

**REPUBLIC OF TÜRKİYE
YILDIZ TECHNICAL UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
DEPARTMENT OF WESTERN LANGUAGES AND LITERATURES
INTERLINGUAL AND INTERCULTURAL TRANSLATION STUDIES MASTER'S
PROGRAM**

MASTER'S THESIS

**ANALYZING THE EFFECT OF USING GENERATIVE AI TOOLS IN
THE PRE-TRANSLATION PROCESS ON TRANSLATION QUALITY
THROUGH THE T9N101 GENERATIVE AI MODEL DEVELOPED
FOR TRANSLATION-ORIENTED TEXT ANALYSIS**

**FURKAN SUNAY
23726001**

**THESIS SUPERVISOR
ASSOC. PROF. DR. SENEM ÖNER BULUT**

2025

**REPUBLIC OF TÜRKİYE
YILDIZ TECHNICAL UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
DEPARTMENT OF WESTERN LANGUAGES AND LITERATURES
INTERLINGUAL AND INTERCULTURAL TRANSLATION STUDIES
MASTER'S PROGRAM**

MASTER'S THESIS

**ANALYZING THE EFFECT OF USING GENERATIVE AI
TOOLS IN THE PRE-TRANSLATION PROCESS ON
TRANSLATION QUALITY THROUGH THE T9N101
GENERATIVE AI MODEL DEVELOPED FOR TRANSLATION-
ORIENTED TEXT ANALYSIS**

**FURKAN SUNAY
23726001
ORCID NO: 0009-0002-0402-4184**

**THESIS SUPERVISOR
ASSOC. PROF. DR. SENEM ÖNER BULUT**

JULY 2025

Furkan SUNAY tarafından hazırlanan “ANALYZING THE EFFECT OF USING GENERATIVE AI TOOLS IN THE PRE-TRANSLATION PROCESS ON TRANSLATION QUALITY THROUGH THE T9N101 GENERATIVE AI MODEL DEVELOPED FOR TRANSLATION-ORIENTED TEXT ANALYSIS” başlıklı çalışma, **27.06.2025** tarihinde yapılan savunma sınavı sonucunda [oybirliği] ile başarılı bulunmuş ve jürimiz tarafından Batı Dilleri ve Edebiyatları Ana Bilim Dalı Diller ve Kùltürlerarası Çeviribilim Programında **YÜKSEK LİSANS** tezi olarak kabul edilmiştir.

Danışman

İmza

Doç. Dr. Senem Öner Bulut

.....

Jüri Üyeleri

İmza

Prof. Dr. Işın Öner

.....

Prof. Dr. Ayşe Banu Karadağ

.....

ABSTRACT

ANALYZING THE EFFECT OF USING GENERATIVE AI TOOLS IN THE PRE-TRANSLATION PROCESS ON TRANSLATION QUALITY THROUGH THE T9N101 GENERATIVE AI MODEL DEVELOPED FOR TRANSLATION-ORIENTED TEXT ANALYSIS

Despite the growing enthusiasm for Artificial Intelligence (AI) in the field of translation, it can be observed that there is limited research on the pre-translation process, which include essential tasks such as translation-oriented text analysis, text type identification, text summarization and terminology extraction. This process is crucial to comprehend the communicative and intended function of a translation task before the actual translation takes place. Based on functionalist approaches in Translation Studies (TS), this thesis study aims to bridge the gap between theoretical insights in the field of TS and Generative AI (GenAI) capabilities by introducing a new GenAI model, T9N101, specifically designed and trained by the author of this thesis to assist pre-translation process. In this regard, an experiment was conducted with nine translation students as voluntary participants and the students were asked to produce two translations from English into Turkish, one using the T9N101 model in the pre-translation process and one without the assistance of the model in the pre-translation process. In addition, two questionnaires were conducted with the participants before and after the experiment to obtain their opinions on the use of AI in translation, especially in the pre-translation process. As a result, a total of eighteen translation outputs were obtained, equally distributed in informative, expressive and operative text types, and these outputs were assessed by three expert translation educators. The relevant results have indicated that the assistance of AI in the pre-translation process had a positive effect on translation quality both holistically and in informative and operative text types. On a participant basis, a success rate of 55.56% was achieved. Therefore, in the light of the results obtained from the translation quality assessment reports and questionnaire data, the study attempted to provide pedagogical insights for translator education by presenting how tasks such as translation-oriented text analysis, text summarization and terminology extraction can be supported and improved by GenAI in the pre-translation process.

Keywords: Functionalist Approaches, Pre-Translation Process, Generative Artificial Intelligence, Translator Education, Translation-Oriented Text Analysis, T9N101

ÖZET

ÇEVİRİ ÖNCESİ SÜREÇTE YAPAY ZEKÂ ARAÇLARI KULLANIMININ ÇEVİRİ KALİTESİNE ETKİSİNİN ÇEVİRİ AMAÇLI METİN ÇÖZÜMLEMESİ İÇİN GELİŞTİRİLEN ÜRETKEN YAPAY ZEKÂ MODELİ T9N101 İLE İNCELENMESİ

Çeviri alanında Yapay Zekâ (YZ) uygulamalarına yönelik artan ilgiye rağmen, çeviri amaçlı metin çözümlemesi, metin türü belirleme, metin özetleme ve terim çıkarma gibi temel görevleri içeren çeviri öncesi süreçte YZ kullanımıyla ilgili sınırlı araştırma olduğu görülmektedir. Bu süreç, çeviri gerçekleşmeden önce bir çeviri görevinin iletişimsel ve amaçlanan işlevini anlamak için oldukça önemlidir. Çeviribilimdeki işlevselci yaklaşımlara dayanan bu tez çalışması, çeviri öncesi sürece yardımcı olmak için özel olarak tez yazarı tarafından tasarlanmış ve eğitilmiş yeni bir Üretken YZ modeli olan T9N101’i tanıtarak Çeviribilim alanında geliştirilen kuramsal anlayışlar ve Üretken YZ’nin kabiliyetleri arasındaki boşluğu doldurmayı amaçlamaktadır. Bu doğrultuda, gönüllü katılımcı olarak dokuz çeviri öğrencisi ile bir deney gerçekleştirilmiş ve öğrencilerden, biri çeviri öncesi süreçte T9N101 modelini kullanarak, diğeri ise çeviri öncesi süreçte modeli kullanmaksızın İngilizceden Türkçeye iki çeviri yapmaları istenmiştir. Ayrıca, katılımcılarla çeviri uygulamasından önce ve sonra, özellikle öğrencilerin çeviri öncesi süreçte YZ kullanımı hakkındaki görüşlerini almak için iki anket çalışması gerçekleştirilmiştir. Sonuç olarak, bilgilendirici, anlatımcı ve işlemsel metin türlerinde eşit olarak dağıtılmış toplam 18 çeviri çıktısı elde edilmiş ve bu çeviri çıktıları, üç uzman çevirmen eğitmeni tarafından çeviri kalitesi açısından değerlendirilmiştir. İlgili çeviri kalitesi değerlendirme sonuçları incelendiğinde hem bütünsel olarak hem de bilgilendirici ve işlemsel metin türlerinde yapılan çevirilerde çeviri öncesi süreçte YZ kullanımının çeviri kalitesine olumlu etkisi olduğu görülmüştür. Katılımcı temelli bakıldığında ise YZ kullanımının %55,56 oranında başarı sağladığı görülmüştür. Böylelikle çeviri kalite değerlendirme raporları ve anket verilerinden elde edilen sonuçlar ışığında çeviri öncesi süreçte çeviri amaçlı metin çözümlemesi, metin türü belirleme, metin özetleme ve terim çıkarma gibi görevlerin Üretken YZ tarafından nasıl desteklenebileceği ve geliştirilebileceği gösterilerek çevirmen eğitimi için pedagojik içgörüler sağlanmaya çalışılmıştır.

Anahtar Kelimeler: Çeviri Amaçlı Metin Çözümlemesi, Çeviri Öncesi Süreç, Çevirmen Eğitimi, İşlevselci Yaklaşımlar, Üretken Yapay Zekâ, T9N101

ACKNOWLEDGEMENTS

First of all, I would like to express my deepest gratitude to my thesis supervisor, Assoc. Prof. Dr. Senem ÖNER BULUT, for her invaluable support, insightful feedback and constant guidance throughout this study.

I would like to convey my gratefulness to Prof. Dr. Didem TUNA KÜÇÜK for providing me the opportunity to conduct this research and I am sincerely thankful to my colleagues, Res. Asst. Cihan ÜNLÜ and Res. Asst. Mert İLBAY, for their valuable assistance during the experiment conducted within this study.

I extend my heartfelt thanks to my mother Ayşe Neriman SUNAY and my father Arif Sıtkı SUNAY, for their support, which has always been a source of strenght for me. Also, to my beloved cat Lily, who provided comforting companionship and help reduce stress during the most challenging moments of this journey.

Last but not least, I would like to express my profound appreciation to my dear wife, Sena SUNAY, whose love, patience, and support have been indispensable throughout this process.

Furkan SUNAY
July, 2025; İstanbul

TABLE OF CONTENTS

ABSTRACT	iii
ÖZET	iv
ACKNOWLEDGEMENTS	v
TABLE OF CONTENTS	vi
LIST OF TABLES	viii
LIST OF FIGURES	x
LIST OF ABBREVIATIONS	xii
1. INTRODUCTION	1
2. THEORETICAL FRAMEWORK	4
2.1. Functionalist Approaches to Translation	4
2.2. Translation-Oriented Text Analysis	10
3. GENERATIVE ARTIFICIAL INTELLIGENCE AND TRANSLATION	16
3.1. A Brief History of Translation Technologies	17
3.2. The Use of Generative Artificial Intelligence in Translation	19
4. A NOVEL GENERATIVE ARTIFICIAL INTELLIGENCE MODEL FOR THE PRE-TRANSLATION PROCESS: T9N101	23
4.1. General Features of the Model	24
4.1.1. Source Text Analysis	25
4.1.2. Translation Brief Generation	27
4.1.3. Source Text Summarization	28
4.1.4. Terminology Extraction	29
4.2. Development and Training	30
4.2.1. User Interface	30
4.2.2. Datasets and the Training of the AI Model	33
4.2.3. Workflow Design	39
5. METHOD	41
5.1. Design and Implementation of the Experimental Study	41
5.2. Data Collection	47
5.3. Participants	48
5.4. Data Analysis	49
5.5. Pilot Study	49
6. DISCUSSIONS OF THE RESULTS	51
6.1. Pre-Questionnaire Results	51

6.2. Translation Quality Assessment Results.....	58
6.3. Post-Implementation Questionnaire Results and Comparison with Pre-Implementation Questionnaire Results	99
7. CONCLUSION.....	107
APPENDICES	117



LIST OF TABLES

Table 2.1. Translation Methods of Text Types	10
Table 4.2. Sources in Informative Text Type for Training of the AI Model	34
Table 4.3. Sources in Expressive Text Type for Training of the AI Model	36
Table 4.4. Sources in Operative Text Type for Training of the AI Model	37
Table 5.5. Methodology of the Study	42
Table 5.6. Source Text Information	43
Table 6.7. Translation Quality Assessment Report of ST1's Translation	59
Table 6.8. MQM Scoring of ST1's Translation	60
Table 6.9. Translation Quality Assessment Report of ST2's Translation	60
Table 6.10. MQM Scoring of ST2's Translation	61
Table 6.11. Translation Quality Assessment Report of ST3's Translation	62
Table 6.12. MQM Scoring of ST3's Translation	63
Table 6.13. Translation Quality Assessment Report of ST4's Translation	63
Table 6.14. MQM Scoring of ST4's Translation	64
Table 6.15. Translation Quality Assessment Report of ST5's Translation	64
Table 6.16. MQM Scoring of ST5's Translation	65
Table 6.17. Translation Quality Assessment Report of ST6's Translation	65
Table 6.18. MQM Scoring of ST6's Translation	65
Table 6.19. Translation Quality Assessment Report of ST7's Translation	67
Table 6.20. MQM Scoring of ST7's Translation	68
Table 6.21. Translation Quality Assessment Report of ST8's Translation	68
Table 6.22. MQM Scoring of ST8's Translation	73
Table 6.23. Translation Quality Assessment Report of ST9's Translation	73
Table 6.24. MQM Scoring of ST9's Translation	76
Table 6.25. Translation Quality Assessment Report of ST10's Translation	77
Table 6.26. MQM Scoring of ST10's Translation	80
Table 6.27. Translation Quality Assessment Report of ST11's Translation	80
Table 6.28. MQM Scoring of ST11's Translation	84
Table 6.29. Translation Quality Assessment Report of ST12's Translation	85
Table 6.30. MQM Scoring of ST12's Translation	86

Table 6.31. Translation Quality Assessment Report of ST13's Translation	88
Table 6.32. MQM Scoring of ST13's Translation	89
Table 6.33. Translation Quality Assessment Report of ST14's Translation	90
Table 6.34. MQM Scoring of ST14's Translation	91
Table 6.35. Translation Quality Assessment Report of ST15's Translation	91
Table 6.36. MQM Scoring of ST15's Translation	92
Table 6.37. Translation Quality Assessment Report of ST16's Translation	93
Table 6.38. MQM Scoring of ST16's Translation	94
Table 6.39. Translation Quality Assessment Report of ST17's Translation	94
Table 6.40. MQM Scoring of ST17's Translation	95
Table 6.41. Translation Quality Assessment Report of ST18's Translation	96
Table 6.42. MQM Scoring of ST18's Translation	97

LIST OF FIGURES

Figure 2.1. Text Types	9
Figure 2.2. The Process of Intercultural Text Transfer.....	12
Figure 2.3. The Translation Process.....	13
Figure 2.4. The Relationship Between Extra and Intratextual Factors	14
Figure 3.5. Scale for Measuring Translation Automation	19
Figure 3.7. AI Translation Teaching System Module.....	21
Figure 4.8. Display of Uploaded Source Text in the T9N101 Interface.....	26
Figure 4.9. The Example of Source Text Analysis and Text Type Classification Features in T9N101 Interface	26
Figure 4.10. Translation Brief Feature in the T9N101 Interface	28
Figure 4.11. Text Summarization Feature in the T9N101 Interface.....	29
Figure 4.12. Terminology Extraction Feature in the T9N101 Interface	30
Figure 4.13. User Interface of T9N101	32
Figure 4.14. T9N101 Workflow	40
Figure 6.15. The Answers to Question 1 in the Pre-Questionnaire	52
Figure 6.16. The Answers to Question 2 in the Pre-Questionnaire	52
Figure 6.17. The Answers to Question 3 in the Pre-Questionnaire	53
Figure 6.18. The Answers to Question 4 in the Pre-Questionnaire	53
Figure 6.19. The Answers to Question 5 in the Pre-Questionnaire	54
Figure 6.20. The Answers to Question 6 in the Pre-Questionnaire	54
Figure 6.21. The Answers to Question 7 in the Pre-Questionnaire	55
Figure 6.22. The Answers to Question 8 in the Pre-Questionnaire	55
Figure 6.23. The Answers to Question 9 in the Pre-Questionnaire	56
Figure 6.24. The Answers to Question 10 in the Pre-Questionnaire	56
Figure 6.25. Error Type Penalty Total (ETPT) Formula	58
Figure 6.26. Absolute Penalty Total (APT) Formula.....	58
Figure 6.27. Per-Word Penalty Total (PWPT) Formula	58
Figure 6.28. Overall Normed Penalty Total (ONPT) Formula	58
Figure 6.29. Overall Quality Score (OQS) Formula.....	58
Figure 6.30. Overall Quality Fraction (OQF) Formula.....	59

Figure 6.31. Overall Quality Score (OQS) Comparison of Translations of Informative Texts with and without AI Assistance in the Pre-Translation Process ..	66
Figure 6.32. Overall Quality Score (OQS) Comparison of Translations of Expressive Texts with and without AI Assistance in the Pre-Translation Process	87
Figure 6.33. Overall Quality Score (OQS) Comparison of Translations of Operative Texts with and without AI Assistance in the Pre-Translation Process	98
Figure 6.34. General Comparison of OQS Results	99
Figure 6.35. The Answers to Question 1 in the Post-Questionnaire and Comparison with the Pre-Questionnaire.....	100
Figure 6.36. The Answers to Question 2 in the Post-Questionnaire and Comparison with the Pre-Questionnaire.....	101
Figure 6.37. The Answers to Question 3 in the Post-Questionnaire and Comparison with the Pre-Questionnaire.....	101
Figure 6.38. The Answers to Question 4 in the Post-Questionnaire and Comparison with the Pre-Questionnaire.....	102
Figure 6.39. The Answers to Question 5 in the Post-Questionnaire and Comparison with the Pre-Questionnaire.....	103
Figure 6.40. The Answers to Question 6 in the Post-Questionnaire and Comparison with the Pre-Questionnaire.....	103
Figure 6.41. The Answers to Question 7 in the Post-Questionnaire and Comparison with the Pre-Questionnaire.....	104
Figure 6.42. The Answers to Question 8 in the Post-Questionnaire and Comparison with the Pre-Questionnaire.....	104
Figure 6.43. The Answers to Question 9 in the Post-Questionnaire and Comparison with the Pre-Questionnaire.....	105
Figure 6.44. The Answers to Question 10 in the Post-Questionnaire and Comparison with the Pre-Questionnaire.....	106

LIST OF ABBREVIATIONS

AI	: Artificial Intelligence
ANN	: Artificial Neural Network
APT	: Absolute Penalty Total
ASTM	: American Society for Testing and Materials
BNN	: Biological Neural Network
CAT	: Computer-Assisted Translation
CC	: Creative Commons
COP	: Conference of the Parties
ELEM.	: Element
ET	: Error Type
ETPT	: Error Type Penalty Total
EXP	: Expert
FAHQT	: Fully Automatic High-Quality Translation
FEAT.	: Feature
GALA	: Globalization and Localization Association
GenAI	: Generative Artificial Intelligence
HAMT	: Human-Aided Machine Translation
INI.	: Initiator
IP	: Intellectual Property
ISO	: International Organization for Standardization
LLM	: Large Language Model
MAHT	: Machine-Aided Human Translation
MQM	: Multidimensional Quality Metrics
MSV	: Max Score Value
MT	: Machine Translation
NMT	: Neural Machine Translation
Q	: Question
ONPT	: Overall Normed Penalty Total
OQF	: Overall Quality Fraction
OQS	: Overall Quality Score
P	: Participant
PI	: Primary Investigator
PM	: Post Meridiem
PS	: Penalty Scaler
PTA	: Pre-Translation Text Analysis
PWA	: Progressive Web Application
PWPT	: Per-Word Penalty Total
RBMT	: Rule-Based Machine Translation
S	: Source
SDG	: Sustainable Development Goals
SIT.	: Situation
SL	: Source Language
SMR	: Social Media-Based Recruitment

SMT	: Statistical Machine Translation
ST	: Source Text
ST-P	: Source Text Profile
ST-R	: Source Text Receiver
STRUCT.	: Structure
SUPRAS.	: Suprasegmental
T	: Target
T9N	: Translation
TM	: Translation Memory
TOTA	: Translation-Oriented Text Analysis
TQA	: Translation Quality Assessment
TRL	: Translator, Translation
TT	: Target Text
TT-R	: Target Text Receiver
UI	: User Interface
UN	: United Nations
UNESCO	: United Nations Educational, Scientific and Cultural Organization
WHO	: World Health Organization
WWW	: World Wide Web

1. INTRODUCTION

Translation as an act of intercultural and interlingual communication has evolved continuously with human civilization. From ancient oral interpretations to modern digital mediums, the scope and dynamic nature of translation has been shaped by the communicative needs, values and capabilities of each era. In recent years, this evolution has accelerated significantly due to significant integration of digital technologies and Artificial Intelligence (AI) into translation. Translation has come to be seen not only as a linguistic transfer, but also as a form of social and cultural action embedded in purposeful communicative environments and increasingly influenced by computer assistance. This multidimensional transformation requires a re-evaluation of the traditional methodologies, practices and tools that have long defined the field.

