héros cette fois-ci ?	I'm sorry that my dad did that to you for the eighth time	ثم نظر إليه مجدداً : فتجوز من يعني فتجوزها... حسب عاك فتجوزها
le t'ait fait ça pour la huitième fois	he hit me on my face	أنا كنت ياها رفضك أو يوقى.
plein visage	I believe it's not just Khalid, but rather all the people of the town	بعضهم المرة دي التي حيث تكون بقال
ce que soit seulement Khalid, mais plutôt tous le	I can't imagine her with anyone else	أن تألفه في بابا يعمل معاك كده المرة الثامنة
l'imaginer avec quelqu'un d'autre	And I don't know what her father wants	فأشعر على وجهي
ce que son père veut	Suppose if Mouna marries someone else, will you go down to the	ولا أعظم أنه خالد فقط بل جميع أهل البلد.
Mona se marie avec quelqu'un d'autre, descend	If you were a coward, then you don't deserve Mouna	من يتخيل إلى أنشوطه أحد لوري.
alors tu ne mérites pas Mouna	The next day, both Khalid and his grandfather woke up early as t	ومنى عارف أبوها عايز أيوه
Khalid et son grand-père se sont réveillés tôt	Khalid has his early work, and his grandfather did not sleep after	فأرض إن من الجوزت حد تاني السدوب ولا ؟
il travaillait tôt, et son grand-père ne dormait pas	continuing to read the Quran until Khalid got up, and then they	لو كنت جبان يبقى مشتمت على
le Coran jusqu'à ce que Khalid se leve, puis il	Khalid whispered in his ear : I will come back to you, Abdou..	في اليوم التالي استيقظ كل من خالد وجدده مبكرًا كما تعودوا دائماً
à son oncle ; il se rendrait vers toi, Abdou	As for his grandfather, he sat alone reading Quran, and prayed to	فخالد لديه عمله المبكر، وجدده لا ينام بعد صلاة الفجر،
nd-père, il s'assit seul en lisant le Quran et pria	And why isn't he answering his phone?!	وظلوا يقرأ إلى كتاب الله حتى ينهض خالد فيستأذن ليعاها سويًا.
le répond pas à son téléphone?!	the city has become like ghost town	فهمس خالد في أذنه فخرج بك يا عبدود
le était devenue la ville des morts.	He asked them again... and he was feeling under the weather	لا جدده فكان يهتس وجها يقرأ إلى كتاب الله، ويخبره أن يعود به سالمًا.
à nouveau... et a eu le cœur serré		ومنى يرد على تليفونه فيه ؟

Mode Feuille de données

Page 30 of 30

Rechercher

This model allowed us to manage terminology accurately and structure it in a way that ensures easy retrieval when required. It clearly highlighted how databases contribute to improving translation quality, not only in ensuring precision and consistency, but also in offering cultural guidance, adapting meaning to different contexts, and facilitating quick access to essential data.

8. Discussion

The analysis showed that *MateCat*, despite relying on translation memory and advanced technical features, it remains unable to handle the stylistic, semantic, and cultural nuances of hybrid literary texts, such as the novel *Land of Zicoula*, where literal translation of figurative expressions, pronoun inconsistencies, inadequate cultural adaptation, and weakened expressive tone affected both the accuracy and clarity of the text.

In this context, the application of Horguelin and Pharand's approach enabled the classification of errors according to clear and precise revision standards, which facilitated a qualitative analysis that underscores the limitations of machine performance compared to human translational sense. These conclusions align with Bououden & Kohil (2022), who stressed that while MateCat offers advanced solutions by storing previous translations and providing future suggestions, its performance is

less reliable when dealing with creative texts requiring cultural sensitivity and contextual interpretation.

In line with Moussaoui & Si Bachir (2022), the results reaffirm that revision is a cornerstone of translation quality. They argued that revision, when conducted by clear and objective standards, ensures accuracy and functional adaptation. In contrast, the absence of such standards weakens the overall quality of the translation. The results also confirmed that self-revision alone is insufficient, thus necessitating the intervention of a qualified reviewer to critically interrogate machine translation output and remedy its limitations.

Our results confirm the observations of Castilho & Resende (2022) on post-editing in literary translation, who emphasised that post-edited literary translations tend to prioritise clarity and uniformity while neglecting stylistic richness and expressive variation, and such translations tend to diminish the aesthetic qualities and creative dimension of the literary work. In line with this, in our analysis, MateCat's translations reflected the same shortcomings, making extensive revision necessary. This highlights that revision is indispensable to preserving the work's identity and cultural significance.

Following Bentivogli et al. (2018), whose experimental research compared post-editing and direct evaluation, this study investigates the relationship between revised output quality and non-expert reader assessments. This confirms that revision functions not only as an error-correcting process but also as an evaluative tool that ensures communicative purpose. This was evident in the improved quality of MateCat's translations of literary texts after systematic revision.

The results are consistent with the conclusions of Quenette (2012), in her applied investigation of revision practices in Switzerland's official translation services, revealed that revision is not limited to linguistic aspects but also entails functional and communicative considerations, which require institutional collaboration and a clearly structured revision framework. Quenette stressed the necessity of collaborative involvement and a clear role distinction between translators and revisers, as this division is essential for achieving quality. This point resonates directly with the evidence presented in the current research on machine translation and revision.