In the face of these developments, Translation Studies (TS) has increasingly embraced functionalist approaches that emphasize the purpose (*skopos*) and socio-cultural context of translation. Building on the pioneering works of Hans Vermeer (1978/2014), Katharina Reiss (1971/2014), Justa Holz-Mänttari (1981) and Christiane Nord (1991/2006), functionalist approaches have strived to define the role of translators as expert text producers operating with communicative purposes. This theoretical shift has not only provided a practical framework for real-world translation tasks but also paved the way for the integration of new technologies and opportunities into the translation workflows in a way that is compatible with functional and communicative functions.

Furthermore, the emergence of Generative Artificial Intelligence (GenAI) has transformed the way the texts are processed, analyzed, interpreted and translated. Through the advent of Large Language Models (LLMs), which are capable of contextual understanding, terminological and even discourse-level coherence, GenAI has become both a tool and a research topic in TS. Especially in the pre-translation process, covering tasks such as text type identification, summarization, source text analysis and terminology extraction, GenAI may offer new possibilities to reduce cognitive load and support decision-making processes.

The intersection of functionalist approaches in translation and GenAI technologies forms the conceptual core of this thesis study. Functionalist approaches emphasized the analysis of the source text, the intended function, the target audience and culture, all of which can be meaningfully supported by AI-driven tools. On the other hand, despite the growing interest in the usage of AI in translation, there are very few studies on the use of GenAI in the pre-translation process and consequently there remains a significant gap in the literature regarding pre-translation process, which is crucial for comprehending the communicative and intended function and analyzing a source text before any translation takes place. This study aims to address this gap, bridging theoretical and technological perspective and presenting an integrated model that supports functionalist principles through GenAI capabilities and provide a new perspective concerning translation-oriented text analysis in translator education.

To this end, the study introduces T9N101, a novel GenAI model specifically trained and designed by the author of this thesis for translation-oriented text analysis in the pre-translation process. T9N101 encompasses multiple modules and features, including source text analysis, translation brief generation, source text summarization and terminology extraction. Each feature is theoretically informed by functionalist concepts and practically implemented through AI technologies, making T9N101 both an applied tool and an object of academic research. The model was developed and trained with using datasets that include publicly available, ethically selected and thematically organized sources. Moreover, the workflow and User Interface (UI) have been adapted to meet the needs of translation students in order to encourage more informed and context-sensitive translation decisions.

The thesis is structured as follows. Chapter 2 provides the theoretical framework by reviewing key functionalist frameworks such as skopos theory, translational action theory, translation-oriented text typology and translation-oriented text analysis. These may serve as conceptual scaffolding for comprehending how AI tools can assist the human translator in pre-translation process. Chapter 3 explores historical and current applications of translation technologies and GenAI in translation. Chapter 4 presents the T9N101 model in detail, outlining its architecture, features, training methodology and workflow design. Chapter 5 describes the empirical methodology adopted to evaluate the effectiveness of the T9N101 model through a mixed-method approach including the translation outputs and feedback of translation students as volunteer

participants and translation quality assessment. Chapter 6 discusses the results in relation to theoretical expectations and practical implications. Finally, Chapter 7 offers a conclusion and reflections for future research into the usage of GenAI in the pre-translation process and translator education.

Consequently, this study attempts to contribute to both academic research and professional and technological practice by combining theoretical approaches to translation and GenAI. It aims not only to introduce a new model of GenAI but also to highlight how functionalist approaches can guide the development and application of AI tools in a way that is compatible with cultural and communicative translation goals. In doing so, it is believed that the study can also provide valuable pedagogical insights for translator education, in particular by demonstrating how the tasks in pre-translation process such as source text analysis, summarization and terminology extraction can be supported and enhanced by AI-driven tools. Integrated AI-assisted analytical phases for these tasks into education environments can help future professional translators to develop a more structured, reflective and function-oriented translation competence. Therefore, this study not only seeks to propose a technological solution to an existing gap in translation workflows, but also to contribute to the evolving landscape of translator education by encouraging critical engagement with emerging technologies.

2. THEORETICAL FRAMEWORK

2.1. Functionalist Approaches to Translation

In the mid-20th century, with the emergence of the German School, a more target-oriented perspective began to gain prominence in TS. At the core of functionalist approaches to translation is the proposition that translation is not merely an act of reproducing words and structures, but a form of intercultural communication guided by its intended function. According to Munday, “[t]he 1970s and 1980s saw a move away from linguistic typologies of translation shifts, and the emergence and flourishing in Germany of a functionalist and communicative approach to the analysis of translation” (Munday, 2016, p. 114). This marks a significant paradigm shift from a source text-oriented view to a target text-oriented one, empowering the translator as an active actor who makes strategic decisions based on the communicative needs of the client, broker and end-users. Skopos theory (Reiss & Vermeer, 1978/2014), translational action theory (Holz-Mänttari, 1981), text typology (Reiss, 1976), translation-oriented text analysis model and function plus loyalty theory (Nord, 1991/2006) are considered as studies that lay the foundations and at the center of functionalist approaches in TS.

Skopos theory, which was put forward by Hans J. Vermeer towards the end of the 1970s, has been a cornerstone study in functionalist approaches to translation and is one of the studies that fundamentally changed the understanding of translation in several respects. The name of the theory comes from the “Greek word for purpose” (Nord, 2018, p. 26). According to Vermeer, “[a]ny form of translational action, including therefore translation itself, may be conceived as an action, as the name implies. Any action has an aim, purpose” (1989/2000, p. 191). Accordingly, Vermeer argues that translation is a human action and therefore every translation should have a purpose. Furthermore, the idea that every translation has a *skopos*, meaning purpose, is named as the *skopos rule* by Vermeer:

“Each text is produced for a given purpose and should serve this purpose. The skopos rule thus reads as follows: translate/interpret/speak/write in a way that enables your text/translation to function in the situation in which it is used and with the people who want to use it and precisely in the way they want it to function” (Vermeer, 1989, as cited in Nord, 2018, p. 28).

For this reason, and because of its broad scope, skopos theory can be regarded as a general theory of translation and provides a holistic perspective on translation and consequently on translational action.

Moreover, with the skopos theory, Vermeer contributed to a target-oriented approach, which replaced the source-oriented approach to translation. According to Vermeer, texts are defined as “offer of information” (Martín de León, 2020, p. 200) and can vary according to various situations and skopoi:

“[...] The source text is oriented towards, and is in any case bound to, the source culture. The target text, the *translatum*, is oriented towards the target culture, and it is this which ultimately defines its adequacy. It therefore follows that source and target texts may diverge from each other quite considerably, not only in the formulation and distribution of the content but also as regards the goals which are set for each, and in terms of which the arrangement of the content is in fact determined” (Vermeer, 1989/2000, p. 193).

It should not be inferred from this that the source text and the target text should be two completely independent and different texts; on the contrary, according to Vermeer, there is a relationship between the two texts in various degrees of “intertextual coherence” (1989/2000, p. 193). Nevertheless, this approach shows a move away from source-oriented translation approaches, and Nord expresses this situation in the following statements: “The status of the source is clearly much lower in *Skopostheorie* than in equivalence-based theories” (2018, p. 12) and “translation cannot be considered as one-to-one transfer between languages” (2018, p. 11).

Another crucial aspect of skopos theory is that it emphasizes the parties involved in the translation processes. Among these parties, the most prominent one is the translator, and as the statement “the role of the translator is no longer that of a language-mediator; translators are experts who decide what is to be translated and how” (Martín de León, 2020, p. 200) indicates that translators are considered as

experts. According to skopos theory, it is the translators as experts who make the final decision, among all other situations and factors, and thus the significance of translators' decision-making is clearly recognized. However, "[t]he skopos has priority in the hierarchy of factors guiding translators' decision-making" (Martín de León, 2020, p. 200). Furthermore, besides the translator, other parties and factors within and influential in translation processes, primarily the commission, are also emphasized.

"Someone who translates undertakes to do so as a matter of deliberate choice (I exclude the possibility of translating under hypnosis), or because he is required to do so. One translates as a result of either one's own initiative or someone else's: in both cases, that is, one acts in accordance with a "commission" (Auftrag)". (Vermeer, 1989/2000, p. 198).

The client is called the "commissioner" and is highly influential in the translation processes. The commissioner, i.e. the client, gives instructions and information to the translator on many aspects of the *translatum* and translation process, but the final decision remains with the translator:

"A client needs a text for a particular purpose and calls upon the translator for a translation, thus acting as the initiator of the translation process. In an ideal case, the client would give as many details as possible about the purpose, explaining the addressees, time, place, occasion, and medium of the intended communication and the function the text is intended to have. This information constitutes an explicit translation brief (Übersetzungsauftrag)" (Nord, 2018, p. 29).

This concept is labeled in many ways, including "translation commission", "translation assignment", "translation brief" and "translating instructions" (Nord, 2018). The key point would be that the initiator provides the translator with as much detail as possible about the intended translation. According to Vermeer, "[t]he skopos of a translation is therefore the goal or purpose, defined by the commission and if necessary adjusted by the translator" (1989/2000, p. 200) and it is subsequently up to the translator to decide whether to accept it or not, to utilize some of it and to decide on the skopos. Moreover, "[t]he realizability of a commission depends on the circumstances of the target culture, not on those of the source culture" (2000, p. 199). On the other hand, when a commission is not given or is not sufficiently detailed, the translator can still decide on the skopos and other aspects as an expert.

Furthermore, translational action theory was proposed by Justa Holz-Mänttari focuses on the action and purpose aspects of translation rather than the linguistic equivalence perspective on translation. In Holz-Mänttari's model, translation is defined as "a complex action designed to achieve a particular purpose" (Holz-Mänttari & Vermeer, 1985, as cited in Nord, 2018, p. 12). Moreover, translators are recognized as "intercultural communication experts" (Nord, 2018, p. 112).

One of the most significant points Holz-Mänttari emphasizes in the theory of translational action is the parties involved in translation, that is, intercultural communication:

- "the initiator: the company or individual who need the translation;
- the commissioner: the individual or agency who contacts the translator;
- the ST producer: the individual(s) within the company who write(s) the ST, and who are not necessarily involved in the TT production;
- the TT producer: the translator(s) and the translation agency or department;
- the TT user: the person who uses the TT – for example, a teacher using a translated textbook or a rep using sales brochures;
- the TT receiver: the final recipient of the TT – for example, the students using the textbook in the teacher's class or clients reading the translated sales brochures" (Munday, 2016, p. 124).

In translational action theory, the effects and roles of all these parties, i.e. participants, in translation processes are specifically addressed and Holz-Mänttari underlines the "cooperation" of these participants in intercultural communication:

"Translational action is the process of producing a message transmitter of a certain kind, designed to be employed in superordinate action systems in order to coordinate actional and communicative cooperation" (Holz-Mänttari, 1984, as cited in Nord, 2018, p. 13).

According to Holz-Mänttari, every participant shapes the translation process, and the translator must weigh these effects while putting the needs of the target audience first.

On the other hand, Katharina Reiss introduced translation-oriented text typology in her book *Texttyp und Übersetzungsmethode* (1976). Reiss' text typology is one of the most influential and milestone works in terms of the functionalist approaches and the new perspectives and paradigm shift developing in TS. Prior to Reiss' work, there are many text typologies, although not translation-oriented, and some of them can also be used from the perspective of TS. For example, according to James L. Kinneavy

(1971/1980), who classifies texts according to the perception of reality, there are four text types as narration, evaluation, description, and classification. He described these text types as in the following list:

- “narration: our dynamic view of reality looks at change
- evaluation: our dynamic view focuses at the potential of reality to be different
- description: our static view focuses on individual existence
- classification: focuses on groups” (Kinneavy, 1971/1980, as cited in Trosborg, 1997, p. 15).

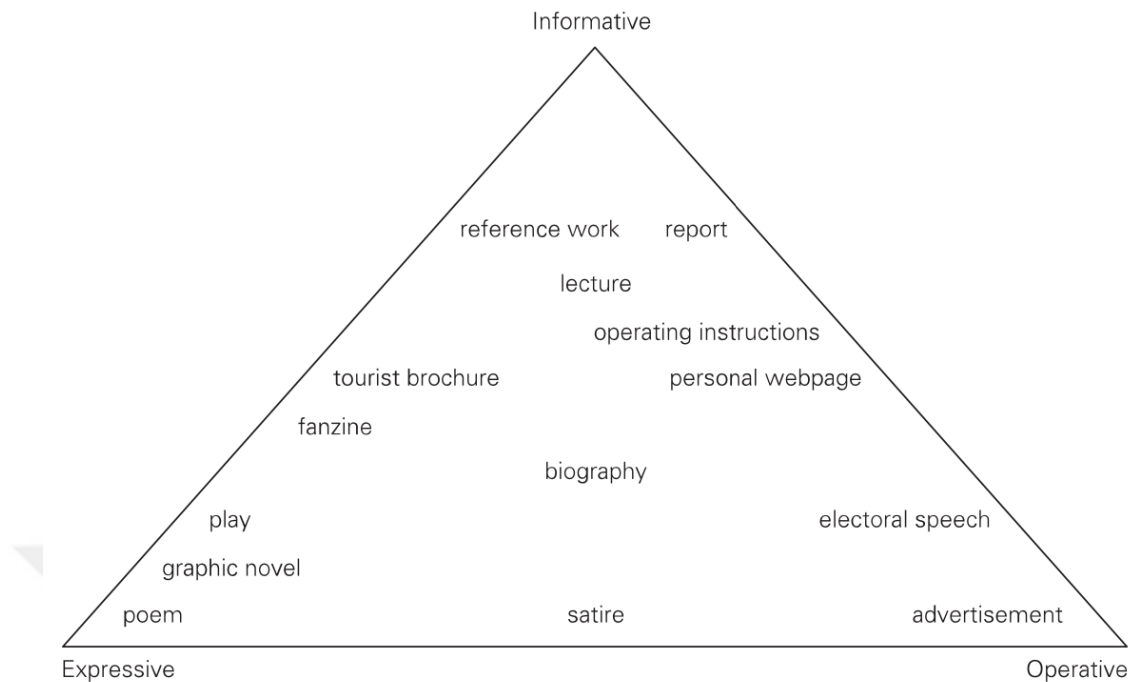
In a similar way, Egon Werlich classifies texts into five types as “description, narration, exposition, argumentation, and instruction” (Werlich, 1976, as cited in Trosborg, 1997, p. 15) according to cognitive and perceptual states. Subsequently, Werlich’s classification was taken as a basis by Hatim and Mason in a translation-oriented manner (1990).

Reiss’s translation-oriented text typology is rather based on the organon model proposed by Karl Bühler (1934/2011). According to Bühler, language has three basic functions as “referential, expressive and appellative” (1934/2011, p. 35), and accordingly texts can be divided into three types in the same way. Respectively, Reiss, by associating these functions with translation in her text typology, suggested that there are 3 main text types as informative, expressive and operative:

- “The communication of content – informative type
- The communication of artistically organized content – expressive type
- The communication of content with a persuasive character – operative type” (Reiss, 1976/1981, p. 124).

In her text typology, Reiss classifies texts for communicative and translation-oriented purposes based on the language functions in Bühler’s organon model (1934/2011). The function of informative texts is the direct communication of information; articles, news, reports and user manuals can be examples of this type of texts. In the expressive text type, aesthetics, creativity and literary elements as well as the author come to the fore. The examples of this text type are poems, short stories, plays and novels. In the operative text type, the main purpose is to get the reader, target audience to take action; propaganda and advertising texts can be considered some examples.

Figure 2.1. Text Types



(Munday, 2016, p. 116)

Reiss then introduced audio-medial text type as a fourth text type. In this text type, elements such as visuals and music are involved and the texts “whose realization involves media other than print” (Nord, 1991/2006, p. 22) can be examples. As it can be recognized from Figure 2.1 some text genres do not completely fit into the text types in the typology and stay in between. For example, while a tourist brochure provides information to a person unfamiliar with the city in order to introduce and inform about the city, it may also contain various elements that stimulate the tourist to take some actions. In this respect, this tourist brochure can be accepted as both an informative text type and an operative text type according to Reiss’s text typology. Another example can be given for advertising texts. Advertising texts usually both provide information about a product or service and encourage the target audience to purchase it. Therefore, it can be said that this advertising texts can be suitable for both informative, operative and audio-medial text types. Reiss then classified this text type examples as hybrid texts in her typology.

One of the most prominent elements that distinguishes Reiss’s typology from other text classifications is that it presents a translation method for the target text in each text type.

Table 2.1. Translation Methods of Text Types

Text type:	<i>Informative</i>	<i>Expressive</i>	<i>Operative</i>
Language function:	Informative (representing objects and facts)	Expressive (expressing sender's attitude)	Appellative (making an appeal to text receiver)
Language dimension:	Logical	Aesthetic	Dialogic
Text focus:	Content-focused	Form-focused	Appellative-focused
TT should...	Transmit referential content	Transmit aesthetic form	Elicit desired response
Translation method:	'Plain prose', explication as required	'Identifying' method, adopt perspective of ST author	'Adaptive', equivalent effect

(Munday, 2016, p.115)

Accordingly, Reiss's typology of texts is mainly function-oriented, but still emphasizes equivalence, albeit from a functionalist perspective, as emphasized in the following quote: "Although her approach remained committed to the prescription of functional equivalence, it may have facilitated the transition from the traditional focus on equivalence to the new focus on the function of the target text advocated by functionalism" (Martín de León, 2020, pp. 199-200). All in all, Reiss's text typology has contributed considerably to the development of functionalist approaches in TS with its appreciable aspects such as the perspective on source text, function of translation and translation methods.

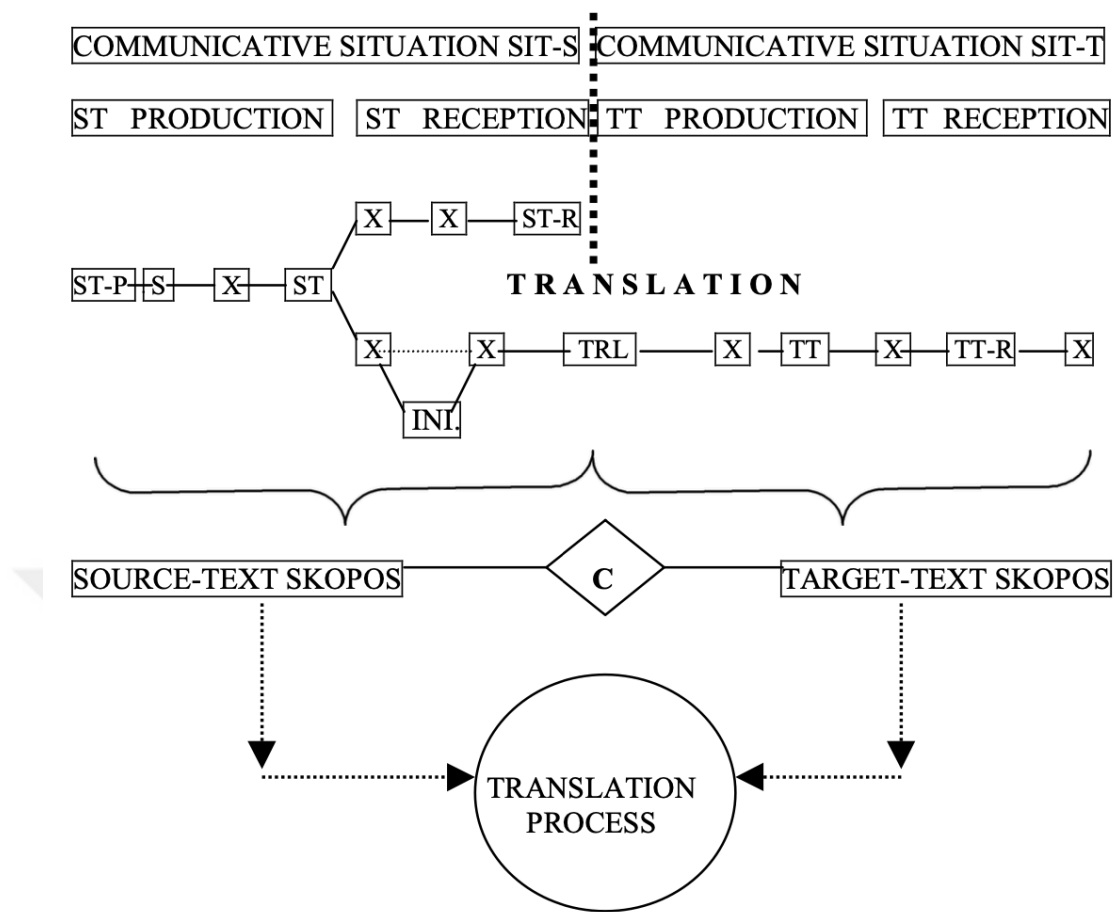
2.2. Translation-Oriented Text Analysis

In the pre-translation process, which is one of the phases of the translation process, source text analysis conducted by the translator has a crucial place. Many methods and approaches such as hermeneutics approach, linguo-stylistic method, cognitive analysis and textocentric analysis (Nikitina & Kasatkina, 2018, pp. 1-2) have been put forward in various perspectives and disciplines. These methods can be beneficial in different aspects of the pre-translation process, but they may not be considered as translation-oriented approaches and methods in particular. This is because, from the perspective of functionalist approaches in TS, in addition to the intratextual elements, translation-oriented extratextual elements are quite significant in consideration of the target text

and function. Therefore, one of the main focal points of translation is to establish the intended function (by commissioner, translator and/or source text author) in the target text, which is why the complex and layered structure of translation comes to the fore, along with many other factors. Respectively, Popelkova states that “it would be a mistake to believe that in professional translation a simple substitution terminology and a very basic knowledge of grammar would suffice” (Popelkova, 2017, as cited in Seresova & Brevenikova, 2019, p. 617). In this context, it can be assumed that there may be a requirement for a particularly translation-oriented methodology for source text analysis, even though it may differ from translator to translator and different methods and approaches may be followed in the pre-translation process.

From the standpoint of functional approaches in TS, one of the most holistic and comprehensive source text analysis methods was introduced by Christiane Nord in 1988 (originally in German). In her book *Text Analysis in Translation: Theory, Methodology, and Didactic Application of a Model for Translation-Oriented Text Analysis* (1988/2006), Nord “proposes a translation-oriented text analysis model based on the concept of functionality, through theoretical profundity, theoretical innovation, and rigorous writing logic, requiring translators to thoroughly analyze and accurately understand the source text, its functions, and translation purposes” (Sun & Sun, 2023). In her book, Nord regards translation as “a communicative act completed by the receiver” (1988/2006, p. 18) and developed the model by addressing and emphasizing the communication, function and intercultural transfer aspects of translation.

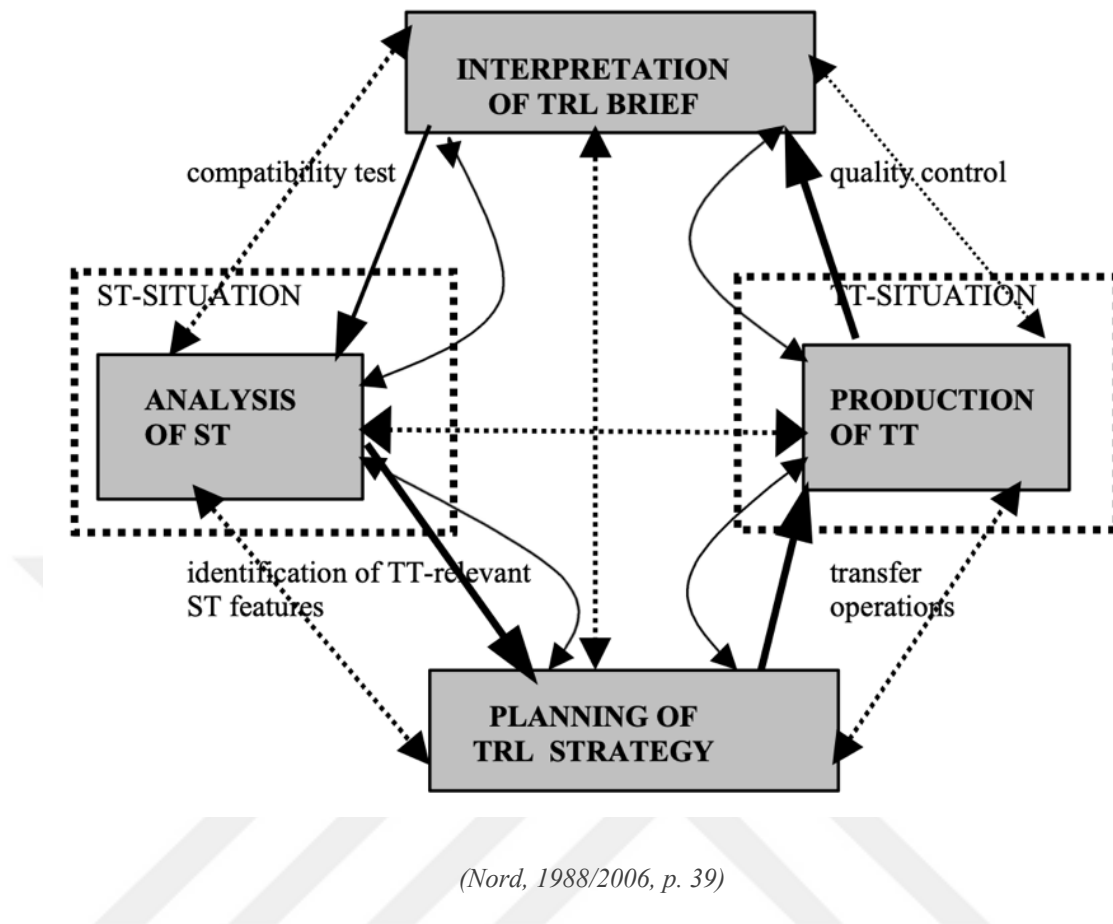
Figure 2.2. The Process of Intercultural Text Transfer



(Nord, 1988/2006, p. 38)

In this regard, the essentiality of source text analysis and translation brief come to the fore in order to achieve the intended function in the target text. According to Nord, “[t]ranslation is the production of a functional target text maintaining a relationship with a given source text that is specified according to the intended or demanded function of the target text (translation skopos)” (1988/2006, p. 32).

Figure 2.3. The Translation Process



Therefore, Nord has designed the translation-oriented source text analysis method with a functionalist perspective on translation and the model comprises both intratextual and extratextual elements. Considering these elements in the model that has been established by Nord, the question “[w]hat information on the various factors may be relevant to translation” (1988/2006, p. 46) comes to the forefront, thereby again underlining function and target reader/audience in translation. At this point, although it is indicated that there may be a lack of information due to the inaccessibility or death of the author of the source text, insufficient information in the translation brief and many other reasons (1988/2006, p.46), it is important to collect as much information as possible for a proper translation-oriented source text analysis and to achieve the intended function in the target text.

Figure 2.4. The Relationship Between Extra and Intratextual Factors

Intra-textual Extra-textual	SUBJECT MATTER	CONTENT	PRESUPPOSITIONS	COMPOSITION	NON-VERBAL ELEM.	STYLE		
						LEXIS	SENT. STRUCT.	SUPRAS. FEAT.
SENDER	favourite subject, special field	personal perspective, commentary; opinion	knowledge of political affiliation	chronological order if sender is a child	gesticulation of Mediterranean sender	personal deixis, idiosyncrasy	simple sentences of uneducated sender	habitual quality of voice, pitch
INTENTION	topical subject; political scandals	prettification or blurring of content	exaggerated pre supp. for prestige reasons	gradual increase of suspense	misleading photographs	connotative words	indirect speech to mark mental reserv.	rhythmical calls for democracy
AUDIENCE	reference to the addressee's own life	taking the addressee's view of things	<i>As you all know perfectly well...</i>	footnotes with explanations	illustrations adequate for children	direct forms of address	imperatives	"baby-talk" intonation
MEDIUM	special subject in scholarly journal	not too complicated in spoken text	knowledge of topical events in newspaper	order of questions in blank form	diagram instead of long statistics on TV	acronyms in newspaper language	simple structures in spoken texts	high-pitched voice in microphone talk
PLACE	culture-specific subjects	information from the parish council	local deixis (<i>in this country</i>)	culture-specific conventions of composition	arms, seals, emblems, logos	elements of regional dialect in lexis, grammar and intonation, Americanisms in English or Spanish		
TIME	season-specific subjects	news of the day	temporal deixis (<i>last night</i>)	composition of classical drama	symbols, such as swastika	temporal markers in lexis and sentence structure		hexameter, blank verse
MOTIVE	season's greetings for Christmas	biographical details in obituary	knowledge of rituals	protocol	sad face	baptismal formula	apostrophe because of emotional upset	solemn tone
FUNCTION	no personal subject in operating instructions	no personal comments in news text	no presuppositions in sales contract	separation of ingredients and instructions in recipe	illustrations in operating instructions	terminology in scientific texts	impersonal constructions in legal documents	singing intonation in liturgy

(Nord, 1988/2006, p. 151)

On the basis of these factors, during source text analysis, questions based on new rhetoric formula such as *who?* for the author of the source text, *why?* for the intended function, *for whom?* for the target text and audience, *where?* and *when?* for time and place, and *what is not/does not?*, *in what words?* *what sentences?* and *what tone?* (Seresova & Brevenikova, 2019, pp. 617-618) are asked. In addition, the importance of the translation brief for answering the relevant questions is emphasized.

Nord's model is quite comprehensive and fundamental not only for professional translators but also for translator education. Along with the growth of the translation industry, the demand for qualified and competent professional translators is gradually increasing and accordingly, translator education is becoming more prominent. In this regard, for pre-translation text analysis (PTA), Ayupova states that "PTA is one of the most important professional skills of a translator; therefore, in the process of translator training adequate amount of time and attention should be given to it" (2014, p. 216). Accordingly, in order for future professional translators to acquire the relevant competence and become familiar with various translation situations, translation students are required to analyze source texts through courses generally centered on Nord's translation-oriented text analysis model. Karakoç and Yetkin Karakoç state that these courses "offered to first year students in the departments of TS aim to introduce the key linguistics concepts such as [...] text type, functions of language, text act, text convention, texteme, intratextual and extra textual elements, discourse, etc." (2014, p. 70). Building on this perspective, it can be considered that translation students begin to develop competence in translation-oriented text analysis from the initial phases of their education. Students who systematically engage with translation-oriented text analysis gain an awareness of communicative purposes, target audience and function, elements that significantly influence translation strategies. As students progress in their education, this competence becomes the ability to make well-informed and context-sensitive translation decisions. Furthermore, such analytical education contributes to the professionalization of the field by enhancing a methodological approach to translation which eventually aligns academic education with real-world industry expectations.

3. GENERATIVE ARTIFICIAL INTELLIGENCE AND TRANSLATION

Along with the increasing development of Artificial Intelligence (AI), various AI features, tools and AI-based technologies are being used frequently in daily life, and they are profoundly affecting many fields. AI is increasingly prominent in both academic discourse and public conversations as its capabilities continue to grow at an accelerating rate. From intelligent virtual assistants that can not only understand but also learn and adapt to user behavior, to advanced systems that can recognize and produce high-quality images and speech, AI technologies are rapidly transforming various aspects of modern life. These developments include, but are not limited to, speech-to-text and text-to-speech systems, autonomous vehicles with full self-driving capabilities, and a wide range of AI features and technologies that are improving decision-making processes across industries. As AI continues to evolve, its growing presence is reshaping business, the way we communicate and the world around us.

The dream of a technology with such properties actually goes back many years and can be found in literature, philosophy and many other fields. According to Yashchenko, “humanity has been moving in this direction for thousands of years” (2024, p. 32). For example, in the field of philosophy for the idea of AI, René Descartes “seems to have been more interested in mechanical man as a metaphor than as a possibility” (Buchanan, 2006, p.53). On the other hand, AI can be found in the works of science fiction authors such as Jules Verne, Isaac Asimov, Mary Shelley and Frank Baum (Buchanan, 2006, p. 53). Similarly, in many fictional works and mythologies of the past, it can be traced that there were non-human beings with AI or the idea of it.

However, although the idea of AI has been around for many years, the foundation of AI technology dates back to the 1950s. In his 1950 article entitled ‘Computing Machinery and Intelligence’ (Turing, 1950), Alan Turing “described how to create intelligent machines and in particular how to test their intelligence” (Haenlein & Kaplan, 2019, p. 3). This test was later called the Turing test, and its main purpose is to assess whether a machine can think or, more accurately, behave like a human being. The basic logic of the Turing test can be summarized as follow:

“The first phase is played by A (man), B (woman) and C (the judge): here, C asks questions to A and B in order to identify the woman. The second phase, introduced by the question “What will happen when a machine takes the part of A in this

game?”, is played in the same way by M (machine), B (woman) and C (the judge). If C decides “wrongly as often [...] as [C] does when the game is played between a man and a woman”, then M passes the test” (Damassino, 2020, pp. 564-565).

Although this test has been the subject of much criticism and debate, it is still discussed in AI-related issues today. Meanwhile, the first use of the word AI dates back to Marvin Minsky and John McCarthy’s *Dartmouth Summer Research Project on Artificial Intelligence* in 1956 (Haenlein & Kaplan, 2019, p. 3). In the following years, various AI projects and technologies such as Perceptron (Rosenblatt, 1957) and ELIZA (Weizenbaum, 1966) have been developed, and AI has had its ups and downs. In this process, there have been periods when the hopes and funding of research related to AI technologies have diminished. However, the development of Deep Learning (DL), Machine Learning (ML) and Big Data technologies, especially with the widespread use of the Internet (World Wide Web), has enabled AI to leap forward in its evolution.