Similarly, this study resonates with the results reported by Guerberof Arenas (2008), who conducted a field experiment with eight professional translators participated in revising machine-translated and translation-memory segments using an online post-editing tool. Results revealed that translators achieved both higher productivity and better quality when revising machine-translated segments. Such evidence confirms that post-editing can serve as an efficient translation practice, as long as human revision is applied to preserve both semantic accuracy and stylistic quality.

Accordingly, this study highlights the necessity of adopting a hybrid approach that combines intelligent tools with human expertise, by using translation memories and specialised glossaries, and applying systematic revision methods that account for

stylistic and cultural specificities. Such an approach ensures literary translations that are both accurate and culturally resonant while meeting the expectations of the target audience.

9. CONCLUSION

Based on the comprehensive analysis of selected machine-translated segments, this research highlights the central role of revision in refining machine translations of literary texts and ensuring compliance with stylistic, semantic, and cultural standards. The results also confirmed that while machine translation offers speed and convenience, it struggles with the linguistic specificities of fantastic literature, as it tends to literal translation and fails to render idiomatic expressions, which renders human revision essential for achieving clarity and accuracy.

The analysis revealed that the Horguelin & Pharand (2009) approach can be applied in different translation fields, particularly in literature, where cultural and stylistic nuances must be carefully preserved. Moreover, the study emphasised the necessity of translation memories and specialised glossaries in fantastic literature to facilitate the translator's work and improve overall output. Based on these results, the study recommends combining technological innovation with methodical human revision, while encouraging further research in this literary field to ensure translations that honour both the quality and the cultural legacy of Arabic literature.

As the findings of this study indicate, despite the technological advances introduced by machine translation tools such as MateCat, these systems remain insufficient for addressing the complexities of literary texts, particularly those rich in metaphorical language, stylistic nuances, and cultural subtleties. Machine-generated translations tend to be literal, often compromising the expressive and aesthetic qualities of the source text, thereby underscoring the necessity of human revision to ensure accuracy, clarity, and the preservation of cultural and artistic values. Consequently, integrating automated translation with meticulous human revision ensures high-quality outputs that uphold both linguistic precision and cultural integrity.

10. References:

- Abdelhamid, A. (2010). *Ard Zikola*. Cairo, Egypt: Aseer Al-Kutub for Publishing and Distribution.
- Balaṭchi, R.-N. (2012). Style et registre de langue en traduction. *Écho des Études Romanes*, 8(2), 24.
- Bentivogli, L., Cettolo, M., Federico, M., & Federmann, C. (2018). Machine translation human evaluation: An investigation of evaluation based on post-editing and its relation with direct assessment. *Proceedings of the Third Conference on Machine Translation (WMT18), International Workshop on Spoken Language Translation (IWSLT)*.
- Bououden, R., & Kohil, S. (2022). Comparing the effectiveness of Google Translate and MateCat tools in the translation of scientific texts from English into Arabic. *In Translation*, 9(1), 543–560. Retrieved from <https://www.asjp.cerist.dz/en/article/207841>
- Castilho, S., & Resende, N. (2022). Post-editeuse in literary translations. *Information*, 13(2), 66
- Guerberof Arenas, A. (2008). Productivity and quality in the post-editing of outputs from translation memories and machine translation. *Localisation Focus*, 7(1), 11–21.
- Horguelin, P. A., & Pharand, M. (2009). *Pratique de la révision* (4e éd.). Montréal: Linguattech.
- Hutchins, W. J., & Somers, H. L. (1992). *An Introduction to Machine Translation*. London: Academic Press.
- Issa, N., Al-Jabri, H., & Abushmaes, A. (2022). Using technology to compile an English-Arabic glossary of the most frequent collocations in TED Talks parallel corpus. *Dirasat: Human and Social Sciences*, 49(5), 446–457. (<https://doi.org/10.35516/hum.v49i5.2751>)
- Kalashnikov, A. (2006). Proper names in translation of fiction. *Translation Journal*.
- Lee, H. (2006). Révision : Définitions et paramètres. *Meta*, 51(2), 413
- Majma‘ Al-Lugha Al-‘Arabiyya bi Al-Qahira. (1995). *Mu‘jam al-hasibat* (2nd ed.). Cairo: Academy of the Arabic Language

- Moussaoui, R., & Si Bachir, Z. (2020). Al-muraja'a wa jawdat al-tarjama [Revision and translation quality]. *Al-Mutargim Journal*, 7(1), 85–104
- Hussain, F. Q. B. (2021, June). 'Al-'ajā'ibī: Mafhūmuh wa tajallī-hū fī al-mawrūth al-sardī al-'arabī [The grotesque, Al-Ajaebi: Its concept and manifestation in the Arabic narrative heritage]. *Taslīm*, 7(17–18), 432–466. <http://tasleem.alameedcenter.iq/uploads/c010ecba68513887489d52800b9d99b4.pdf>
- Qamus Al-Maany. (n.d.). *Arabi- 'Arabi*. Retrieved from <https://www.almaany.com/>
- Quenette, A. (2012). La pratique de la révision dans différents services de traduction francophones de la Confédération suisse. *Meta*.
- Robert, I. S. (2014). La relecture unilingue : une procédure de révision de traduction rapide, fonctionnelle, mais déloyale. *TTR*, 27(1), 104. <https://doi.org/10.7202/1037120ar>
- Thomét, M. (2016, March 15). *Disseminating the fantastic* [Blog post]. Set in Cobalt. <https://incobalt.wordpress.com/2016/03/15/disseminating-the-fantastic/>
- Wangerin, W. Jr. (1996). *The book of God*. Zondervan.