In this regard, Yanqing Duan, John S. Edwards and Yogesh K. Dwivedi state that “[w]ith the rapid advancement of Big Data technologies, [...] AI is being revitalized with the availability and power of Big Data” (2019, p. 63). As a result, expectations for AI have been revived and more research and projects have started to be developed for AI. Especially with the GPT-3 Large Language Model (LLM) introduced by OpenAI in 2020, the generative aspect of AI has come to the forefront more, and the concept of Generative Artificial Intelligence (GenAI) has become a part of our lives.

Furthermore, even though AI has a direct impact on many fields, translation has been one of the fields most affected by Natural Language Processing (NLP), DL and LLM technologies. These systems have not only increased the speed and reduced the workload of translation tasks but have also led to a major change in and debate on the understanding of translation.

3.1. A Brief History of Translation Technologies

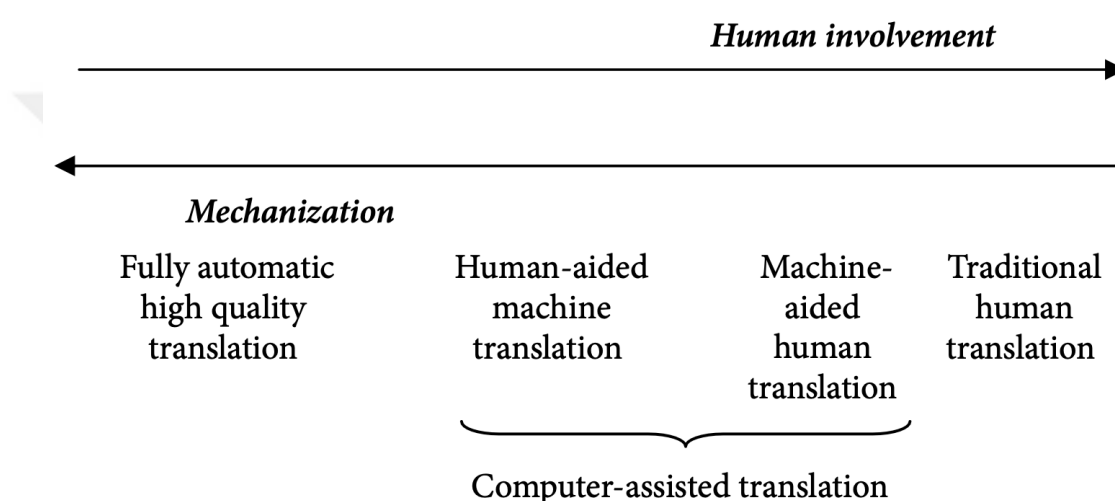
The communicative aspect of translation has been directly influenced by communication technologies such as the telephone and fax. In earlier phases, these communication technologies significantly influenced translation practice by enabling faster and more direct exchange of information across linguistic and cultural

boundaries. These technologies have increased the frequency and immediacy of cross-cultural communication, thus strengthening the demand for translation. In this context, “Cronin (2013) argues that any form of global interaction cannot occur without interlingual activities and thus globalization denotes translation” (Cronin, 2013, as cited in Doherty, 2016, p. 948). Nevertheless, the emergence and rapid evolution of digital technologies, particularly the computer and the internet, have profoundly changed the translation landscape. These developments have not only increased the speed of translation processes but have also redefined the modes in which translation is produced, accessed and consumed such as “1) communication (the ways translators communicate with clients, authors, and other translators), 2) memory (how much information we can retrieve, and how fast), and 3) texts (how texts now become temporary arrangements of content” (Biau-Gil & Pym, 2006, p. 5). As a result, translation has become transformed from a manual, document-based task to a complex and technology-driven activity and “[t]he need to combine computer processes and tools with those used to translate, together with their continuous development, has given rise to a new discipline known as translation technologies” (Alcina, 2008, p. 80).

Translation Memory (TM) and Machine Translation (MT) in particular are at the core of translation technologies. The quest for MT, or fully automated translation by computer, began in the 1950s. The first public demonstration of an MT system, the 1954 Georgetown-IBM experiment, was a landmark event. The first MT systems in the 1950s and 1960s were rule-based systems that relied on large bilingual dictionaries and hand-crafted grammar rules to create sentences in the target language (Hutchins, 2014). In this process, the ALPAC report in 1966 was an important point and “began to damage the reputation and further development of MT (Gaspari, 2024, p. 327). The effects of the ALPAC report continued to last until the 1980s, however with the “increasing availability of computing power, linguistic data, and the growing need for automation, tangible successes of MT began to emerge in the 1980s and 1990s, mostly using rule-based approaches, whereby sets of linguistic rules were written manually by linguists and translators for each language pair” (Doherty, 2016, p. 952). In the 1990s, with the advent and proliferation of the Internet and the World Wide Web (WWW), there was a huge leap in the development of MT, and technology giants such as Google and Microsoft developed and deployed Statistical Machine Translation (SMT), a more advanced system in MT than Rule-Based Machine Translation

(RBMT), with various machine learning techniques (Gaspari, 2024, pp. 330-331). Since the 2010s until today, Neural Machine Translation (NMT), which is created with deep learning techniques and neural networks, has been used, and now machine translation outputs have become more advanced, and its usage is spreading day by day. Therefore, along with the widespread use of MT, various approaches to machine-human interaction in translation such as fully automatic high-quality translation (FAHQT), human-aided machine translation (HAMT), machine-aided human translation (MAHT) and traditional human translation have been proposed.

Figure 3.5. Scale for Measuring Translation Automation



(Hutchins & Somers, 1992, as cited in Alcina, 2008, p. 81)

Furthermore, nowadays, the development of AI technologies has led to discussion not only on translation outputs but also on the use of AI in different processes and aspects of translation and thus, the human-machine relationship has started to be discussed in different dimensions.

3.2. The Use of Generative Artificial Intelligence in Translation

The impact of the developments in LLMs, NLP, DL systems and technologies on translation and research in this area has been steadily expanding. Even though the quality of the NMT outputs were at an unprecedented level and translation capabilities were considered to be at an adequate level until then, it can be observed that these translation outputs have become much improved with the introduction of LLMs and “particularly the Generative Pre-Trained Transformer (ChatGPT)

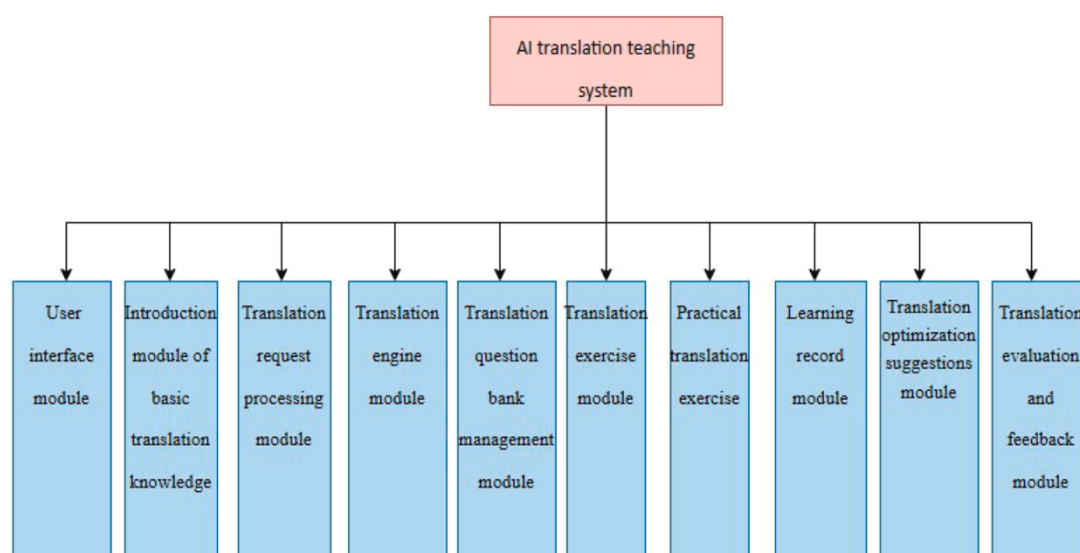
developed by OpenAI, which has further revolutionized the field (Mohsen, 2024, p. 136). According to Wang, “[r]evolutionary developments of AI and deep learning have greatly facilitated natural language processing and improved the accuracy and quality of machine translation” (2023, p. 1528). However, AI affects not only translation outputs but also on many other aspects of translation such as processes and workflow, the role of the human translator, and the “human-computer interaction” (O’Brien, 2012) in translation, translation quality assurance and ethics and thus, “the interplay between technology and the human translator has increasingly been the subject of scholarly debate in the field of TS” (Öner Bulut & Alimen, 2023, p. 376).

Particularly in translator education, which is a significant field in TS for the training of future professional translators with sufficient level of relevant competencies “to facilitate the process through which translators join the profession” (Birkan Baydan & Karadağ, 2014, p. 985), AI is influential as in many other fields and “[n]owadays, more and more teachers are exploring how to combine AI technology with translation teaching to improve the effectiveness of translation teaching” (Yuxiu, 2024, p. 1). Since translator education is a future-oriented field, it is foreseen that the understanding and practice of translation may evolve with the rapid development of AI technology, and it is aimed to improve the practical translation skills of translation students in this direction. In this respect, Wang states that “[t]he main attention in teaching English translation should be given to the development of the thinking abilities of students, the improvement of their knowledge and skills, as well as their reasonable application in practice” (2023, p. 1528). Moreover, GenAI may also be considerable in bringing new perspectives to major approaches and methodologies that have been embedded in translator education such as the social constructivist approach (Kiraly, 2014). Don Kiraly states the following for his social constructivist approach to translator education: “Nor am I aiming at what has sometimes been described as ‘autonomous learning’, where each individual would essentially be an autodidact within the institutional framework. Clearly the development of autonomous learning skills in the sense of independence from the teacher as the source of truth is essential for ensuring that translators can continue learning once the programme of studies is over” (2014, p. 20). In such an approach, it may be possible to suggest that GenAI can be useful with the various features it offers. Concisely, the following features of AI in translation may reaffirm its place in translator education:

- “Using automation technology can save time and workload while processing large amount of data and improve work efficiency.
- In order to better understand these words and grammar, machine learning technology, statistics, and NLP technology are used to learn these words and grammar.
- Due to significant differences in grammar and vocabulary usage among different languages, and most translation tasks are based on specific cultural backgrounds, misunderstandings and ambiguities often arise in translation. By analyzing the context of the text, one can better understand the meaning and context of the sentence, thereby improving the accuracy and efficiency of translation.
- Through multilingual support and gradual learning, translation technology would better adapt to different translation scenarios and provide more efficient and accurate translation services” (Yuxiu, 2024, p. 4)

In this context, in the field of translator education, various methods and pedagogical approaches need to be developed that aim to effectively integrate capabilities, tools and functionalities of AI into different process and dimensions of translation. These initiatives aim should not only aim to familiarize translation students with AI technology but also to increase their critical awareness of the tools, decision-making in translation strategies, workflow efficiency and translation quality and help them gain life-long learning skills in the field of translation.

Figure 3.6. AI Translation Teaching System Module



(Yuxiu, 2024, p. 5)

Thus, AI should be positioned not only as a practical aid supporting routine translation tasks but also a subject for critical and analytical reflection in translator education.

This role of AI in translator education encourages students to engage with AI both as a tool to increase productivity and as a complex technological opportunity that raises important question about translation ethics, quality, and the translator's role. Eventually, this integrated approach may provide the development of more comprehensive, reflective and adaptive competencies among future professional translators, equipping them to meet the changing demands of translation industry and “in order for the human translators to carry out value-added tasks that will keep them in the profession, translator training is required to help trainees develop a perception of their human abilities that would support them in their dance of agency with the machine” (Öner & Öner Bulut, 2021, p. 103). However, considering this relatively new perspective, it can be emphasized that the number of studies conducted in this direction is quite limited. It may be possible to state that the need for innovative methods and novel approaches in translator education would contribute to the research on the integration of AI technologies into translator education.

4. A NOVEL GENERATIVE ARTIFICIAL INTELLIGENCE MODEL FOR THE PRE-TRANSLATION PROCESS: T9N101

The T9N101 Project was developed by the author of this thesis to facilitate the work of translators and translation students with various Artificial Intelligence (AI) features in the pre-translation process. The name T9N101 is a combination of the abbreviations T9N and 101. According to Globalization and Localization Association, T9N stands for the word translation, “[t]ranslation (also referred to as t9n) is rendering meaning from one language into another language” (GALA, 2025) and this acronym of translation is widely used in the fields of translation technologies, localization, software and computer science. The number 9 in the abbreviation T9N stands for the total number of letters between the first letter “t” and the last letter “n” in the word translation. The abbreviation 101 stands for “showing the most basic knowledge about a subject” (Cambridge University Press, 2025) and is mostly used in academic and educational fields. These acronyms form the name of the pre-trained Generative Artificial Intelligence (GenAI) model because the model focuses on the pre-translation process, which is one of the initial and most fundamental points in translation processes and translator education.

T9N101 is designed with a cloud-based working structure that provides constant accessibility and flexibility for users. This means that the model can be accessed from anywhere and on any internet-enabled device by simply accessing <https://www.t9n101.com>. This cloud infrastructure, which eliminates the need for local storage and allows for real-time access and updates, is especially advantageous for translators and translation students who require mobility and remote access. Moreover, T9N101 has been developed as a web application, which means that users also have the option to download and install the app as a progressive web application (PWA). Once installed on a device, the application can work similarly to native apps and offers a more integrated and modern user experience. However, although it can be accessed locally through the downloaded version, an active internet connection is still required to ensure full functionality and synchronization with the cloud systems.

Accessibility has also been an important consideration in the development of T9N101. The design and structure aim to support cross-device compatibility, allowing users to interact with the project on a variety of platforms, including laptops, desktops, tablets and smartphones. However, due to the general structure and multiple features of T9N101, some challenges may arise when used on devices with small screens, such as smartwatches, minicomputers and compact tablets. While it remains technically accessible on such devices, usability issues can affect the overall experience. These may include navigation difficulties, interface responsiveness limitations or feature limitations that make it less comfortable to work efficiently.

4.1. General Features of the Model

T9N101 builds on well-established theories and models in the field of functionalist approaches in TS. In particular, the model includes approaches such as Katharina Reiss's translation-oriented text typology (1976/1981), Hans Vermeer's skopos theory (1978/2014) and Christiane Nord's *Text Analysis in Translation* (1991/2006), which emphasize the functional and purposeful nature of translation. Reiss's translation-oriented text typology provides a framework for categorizing texts according to their communicative function, guiding translators in choosing appropriate translation strategies. Vermeer's skopos theory emphasizes the importance of translation purpose (skopos) in shaping the translation process. Lastly, Nord's *Text Analysis in Translation* (1991/2006) extends functionalist principles by providing a structured method for analyzing source texts before translation begins, taking into account both linguistic and extralinguistic factors, and offers a model for translator education.

Based on these theoretical foundations, T9N101 aims to assist translators and translation students in the pre-translation process by making critical preparation tasks easier. Through T9N101 a pre-trained GenAI model, users can benefit from advanced AI-driven functions such as source text analysis, source text summarization (short and long summaries), AI-generated translation brief according to source text analysis and terminology extraction. For all these features, the model is specifically and separately pre-trained. Therefore, T9N101 seeks to improve the efficiency and effectiveness of the translation workflow by integrating these AI-enabled capabilities and enabling translators and translation students to focus on strategic decision-making processes

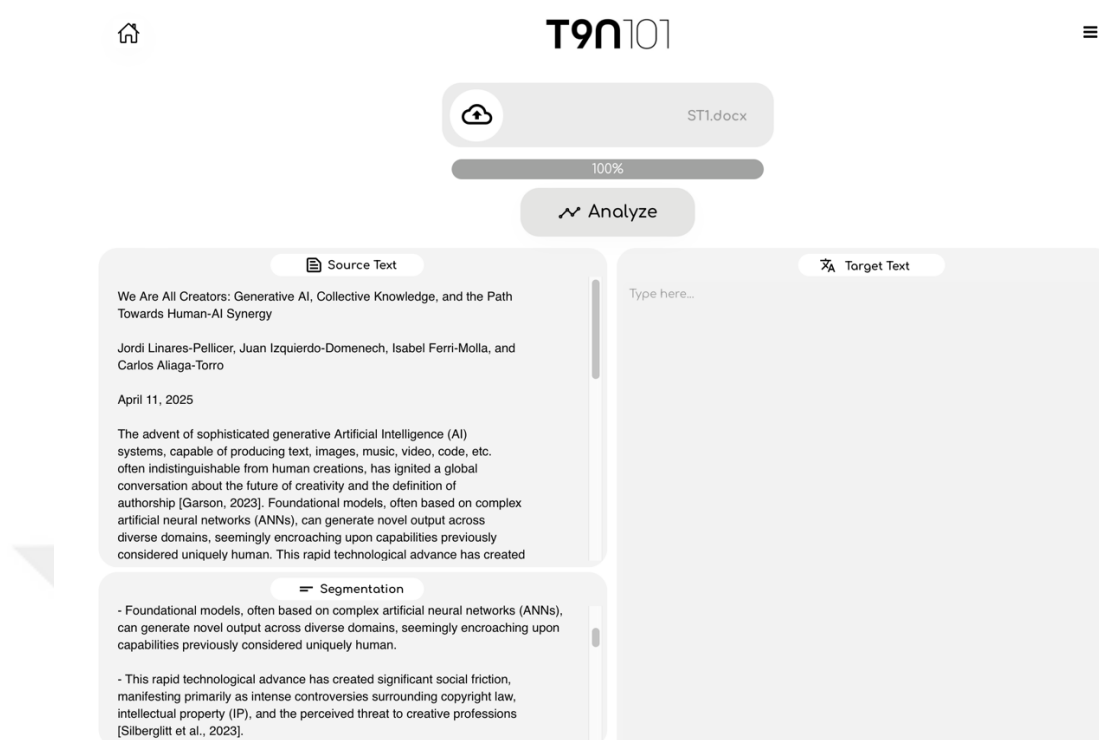
rather than repetitive manual tasks. Finally, the model aims to contribute to the evolving environment of translation technology and education by acting as a bridge between theoretical approaches translation and practical AI-enabled solutions.

4.1.1. Source Text Analysis

Source text analysis plays an important role in TS and translator education, especially in functionalist approaches. As one of the fundamental phases of the translation process, it enables translators to better understand the linguistic, textual, cultural and communicative features of a given source text before starting the act of translation. Recognizing the relevance of this stage, the T9N101 model places source text analysis at its center by integrating the GenAI model that is specifically pre-trained for translation-oriented source text analysis.

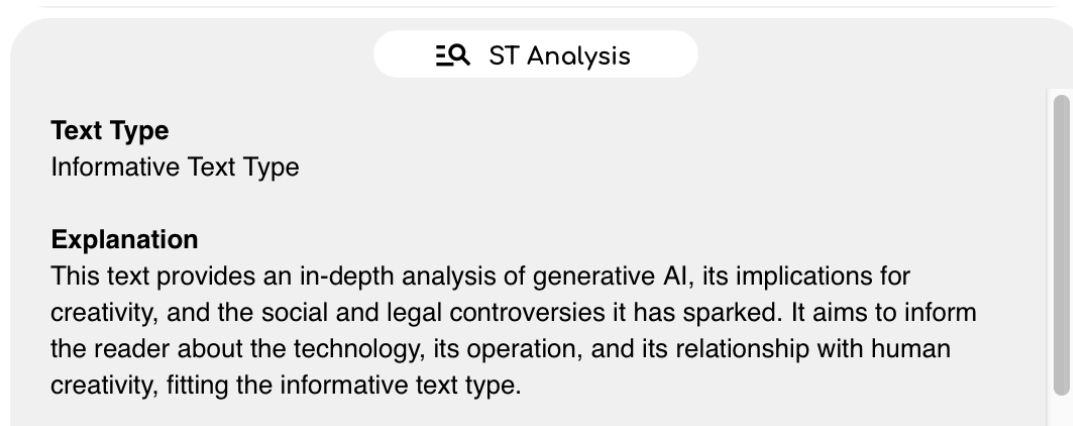
In the T9N101 model, the AI-powered system is designed to comprehensively analyze the source text uploaded by the user by meticulously going through it from beginning to end. When the user uploads a source text, it is immediately displayed in the top left corner of the interface for easy reference. The user can then start the analysis process by pressing the *Analyze* button and ask the pre-trained GenAI model to analyze the text in depth.

Figure 4.7. Display of Uploaded Source Text in the T9N101 Interface



As a result of this analysis, AI identifies and categorizes the source text according to its type and communicative function and provides information to translators and translation students. The classification system used by AI is based on Reiss's translation-oriented text typology, a widely accepted framework in TS and translator education. According to this typology, AI categorizes texts into three main categories: informative text, expressive text and operative text.

Figure 4.8. The Example of Source Text Analysis and Text Type Classification Features in T9N101 Interface



Utilizing this typological framework, the model not only determines the category of the source text but also provides an explanation for its classification. This feature may

enhance translators' and translation students' ability to make informed decisions regarding translation strategies, allowing that the communicative function of the source text is clearly considered in the production of a target text.

4.1.2. Translation Brief Generation

In addition to source text analysis features, an AI-generated translation brief feature is provided in T9N101. After analyzing the source text uploaded by the user and identifying the text type, the model automatically generates a translation brief based on the characteristics of the text. This feature is aligned with functionalist approaches in TS, which emphasize the role of translation brief in helping translators to make context-appropriate translation decisions.

The translation brief plays an important role in functionalist approaches which emphasize the purposeful nature of translation. However, in many educational settings, translation students often do not have access to well-defined translation briefs, either because they are not consciously provided by their translation instructors or because they need to perform independent translation exercises. To address this gap, the T9N101 model integrates an AI-generated translation briefing feature, making it particularly useful in any setting where structured briefing is not always available.

If a user has a predefined translation brief, they have the flexibility to ignore the AI-generated summary or use it as an additional reference. Even in such cases, the AI-generated brief can still provide valuable guidance. However, for those without a translation brief, the AI-generated output serves as a comprehensive resource that provides substantial details to support the translation process.

Figure 4.9. Translation Brief Feature in the T9N101 Interface

Translation Brief

Target Audience
Academics, researchers, and professionals in technology, law, and creative industries.

Medium
Academic journal or conference paper.

Intended Function (Skopos/Purpose)
To inform and educate the audience about generative AI, its societal implications, and the need for a deeper understanding of its principles.

Period
Publication planned for 2025.

AI-generated translation briefs include essential elements such as target audience, medium, intended function (skopos/purpose) and time period. Combining these elements, the T9N101 model enables both translation students and translators to receive detailed and structured translation briefs, helping them to make informed translation choices. The integration of GenAI for translation briefing enhances the model's ability to bridge gaps in translation education while promoting autonomous translation practice.

4.1.3. Source Text Summarization

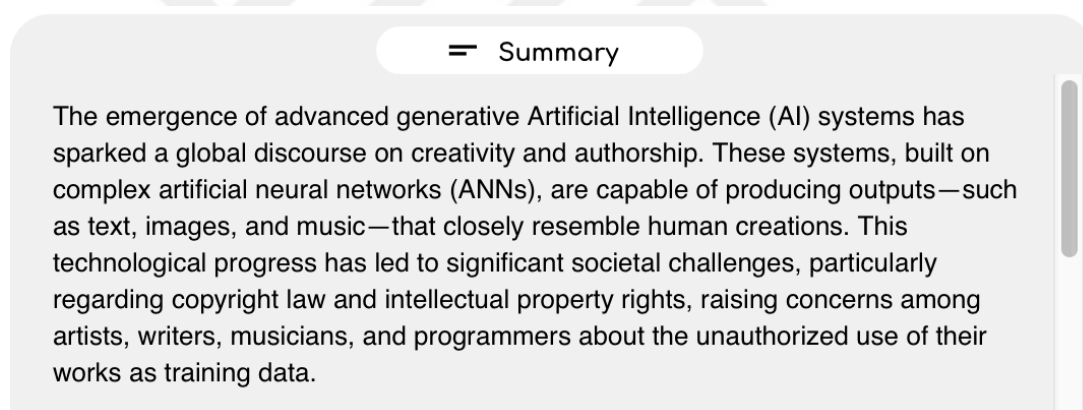
In TS, especially from the perspective of functionalist approaches, one of the most significant aspects of the pre-translation process is the summarization of the source text. This step can play an important role in helping translators comprehend the general structure, main themes and basic information of the text before starting the actual translation process.

During translation, the entire source text is naturally used as the primary reference. However, creating a structured summary, whether short or long, can provide significant benefits to the translator at the pre-translation stage. By reviewing a summary before proceeding to the full text, translators can develop a clearer understanding of the main arguments, narrative flow and stylistic features. This preliminary analysis helps to make informed decisions about linguistic choices, tone and coherence in the target language. A well-constructed source text summary enables

translators to make inferences about various elements such as overall structure, text genre, target audience and overall communicative purpose. It also helps to identify key terminology, recurring patterns and potential translation challenges. In this context, summarization serves as a strategic tool to increase efficiency and accuracy in terms of intended function in translation projects.

Understanding the importance of source text analysis in the pre-translation process, a source text summarization feature has been included in T9N101. This feature was designed with the needs of translators and translation students in mind and offers a support in their analytical processes. To further improve the effectiveness of this feature, the GenAI model of T9N101 has been specially trained to produce both long and short summaries of source texts. These AI-generated summaries are translation-oriented, highlighting key linguistic and structural elements that are particularly relevant to the translation process.

Figure 4.10. Text Summarization Feature in the T9N101 Interface

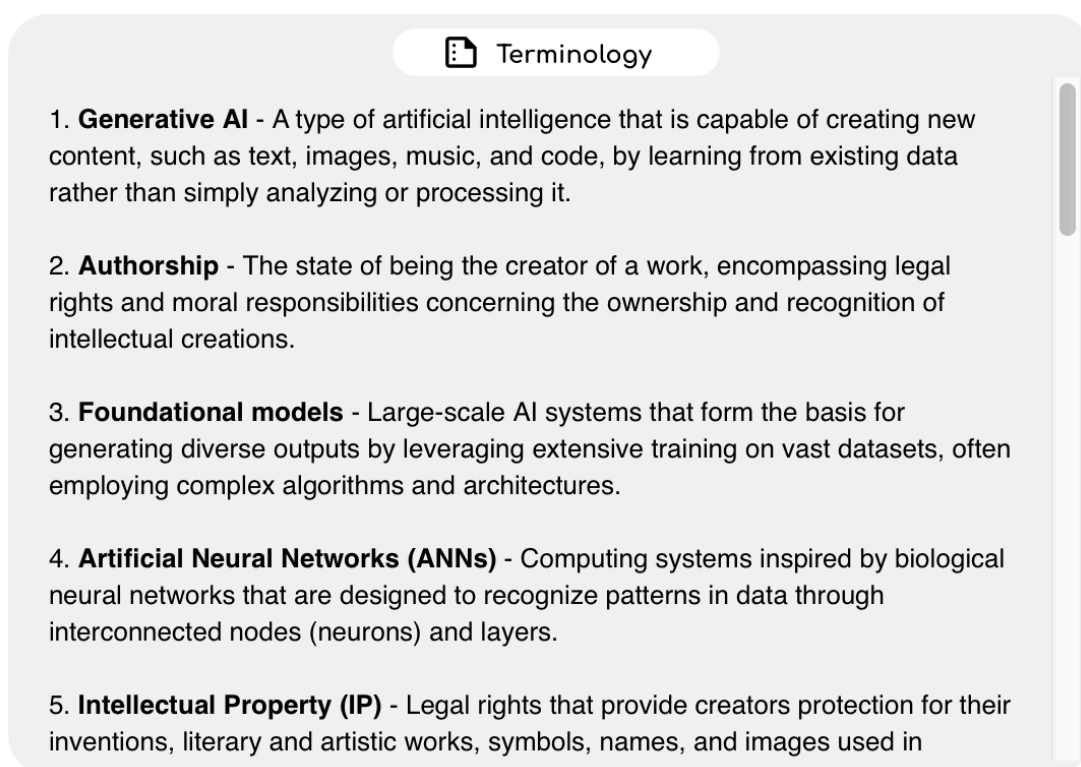


By integrating this translation-oriented AI-driven summarization feature, T9N101 aims to facilitate a more structured and insightful approach to translation, allowing both professionals and students to interact with source texts in a more comprehensible and strategic way.

4.1.4. Terminology Extraction

Another crucial feature of the T9N101 is its AI-assisted terminology extraction capability. This feature provides users with both a selected list of terminology and detailed lexical descriptions of each term, utilizing a pre-trained GenAI model to identify and extract 20 key terms from a given source text.

Figure 4.11. Terminology Extraction Feature in the T9N101 Interface



By automating this terminology extraction process, T9N101 aims to facilitate the pre-translation phase for both professional translators and translation students. Identifying key terms and understanding their precise meaning is one of the most important steps in the translation process. However, manually extracting these terms and searching for their lexical meanings can be both time-consuming and labor-intensive. With this AI-powered feature, translators and translation students can quickly access a translation-oriented list of terminology, saving time that would otherwise be spent manually identifying and searching for key terms in the source text. The lexical explanations provided by the GenAI model offer additional linguistic insights that help translators and translation students gain a deeper understanding of specific vocabulary, and contextual meanings.

4.2. Development and Training

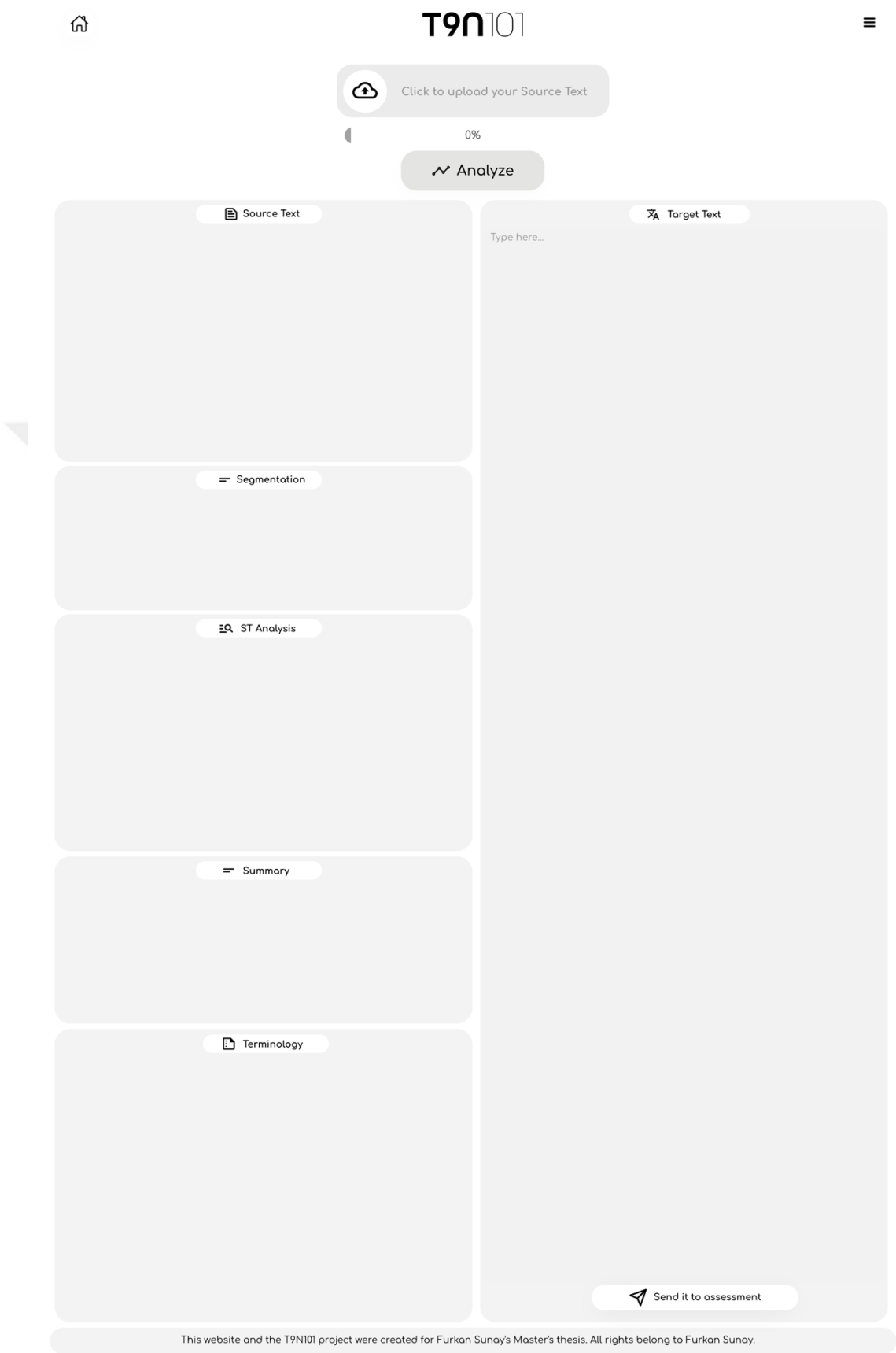
4.2.1. User Interface

The T9N101 project's User Interface (UI) has been specifically designed to provide that both professional translators and translation students can easily access all of its AI-powered features. The main goals of this design are to increase usability, streamline

workflows, and facilitate an efficient pre-translation process. Given the increasing use of digital tools in translation practice, the T9N101 UI has been structured in accordance with established translation software conventions and made easy to navigate for users familiar with Computer-Aided Translation (CAT) tools.

The T9N101 interface follows a structured layout that effectively organizes pre-translation tools and source text analysis features for optimum experience. The interface is divided into two main sections. On the left, users can access features for the pre-translation process and source text analysis tools. These include AI-powered functions such as source text summarization, terminology extraction, and other analytical tools that help understand and prepare the text for translation. On the right, there is a dedicated section for translation input, where users can write, edit, and improve their translations based on the source text and analytical insights provided by the AI features. This dual-panel design allows users to interact with the source text analysis simultaneously while working on their translations, encouraging a more structured and informed translation process.

Figure 4.12. User Interface of T9N101



Furthermore, T9N101's user interface style intentionally resembles the layout of established translation programs and platforms, especially those developed for digital translation environments. A similar interface design can be found in almost all modern CAT tools, where the source text is displayed on the left and the translated (target) text is displayed on the right. Also, this structure is often seen in translation memory (TM) systems that allow translators to compare previously translated texts with the current project. By adopting this widely accepted interface approach, T9N101 allows translators and students to seamlessly transition to using the platform without any difficulty. The aim is to provide a familiar yet enhanced digital workspace that supports both pre-translation analysis and the actual act of translation in an efficient and structured manner.

4.2.2. Datasets and the Training of the AI Model

The T9N101 offers a range of AI-powered features specifically designed for translation students and professional translators, aiming to optimize the pre-translation process. These features include source text analysis, translation briefing, text summarization, and terminology extraction, all powered by a pre-trained GenAI model. The model has been meticulously developed and trained based on OpenAI's ChatGPT-4o architecture (OpenAI, 2025), allowing its functionality to be tailored to the needs of translators. Moreover, the model has been specifically pre-trained and fine-tuned to focus on translation-related tasks. Unlike general AI models that may lack the precision required for linguistic analysis and terminology management, T9N101 model has been trained on large-scale datasets containing thousands of rows of data for each feature integrated into the project. This enables the model to deliver relevant and translation-focused outputs.

The pre-training process for T9N101 included extensive data preparation to ensure that the GenAI model understands various language structures, terminology variations, and text summarization techniques; fine-tuning for translation purposes; enabling the model to produce concise, structured, and meaningful insights into the translation process; and integrating domain-specific knowledge, enabling the AI to recognize and extract key terminology, provide contextual lexical explanations, and produce translation briefs that facilitate better text understanding.

The general characteristics of the dataset used for the text type analysis feature of the source text according to Reiss's text typology can be described as follows: "id", "text", "source", "text_type" and "justification". The "id" here is the numbering of the sources in the dataset, for example "0001" for the first example. "Text" is all or part of the source text used as an example, 'source' refers to the source from which the text was obtained. Finally, the "text_type" and "justification" parts indicate that the "text_type" is classified as "informative text", "expressive text" or "operative text" according to Reiss's text typology based on the sample source used in the dataset and the "justification" part justifies this text type classification. Accordingly, figurative and aesthetic language use, metaphor and narrative density are generally used in the justification of expressive text classification. Technical terms, direct information transfer, data presentation and objectivity are used in the justification of informative texts. Lastly, patterns such as call to action, second person use, imperative tense are used in the justification of operative texts.

In this direction, the information of the sources, all or some parts of which are used in the datasets in accordance with the informative text type, is given in the table below:

Table 4.2. Sources in Informative Text Type for Training of the AI Model

Author(s)	Year	Title	Journal/Publisher
Atabekov	2023	Public functions implementation by artificial intelligence: Current practices and prospects for common measures within particular periods across continents and regions	<i>Societies, 13(7)</i>
Bai, et al.	2024	Two novel deep-learning models to predict spontaneous ureteral calculi passage: Model development and validation.	<i>Current Urology, 18(4)</i>
Bartmess & Abreu	2024	Maintaining data quality when using social media for recruitment: Risks, rewards, and steps forward	<i>Methodology, 20(4)</i>
Daungsupawong, & Wiwanitkit	2024	Maintaining data quality when using social media for recruitment: Risks, rewards, and steps forward	<i>Methodology, 20(4)</i>
Garascia	2024	Plants, water, salt, coal: The archival strata of the Victorian photographic book	<i>Interfaces, 52</i>

Ghahramani, et al.	2020	Artificial intelligence for efficient thermal comfort systems: Requirements, current applications and future directions	<i>Frontiers in Built Environment</i> , 6
Giddy	2024	Falling in love	<i>Methexis</i> , IV(2)
Hankins, et al.	2024	Diet predicts mind and moral concern towards a broad range of animal categories	<i>Psychology of Human-Animal Intergroup Relations</i> , 3
Le Blanc	2024	The advancement of software technology and the evolution of transcription protocols in the field of genetic studies	<i>Interfaces</i> , 52
Moorkens, et al.	2024	Proposal for a triple bottom line for translation automation and sustainability: An editorial position paper	<i>The Journal of Specialised Translation</i> , (41)
Paffrath	2024	The measurement of (dis-)embedded identification	<i>Measurement Instruments for the Social Sciences</i> , 6
Parker	2025	Morini, Massimiliano (2022). Theatre Translation: Theory and Practice.	<i>The Journal of Specialised Translation</i> , 43(43)
Paun	2023	Scan your life in the digital era	<i>Annals of Spiru Haret University Economic Series</i> , 23(2)
Percival	2024	Decolonial practices around “Portrait of a Man in a Red Suit” (formerly “Portrait of an African”), in the Royal Albert Memorial Museum (RAMM), Exeter	<i>Interfaces</i> , 51
Popşa	2023	Digitalization: A strategic approach for the travel and tourism industry	<i>Expert Journal of Marketing</i> , 11(2)
Pöchhacker	2024	Is machine interpreting interpreting?	<i>Translation Spaces</i> , 13(1)
Roig-Sanz, & Fólica	2021	Big translation history: Data science applied to translated literature in the Spanish-speaking world, 1898–1945	<i>Translation Spaces</i> , 10(2)
Sakamoto, et al.	2024	Measuring translators’ quality of working life and their career motivation: Conceptual and methodological aspects	<i>Translation Spaces</i> , 13(1)
Scarfone, et al.	2025	Smart IoT device for in field Black Sigatoka Disease recognition and mapping	<i>Smart Agricultural Technology</i> , 10

Wang, et al.	2024	Metabolite associations with childhood and juvenile absence epilepsy: A bidirectional Mendelian randomization study	<i>Psychiatry and Clinical Psychopharmacology</i> , 35(1)
Wiwanitkit, & Wiwanitkit	2024	How much protection can COVID-19 vaccine give compared to no vaccination? A reappraisal	<i>Assam Journal of Internal Medicine</i> , 14(1)

The sources suitable for the expressive text type used in the databases for training the GenAI model are listed below:

Table 4.3. Sources in Expressive Text Type for Training of the AI Model

Author(s)	Year	Title	Journal/Publisher
Aesop	6th century BCE	<i>The fables of Aesop</i>	Project Gutenberg
Austen	1813	<i>Pride and prejudice</i>	Project Gutenberg
Austen	1815	<i>Emma</i>	Project Gutenberg
Blackwood	1917	<i>Day and night stories</i>	Project Gutenberg
Burns	1787	<i>Poems and songs of Robert Burns</i>	Project Gutenberg
Carroll	1865	<i>Alice's adventures in Wonderland</i>	Project Gutenberg
Cournos, & O'Brien (Eds.)	1922	<i>The best British short stories of 1922</i>	Project Gutenberg
Dickens	1850	<i>David Copperfield</i>	Project Gutenberg
Dickens	1859	<i>A tale of two cities</i>	Project Gutenberg
Doyle	1902	<i>The hound of the Baskervilles</i>	Project Gutenberg
Eliot	1871	<i>Middelmarch</i>	Project Gutenberg
Fielding	1749	<i>The history of Tom Jones, a foundling</i>	Project Gutenberg
Fitzgerald	1925	<i>The great Gatsby</i>	Project Gutenberg
James	1925	<i>A warning to the curious, and other ghost stories</i>	Project Gutenberg
Joyce	1914	<i>Dubliners</i>	Project Gutenberg
Joyce	1922	<i>Ulysses</i>	Project Gutenberg
Marlowe	1604	<i>The tragical history of Doctor Faustus</i>	Project Gutenberg
Melville	1851	<i>Moby Dick; or, The whale</i>	Project Gutenberg
Milne	1926	<i>Winnie-the-Pooh</i>	Project Gutenberg
More	1516	<i>Utopia</i>	Project Gutenberg
Poe	1850	<i>The works of Edgar Allan Poe, Volume 2</i>	Project Gutenberg
Shakespeare	1597	<i>Romeo and Juliet</i>	Project Gutenberg
Shakespeare	1623	<i>The complete works of William Shakespeare</i>	Project Gutenberg

Shelley	1818	<i>Frankenstein; or, The modern Prometheus</i>	Project Gutenberg
Stoker	1897	<i>Dracula</i>	Project Gutenberg

Lastly, the sources listed below were used in accordance with the operative text type:

Table 4.4. Sources in Operative Text Type for Training of the AI Model

Author(s)	Year	Title	Journal/Publisher
Gentile	2008	<i>The Italian cook book: The art of eating well; practical recipes of the Italian cuisine, pastries, sweets, frozen delicacies, and syrups</i>	Project Gutenberg
Gillette, & Ziemann	2004	<i>The Whitehouse cookbook (1887): Cooking, toilet and household recipes, menus, dinner-giving, table etiquette, care of the sick, health suggestions, facts worth knowing, etc., etc</i>	Project Gutenberg
Grant	2004	<i>The Highland fling and how to teach it</i>	Project Gutenberg
Hartley	2012	<i>The gentlemen's book of etiquette and manual of politeness: Being a complete guide for a gentleman's conduct in all his relations towards society</i>	Project Gutenberg
Hartley	2011	<i>The ladies' book of etiquette, and manual of politeness: A complete hand book for the use of the lady in polite society</i>	Project Gutenberg
Kitchiner	2009	<i>The cook's oracle; and housekeeper's manual</i>	Project Gutenberg
UNESCO	2017	About the campaign	<i>Global Education Monitoring Report 2017</i>
UNESCO	2017	Gender review: Social media resources	<i>Global Education Monitoring Report 2017</i>
UNESCO	2017	Make it public: Social media resources	<i>Global Education Monitoring Report 2017</i>
UNESCO	2024	Young people call for climate change education to adapt	<i>Global Education Monitoring Report</i>
UNESCO	2024	How can we empower school leaders to #LeadForLearning? Recommendations from the 2024/5 GEM Report	<i>World Education Blog</i>
UNESCO	2024	Learning wish list: A spotlight on Africa	<i>Global Education Monitoring Report</i>

UNESCO	2024	We must invest in system leaders to #LeadForLearning	<i>World Education Blog</i>
UNESCO	2024	Youth and students call for technology to be on their terms	<i>World Education Blog</i>
UNESCO	2025	Making reading fun: Africa’s spelling bee meets the BornToLearn campaign	<i>World Education Blog</i>
UNESCO	2025	Learn to eat well and eat well to learn well	<i>World Education Blog</i>
United States War Department	2016	<i>Motorcycle, solo (Harley-Davidson Model WLA)</i>	Project Gutenberg
World Health Organization	2025	<i>Alcohol and cancer in the European Union: A call to action</i>	www.who.int

The feature of the dataset used in the training of the T9N101 model for translation-oriented summarization feature consist of “id”, “source_text” and “summary” parts. The “id” part is again used to enumerate the sample source text used in the dataset. The “source_text” is the complete source text sample while the “summary” part contains the summary of the source text. The source text summaries used for the “summary” in the dataset are either the summaries of the original sources created directly or revised from the summaries created by AI by the author of the presen thesis.

On the other hand, the dataset used for the translation-oriented terminology extraction feature consist of “id”, “source_text”, “key_terms”, “term” and “definition”. The “id” and “source_text” parts here are the same as in the databases of the previous features. The “key_terms” part is used as an umbrella to extract the most important terms from the source text sample used in the dataset. For the translation-oriented feature of extracting the most important terms in the source text, the terms were identified manually by the author of the present thesis and/or with Large Language Model (LLM) support and then revision method in the training of the GenAI model. The “term” and “definition” in the dataset refer to the important terms and their lexical meanings.

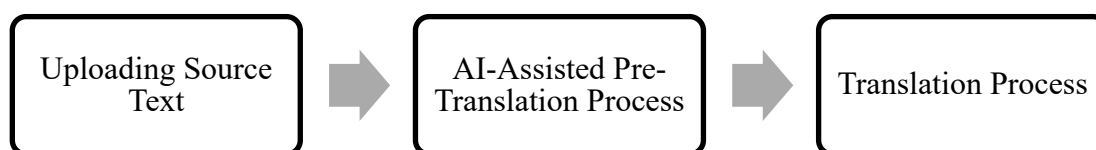
Furthermore, a critical aspect of the training of theT9N101 GenAI model was adhering to ethical guidelines and responsible AI practices. The sources in the datasets used in the training of the AI model were selected only from non-copyrighted and publicly available works and studies to comply with ethical standards. Literary works such as poems, short stories, novels, novellas, and plays were retrieved from Project Gutenberg (n.d.). These sources were particularly relevant for training the GenAI model for expressive text type according to Reiss’s translation-oriented text typology. (1976). On the other hand, various open access scientific articles were used for

informative texts. In this regard, attention was paid to ensure that the articles in question were from several disciplines. For operative texts, it has been carefully chosen to be Creative Commons (CC) licensed texts. The mission of Creative Commons is explained as follows: “Creative Commons (CC) is an international nonprofit organization dedicated to helping build and sustain a thriving commons of shared knowledge and culture. [...] As part of this work, we help overcome legal obstacles to the sharing of knowledge and creativity to address the world’s most pressing challenges” (Creative Commons, n.d.). CC-licensed texts are often taken from campaigns of large-scale, international organizations such as the United Nations (UN), UNESCO and the World Health Organization (WHO). Therefore, this approach ensures that intellectual property rights and academic integrity are respected while maintaining high-quality, unbiased training data. T9N101 emphasizes ethical AI development, ensuring that translational AI capabilities not only increase efficiency but also comply with fair use policies and responsible data sourcing practices. This commitment to ethical AI training underscores the project’s commitment to transparency, accountability, and academic integrity.

4.2.3. Workflow Design

T9N101’s workflow is designed to mirror the standard steps of professional translation workflows, with a particular emphasis on the pre-translation process. This structured approach seeks to enable translators and translation students to efficiently analyze source texts, make informed translation decisions, and produce higher quality translations. T9N101 workflow integrates AI-powered features in a logical sequence, allowing users to seamlessly move from source text analysis to translation and assessment.

Figure 4.13. T9N101 Workflow



The translation workflow begins with the user uploading their desired source text to the system. This is done by clicking on the *Click to upload your Source Text* button and selecting a file from their device. Once uploaded, the full source text will appear in the *Source Text* section located on the top left of the interface. This feature allows users to visually confirm their uploaded text before moving on to the next steps. Once the source text is uploaded, the user will initiate the pre-translation analysis process by pressing the *Analyze* button. This action activates the GenAI model, which is specifically pre-trained for translation-oriented features. The GenAI model then performs a comprehensive analysis of the source text to prepare the necessary pre-translation insights. Once the AI analysis is complete, the user gains access to a range of AI-powered pre-translation features displayed in a structured order on the left side of the interface. Features such as source text analysis, translation summary, text summary, and terminology extraction are divided into dedicated sections that allow the user to navigate through them efficiently.

In the final step of T9N101's workflow, once the pre-translation process is complete, the user may move on to the actual translation process. This is done in the *Target Text* section located on the right side of the interface. The target text section is fully editable, meaning the user can write, delete, and correct their translation in real time. This editable section allows translators and translation students to improve their translations as needed, ensuring greater accuracy and consistency before finalizing the text. When the translation is complete, translators and translations students can save and submit their translations by clicking on the *Send it to the assessment* button located at the bottom right of the interface. By doing so, the translated text is securely stored in T9N101's storage system and becomes accessible for assessment and feedback. Once uploaded, the translation evaluator (such as a translation trainer, reviewer, or professional editor) can review the submitted translation.

5. METHOD

5.1. Design and Implementation of the Experimental Study

A structured methodology is used in this study to examine how the use of AI in the pre-translation process affects translation quality. The study design involves a controlled comparison between translations produced with AI-assisted pre-translation analysis and translations completed without AI assistance and is designed in phases accordingly. The stages and details of the methodology and design of the study are described in what follows:

The study involves volunteers who agreed to participate in the application phase. Before starting the application, each participant went through a 30-minute training session where they were introduced to T9N101 model and its features. This training ensured that all participants became familiar with how to use AI-assisted pre-translation tools and features, including source text analysis, brief generation, summarization, and terminology extraction. The aim was to standardize the training process so that participants could comprehensively access all AI-based features of the T9N101 model in their AI-assisted translation, thus increasing usability.

Each participant was assigned two separate but similar source texts, each up to 300 words long. The language direction was from English into Turkish. The design of the translation tasks followed a controlled approach where each participant translated the first source text with AI assistance. Participants first analyzed the source text using the T9N101. Then, each participant translated the second source text without using T9N101. The participants completed this translation manually without any AI-assisted pre-translation analysis. Therefore, this paired translation task allowed for direct comparison between AI-assisted and non-AI-assisted translations and helped determine whether the use of the AI in the pre-translation process impacts translation quality.

In order to ensure that the study results are more holistic, comprehensive and reliable, the source texts assigned to the participants were selected according to certain criteria. Each pair of source texts assigned to a participant was similar in terms of language, style, difficulty and text type to eliminate bias in translation difficulty. The two texts assigned to a participant were excerpts from the same text to ensure contextual similarity. Moreover, the source texts were suitable for the text types in Reiss's translation-oriented text typology (1976/1981), which covers three main text types: informative texts, expressive texts and operative texts. By ensuring that all three text types were represented, the study aimed to provide a comprehensive analysis of how AI-assistance in pre-translation process affects translation in different text types.

In order for the application carried out in the research to cover all three text types, the study assigned participants as follows:

- Three participants were assigned to translate informative texts with AI-assistance in pre-translation process and without any AI-assistance.
- Three participants were assigned to translate expressive texts with AI-assistance in pre-translation process and without any AI-assistance.
- Three participants were assigned to translate operative texts with AI-assistance in pre-translation process and without any AI-assistance.

Table 5.5. Methodology of the Study

Source Text (ST)	Participant (P)	Text Type	AI-Assistance
ST1	P1	Informative Text Type	Yes
ST2	P1	Informative Text Type	No
ST3	P2	Informative Text Type	No
ST4	P2	Informative Text Type	Yes
ST5	P3	Informative Text Type	Yes
ST6	P3	Informative Text Type	No
ST7	P4	Expressive Text Type	Yes
ST8	P4	Expressive Text Type	No
ST9	P5	Expressive Text Type	No
ST10	P5	Expressive Text Type	Yes
ST11	P6	Expressive Text Type	Yes
ST12	P6	Expressive Text Type	No
ST13	P7	Operative Text Type	Yes
ST14	P7	Operative Text Type	No
ST15	P8	Operative Text Type	No
ST16	P8	Operative Text Type	Yes
ST17	P9	Operative Text Type	Yes
ST18	P9	Operative Text Type	No

Each participant translated the two texts in their assigned category, allowing the effects of AI to be tested across multiple text types and participant experiences. The information of the source texts that the participants were asked to translate is given below, and the full source texts (see Appendix 1) and their guidelines and translation briefs (see Appendix 2) for each of them are included in the appendices.

Table 5.6. Source Text Information

ST Number	Author(s)	Year	Title	Journal/ Publisher	Excerpt Information
ST1	Linares-Pellicer, et al.	2025	We are all creators: Generative AI, collective knowledge, and the path towards human-AI synergy	<i>arXiv</i>	Introduction, paras. 1-2, 262-word excerpt
ST2	Linares-Pellicer, et al.	2025	We are all creators: Generative AI, collective knowledge, and the path towards human-AI synergy	<i>arXiv</i>	Introduction, paras. 3-4, 180-word excerpt
ST3	Hughes, & Karcher	2024	Maintaining data quality when using social media for recruitment: Ethical considerations and recommendation s	<i>Methodology : European Journal of Research Methods for the Behavioral and Social Sciences</i>	Abstract, 167-word excerpt
ST4	Hughes, & Karcher	2024	Maintaining data quality when using social media for recruitment: Ethical considerations and recommendation s	<i>Methodology : European Journal of Research Methods for the Behavioral and Social Sciences</i>	Consider How Social Media Platforms Are Used for Recruitment, paras. 3, 158-word excerpt

ST5	Pöchlhammer	2024	Is machine interpreting interpreting?	<i>Translation Spaces, 13(1)</i>	Conceptual maps, paras. 5-6, 156-word excerpt
ST6	Pöchlhammer	2024	Is machine interpreting interpreting?	<i>Translation Spaces, 13(1)</i>	Conceptual maps, paras. 7-8, 212-word excerpt).
ST7	Carroll	1865 / 2008	<i>Alice's Adventures in Wonderland</i>	Project Gutenberg	Chapter I, paras. 7-8, 183-word excerpt
ST8	Carroll	1865 / 2008	<i>Alice's Adventures in Wonderland</i>	Project Gutenberg	Chapter I, paras. 9-10, 259-word excerpt
ST9	Dickens	1859	<i>A tale of two cities</i>	Project Gutenberg	Chapter I, paras. 1-2, 190-word excerpt
ST10	Dickens	1859	<i>A tale of two cities</i>	Project Gutenberg	Chapter II, paras. 1-2, 260-word excerpt
ST11	Stoker	1897	<i>Dracula</i>	Project Gutenberg	Chapter I, paras. 1-2, 237-word excerpt
ST12	Stoker	1897	<i>Dracula</i>	Project Gutenberg	Chapter I, paras. 7-8, 291-word excerpt
ST13	UNESCO	2024	Young people call for climate change education to adapt	<i>Global Education Monitoring Report</i>	The future belongs to us: youth, paras. 1-6, 258-word excerpt
ST14	UNESCO	2024	Young people call for climate change education to adapt	<i>Global Education Monitoring Report</i>	To: Governments, paras. 1-5, 173-word excerpt
ST15	Gentile	2008	<i>The Italian cook book: The art of eating well; practical recipes of the Italian cuisine, pastries, sweets, frozen</i>	Project Gutenberg	Ravioli, paras. 1-3, 261-word excerpt

			<i>delicacies, and syrups</i>		
ST16	Gentile	2008	<i>The Italian cook book: The art of eating well; practical recipes of the Italian cuisine, pastries, sweets, frozen delicacies, and syrups</i>	Project Gutenberg	Tomato Sauce, paras. 1-5, 285-word excerpt
ST17	Hartley	2012	<i>The gentlemen's book of etiquette and manual of politeness: Being a complete guide for a gentleman's conduct in all his relations towards society</i>	Project Gutenberg	Chapter I, paras. 20-22, 212-word excerpt
ST18	Hartley	2012	<i>The gentlemen's book of etiquette and manual of politeness: Being a complete guide for a gentleman's conduct in all his relations towards society</i>	Project Gutenberg	Chapter I, paras. 23-28, 215-word excerpt

In the final stage, each participant's translations of two different source texts were saved in computerized written form and numbered according to the order of the participants. Then, these translations were analyzed by expert translator trainers according to *The MQM Core Typology* (2024), a translation error typology study by Multidimensional Quality Metrics (MQM), which provides a framework for translation quality assessment and conforms to the international standards ISO DIS 5060:2024 and ASTM WK46396. *The MQM Core Typology* (2024) consists of 7 main categories: Terminology, Accuracy, Linguistic Conventions, Style, Locale Conventions, Audience Appropriateness and Custom. The expert translator educators conducting the quality assessment of translation outputs were professors from the Department of English Translation and Interpreting. These experts did not know the identity of the volunteer participants in the study and were not familiar with the details of the implementation. Therefore, it is aimed to avoid any bias in the translation quality assessment process.

In addition, two questionnaires were conducted with the participants before and after the implementation. The questionnaires include 10 questions in total according to Likert scale (Likert, 1932) and 1 open-ended question. The questions are designed for pre- and post-implementation. In this way, it was examined whether the opinions of the participants changed with the implementation. The questions asked in the questionnaires are given below.

Pre-implementation questionnaire:

- I often get support from Artificial Intelligence (AI) when translating.
- I think getting support from AI while translating makes my work easier and reduces the time I spend.
- I think getting any help from AI makes my translation worse.
- I think it would be beneficial to get support from AI when analyzing the source text and deciding on my translation strategies before translating.
- For me, it would be useful when translating if the AI summarizes the source text before translation.
- A feature where the AI extracts the most important terms from the source text and gives their dictionary meanings would have provided me no benefit when translating.
- I think a translation brief feature, which is automatically generated by the AI based on the analysis of the source text, would be useful for me to practice translating on my own.
- I think getting support from AI before translating has a negative effect on my creativity and critical thinking.
- In my opinion, an automatic text type analysis feature generated by AI before translation would give me a bias in my translation.
- I think there should be more use of AI in translator education.
- What do you think about the use of AI in translation? (Open-ended response). Please write any thoughts, suggestions and comments below:

Post-implementation questionnaire:

- I often get support from Artificial Intelligence (AI) when translating.
- I think getting support from AI while translating makes my work easier and reduces the time I spend.
- I think getting any help from AI makes my translation worse.
- I think it is useful to get support from AI when analyzing the source text and deciding on my translation strategies before translating.
- For me, the AI summarization feature of the source text before translation is beneficial when translating.

- In my opinion, the feature of AI, which extracts the most important terms from the source text and gives their dictionary meanings, does not provide any benefit to me when translating.
- I find the translation brief feature, which is automatically generated by AI based on the analysis of the source text, helpful for practicing translation on my own.
- I think getting support from AI before translating has a negative effect on my creativity and critical thinking.
- For me, the automatic text type analysis feature generated by AI before translation causes bias in my translation.
- I think there should be more use of AI in translator education.
- What do you think about the use of AI in translation? (Open-ended response). Please write any thoughts, suggestions and comments below:

In answering these 10 questions, participants were asked to choose one of the Likert scale options: strongly disapprove, disapprove, undecided, approve and strongly approve so that the results are evaluated according to the Likert scale. In the last question, it was aimed to obtain the general opinions of the participants about AI in translation by taking an open-ended response.

5.2. Data Collection

The data and results used and analyzed in this study were collected through two different methods: computerized test implementation and pre- and post-questionnaires, to provide a broad analysis of the research data.

At the core of the data collection process was a computerized testing application with a group of 9 translation students who voluntarily participated in the study. These participants first underwent an introductory session in which they were introduced to the T9N101 model, its main features and functions, which was followed by a structured training session to familiarize them with the system and its use. After the training had been completed, participants took a computerized translation test. During this test, each participant was given two different English source texts on the computer. Participants were asked to translate these texts from English into Turkish. In the first translation task, participants had access to T9N101's AI-generated pre-translation assistance features. In second task, they performed the task without AI assistance. The translations produced by the participants were saved in the T9N101 storage system and later submitted for assessment by the expert translator trainers.

In addition to the computerized implementation, the second data collection method involved the administration of the pre- and post-implementation questionnaires to be administered to the same nine participants. The questionnaires had been designed to measure participants' perceptions and attitudes towards AI-assisted translation before and after interacting with the T9N101 model. The pre- and post-implementation questionnaires consisted of 10 Likert-scale questions and 1 open-ended question. The pre-implementation questionnaire had been designed and conducted to find out the participants' initial thoughts on the use of AI in the pre-translation process, and the post-implementation questionnaire had been designed and conducted to examine whether there were any changes in these thoughts after using the AI-based features of T9N101 in the pre-translation and translation processes. The design of the questionnaires aimed also to explore the perspectives of the participants on AI in translation in general, their evaluation of the T9N101 model, including its usability and effectiveness.

Upon the completion of the experiment, the responses from the questionnaires were statistically analyzed according to the Likert scale, allowing for a structured interpretation of the respondents' perspectives and the effects of AI in the translation processes, especially in the pre-translation process. Through these two data collection methods, the study aimed to provide insights into the practical implications of AI-assisted translation and its potential role in translator education.

5.3. Participants

The experiment was conducted with nine university students enrolled in a Translation and Interpreting program. Participation was entirely voluntary, but the selection process had been guided by specific criteria. Participants were currently enrolled in a Translation and Interpreting undergraduate program to ensure that they had basic knowledge and experience in translation practices and theories. Also, all the participants had successfully passed the *Translation-Oriented Text Analysis* course with a minimum grade of BB, which corresponds to a range of 71-76 out of 100. These courses are important as they equip students with basic skills in translation-oriented text analysis, translation strategies and theoretical approaches, which are crucial for analyzing the effects of the AI-assisted pre-translation process on translation quality.

5.4. Data Analysis

The data has been analyzed in two different ways after being collected with the test application in a computerized environment and questionnaires. Primarily, the data from the questionnaires was analyzed and interpreted according to the Likert scale. Since the data was obtained in two stages during the implementation of two questionnaires, before and after the application, it has been possible to make a comparison in the analysis in line with the aim to understand whether there was a change in the attitudes of the participants after the translation implementation phase.

On the other side, the data obtained from the participants in the translation implementation phase conducted in a computer environment was assessed by the expert translator educators. The translations made by the participants with AI-assistance in the pre-translation process and without any AI-assistance were analyzed and scored in 7 main categories in accordance with *The MQM Core Typology* (MQM, 2024): Terminology, Accuracy, Linguistic Conventions, Style, Locale Conventions, Audience Appropriateness and Custom (in particular, appropriateness to the given translation brief). Then, the overall translations were evaluated and scored. In addition, data was collected in separate categorical groups in three text types: informative texts, expressive texts and operative texts. Accordingly, since translations for each text type had been collected from three out of nine participants in its own group and there was a total of six translations, three with AI support and three without AI support, it has been possible to analyze the effects of AI use on translation quality according to the text type in the pre-translation process within informative, expressive and operative text types with the data obtained from these.

5.5. Pilot Study

A pilot study was conducted on 24 March 2025 with four Master's-level translation students. The aim of this preliminary study was to gather both general feedback on the T9N101 model and the overall design of the main study. As part of the pilot study, each student was asked to translate 2 texts: one using the T9N101 model in the pre-translation process (i. e. with the assistance of AI) and one without any AI assistance in the pre-translation process. The translation outputs were then discussed in a classroom setting, allowing for a comparative evaluation of the results.

Among the many insightful comments provided by the participants, one of the most critical observations concerned the format of the source text uploaded to the system. Participants noted that source texts in PDF format posed significant challenges in terms of display and accuracy. In some cases, words and sentences were either incorrectly transposed or omitted altogether during the upload process, which could jeopardize the reliability of the translation task. Based on this feedback, it was decided to limit the upload functionality to Microsoft Word document in .docx format for the final experimental design to ensure more stable and accurate input processing.

Furthermore, several usability improvements were made to the user interface of the T9N101 system based on constructive and detailed suggestions collected during the pilot study. These changes were aimed not only at improving the overall user experience but also at increasing the accessibility and functionality of the system for translation students. Specific changes included reorganization of certain interface elements to make navigation smoother, clearer instructions to guide users through each stage of the pre-translation process, and improved display of T9N101's features. By bringing the user interface closer to educational applications, the system now aims to provide a more supportive and efficient environment for users to engage with AI-assisted pre-translation analysis.

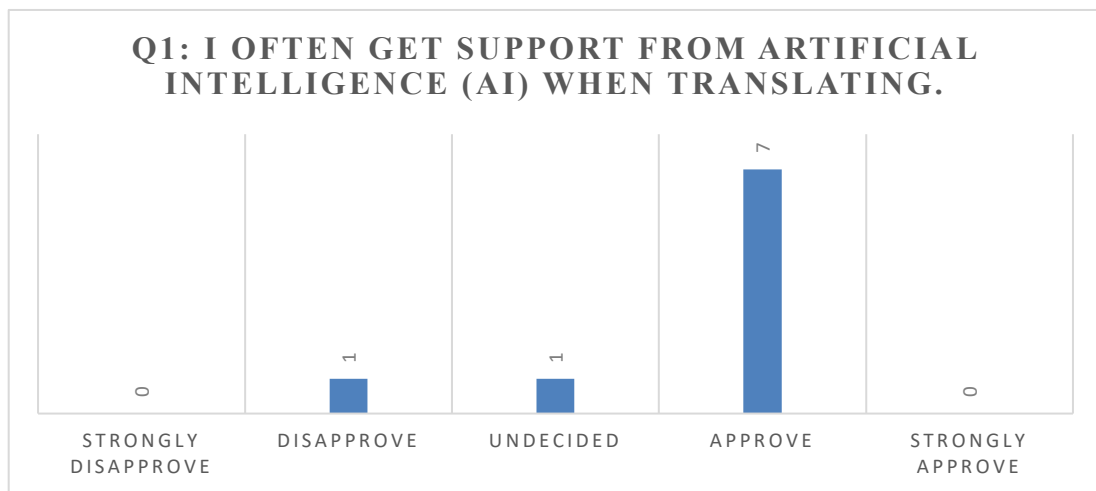
6. DISCUSSIONS OF THE RESULTS

In this chapter, the results of the experimental study and the pre-questionnaire and post-questionnaires are shared. The study aimed to analyze the effect of AI assistance in the pre-translation process on translation quality and to compare the translation outputs of three text types, i.e. informative, expressive and operative and to find out whether there were differences between these text types in this regard. The translation quality assessment of the outputs from nine translation students, one translation with the assistance of the T9N101 GenAI model in the pre-translation process and one translation without AI assistance, was carried out by three expert translator educators, who are professors in the Department of Translation and Interpreting. Firstly, the answers to the questionnaires before and after the experiment were analyzed and interpreted in what follows.

6.1. Pre-Questionnaire Results

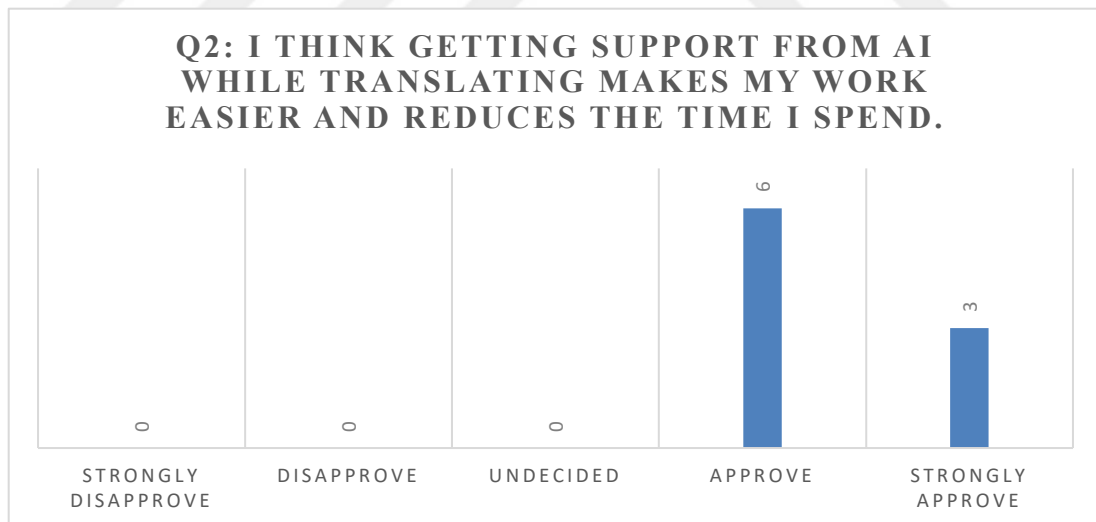
The pre-questionnaire implemented with nine volunteer participants of the experiment was conducted after the participants had been introduced to and trained on the T9N101 GenAI model, before the actual translation task. The aim of this questionnaire was to get the participants' preliminary opinions about the use and assistance of AI in translation, especially in the pre-translation process. Moreover, it also aimed to compare the data obtained from the questionnaire conducted after the completion of the experiment with the data obtained from pre-questionnaire to examine whether the use of the T9N101 model makes a difference in the participants' opinions. In this context, 10 Likert scale questions and 1 open-ended question were asked to the participants before the experiment and the responses of the participants are presented below.

Figure 6.14. The Answers to Question 1 in the Pre-Questionnaire



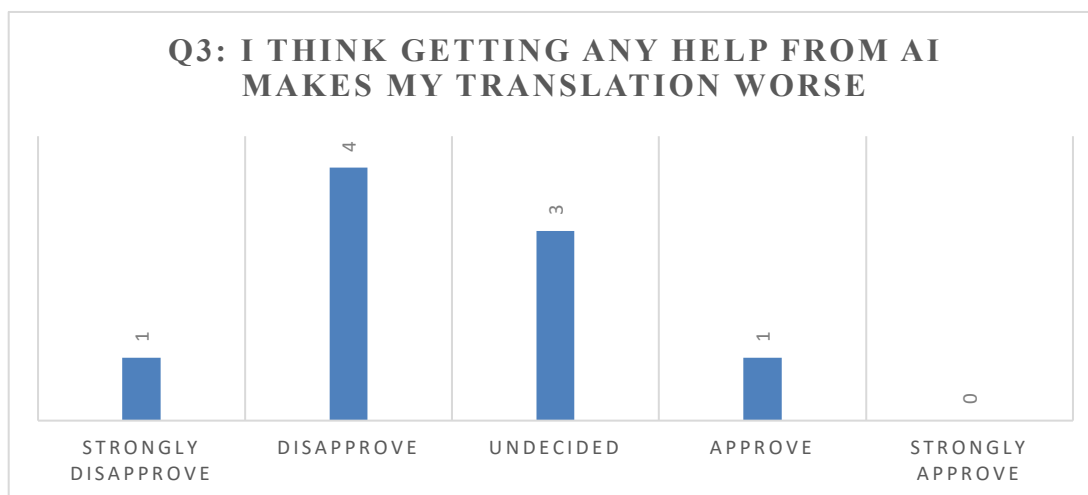
The first question in the pre-questionnaire aimed to find out how often the participants get support from AI while translating. Seven out of nine participants selected “approve”, indicating that most of the participants frequently get support from AI while translating. One participant selected “disapprove”, and another selected “undecided”, showing that most of the participants were already familiar with AI in translation.

Figure 6.15. The Answers to Question 2 in the Pre-Questionnaire



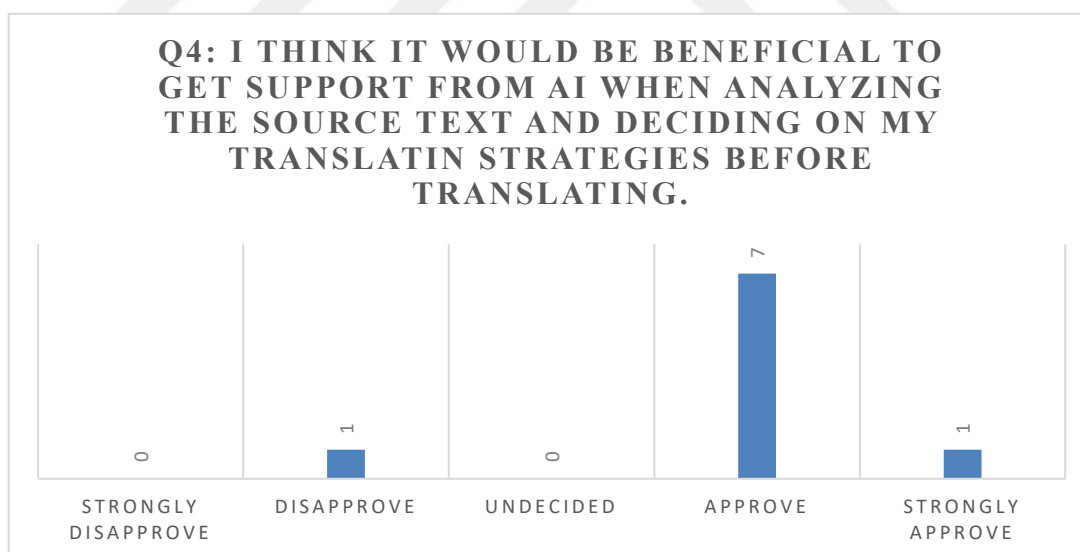
The responses to the second question are quite promising in line with the aim of this study and the insights it seeks to gain. All of the participants stated that getting help from AI while translating makes their work easier and reduces the time they spend. In this respect, the responses show that the participants had positive opinions in this direction.

Figure 6.16. The Answers to Question 3 in the Pre-Questionnaire



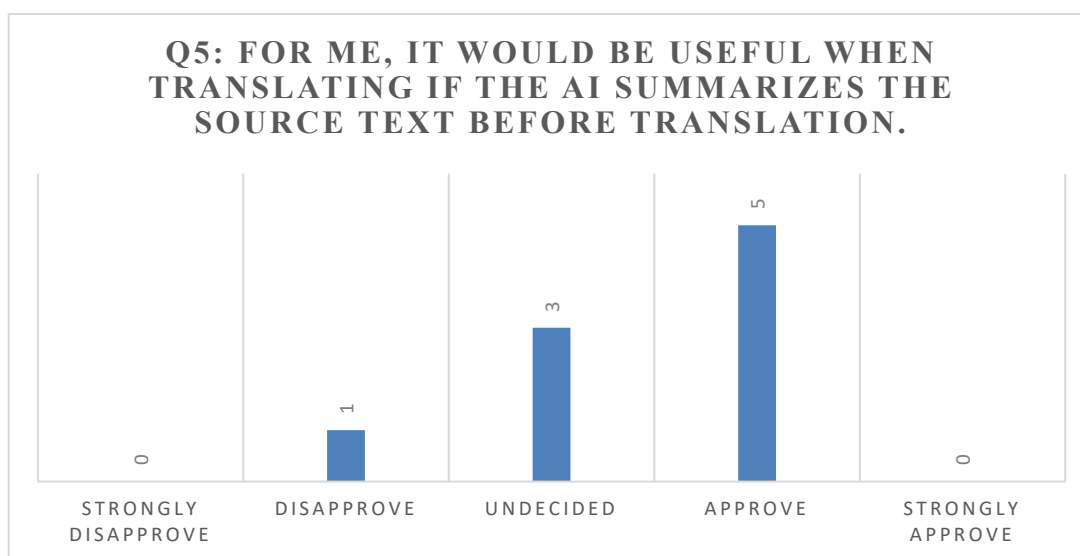
The third question was designed to find out the participants' opinions on the the negative effects of the use of AI on translation quality. The majority of the participants responded that the use of AI does not have a negative impact on their translations' quality. However, one participant stated that it can have a negative effect by selecting "approve" and three participants selected "undecided".

Figure 6.17. The Answers to Question 4 in the Pre-Questionnaire



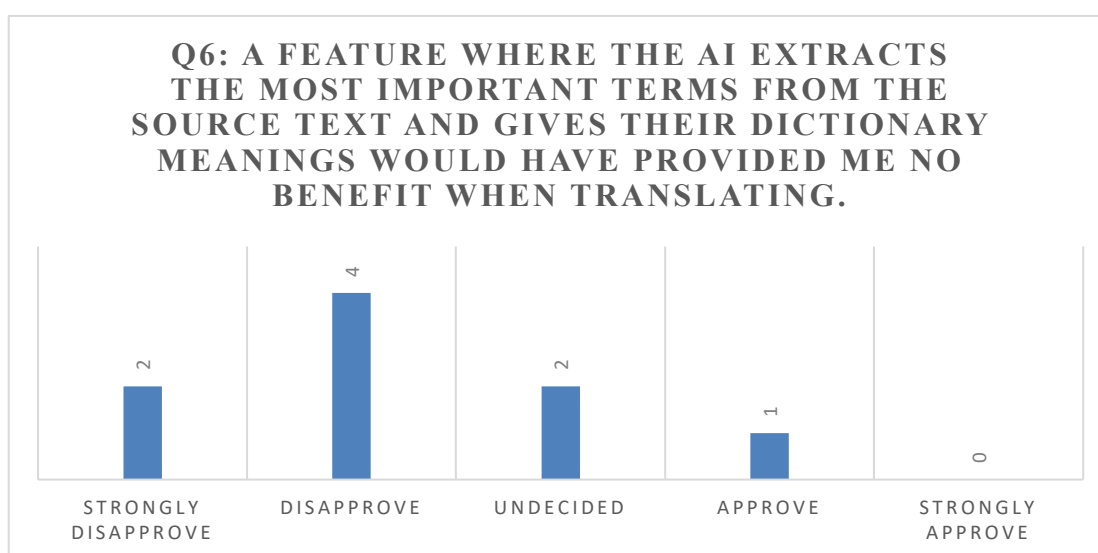
The fourth question focuses on AI assistance in the pre-translation process, which concerns the main focus of the present study. Eigh out of nine participants responded that getting help from AI in the pre-translation process was useful in the tasks of source text analysis and determining translation strategies. However, one participant stated that receiving support from AI in the pre-translation process would not be beneficial for these tasks.

Figure 6.18. The Answers to Question 5 in the Pre-Questionnaire



The fifth question, similar to the fourth question, also focuses on AI assistance in the pre-translation process, but aims to elicit participants' views on another important task in the pre-translation process: source text summarization. In this regard, half of the participants consider that it would be useful for AI to summarize the source text in the pre-translation process. In contrast to the results concerning the fourth question, there are more participants who selected "undecided" in the fifth question and one participant thinks that AI summarizing the source text would not be useful.

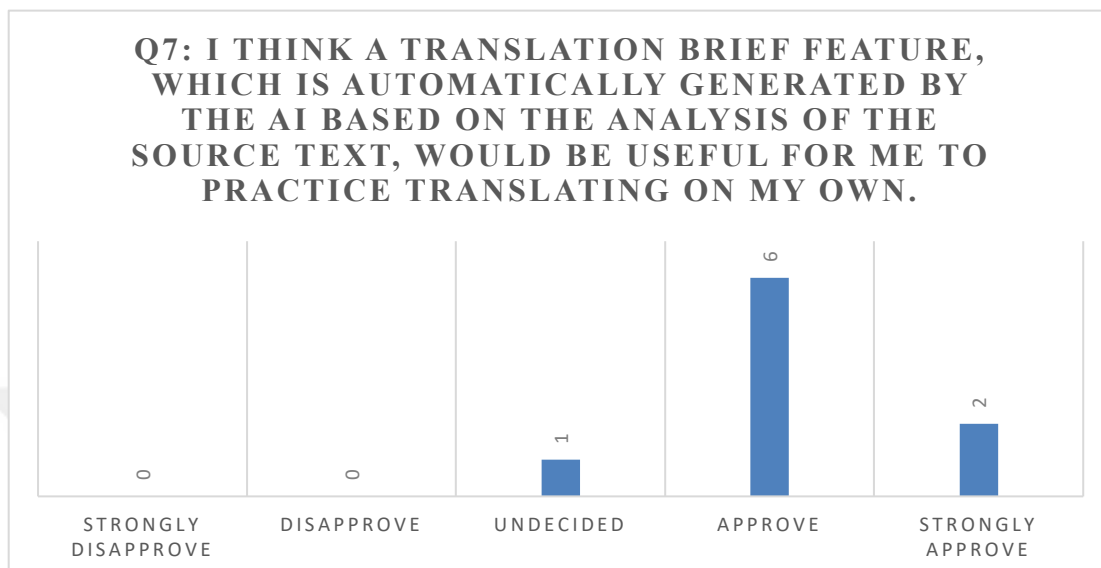
Figure 6.19. The Answers to Question 6 in the Pre-Questionnaire



The sixth question seeks to obtain the opinions of the participants about AI support in terminology extraction and management, which is yet another important task in the pre-translation process. Moreover, the support for the terminology extraction is one of

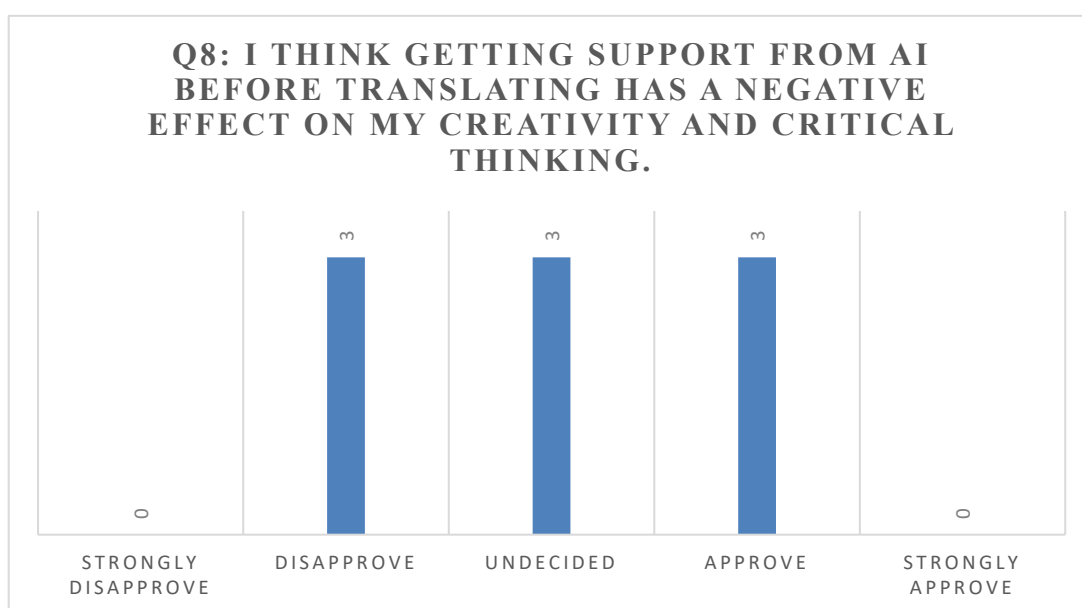
the most important features of the T9N101 GenAI model. As a result of the responses given to the sixth question, most of the participants consider that AI assistance could be useful in this task in the pre-translation process.

Figure 6.20. The Answers to Question 7 in the Pre-Questionnaire



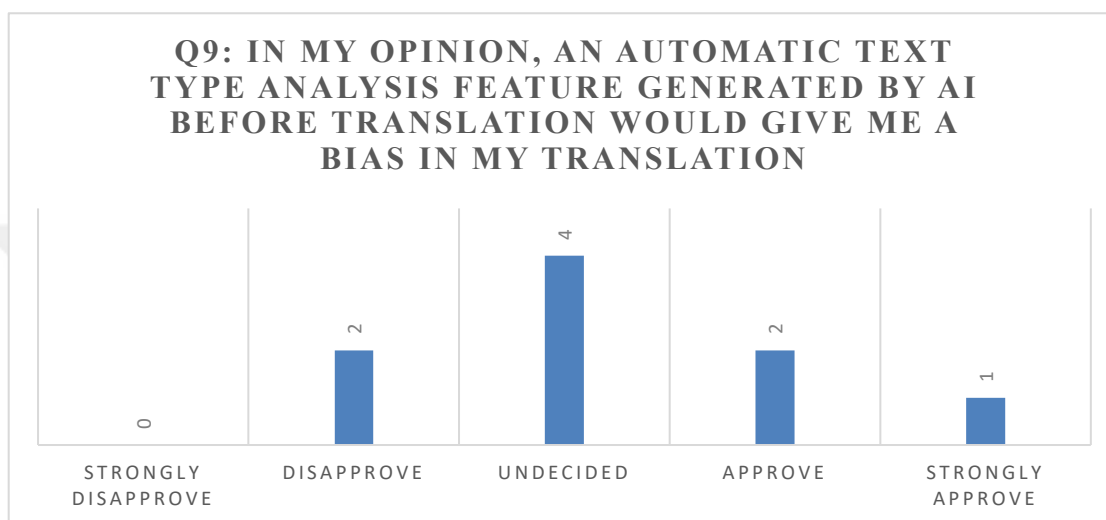
Next question aims to receive the participants' views on one of the most significant features of the T9N101 model, which is the translation brief feature that is automatically generated according to the source text analysis. Eight of the participants stated that such an AI-assisted feature would be useful in the pre-translation process, while one participant selected "undecided".

Figure 6.21. The Answers to Question 8 in the Pre-Questionnaire



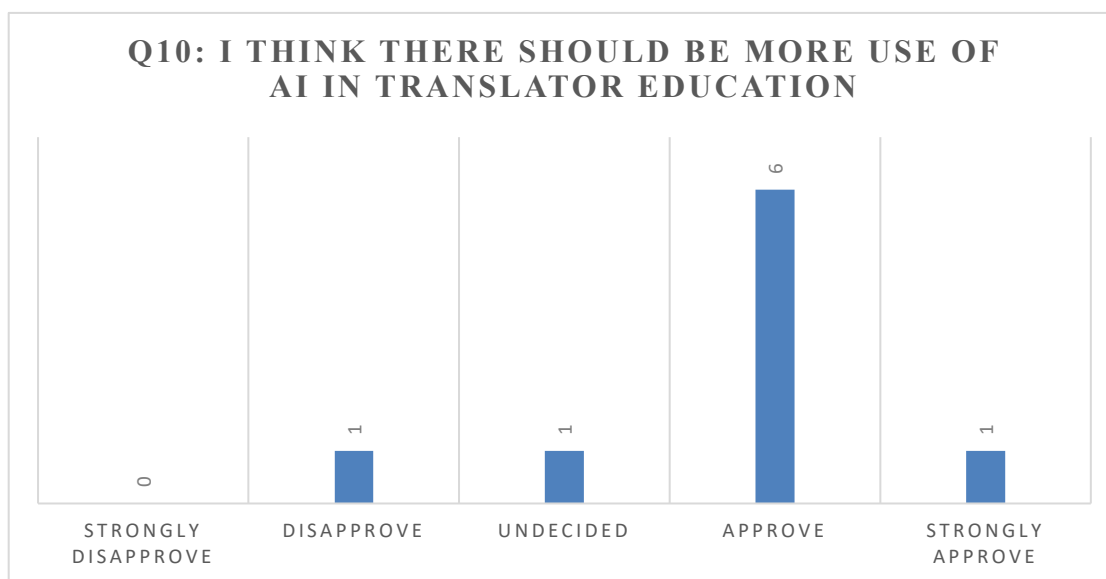
Eighth question especially focuses on getting participants' views on one of the biggest criticisms regarding AI assistance in the pre-translation process: that it can negatively affect the translator's creativity and critical thinking skills. The answers given by the participants to this question are quite mixed but balanced. Three participants responded negatively, three participants responded positively and three participants selected "undecided".

Figure 6.22. The Answers to Question 9 in the Pre-Questionnaire



The ninth question aimed to gather the opinions of the participants about the assistance of AI in source text type analysis, which is another significant task in the pre-translation process. Most of the participants selected "undecided" and "disapprove" on this issue.

Figure 6.23. The Answers to Question 10 in the Pre-Questionnaire



In the tenth question, the participants were asked about their opinions on the use of AI in translator education. Seven of the participants consider that there should be more AI integration in translator education. On the other hand, one participant selected “disapprove” on this perspective and one participant selected “undecided”.

The last question was an open-ended question asking for the participants’ general opinions, suggestions and comments on the use of AI in translation. Participants’ responses to this question can be categorized into two categories: the comments that were positive but included the view that AI has a negative effect on creativity, and the comments that illustrate a positive perspective of AI use in translation tasks. Example of the comments that include a negative view in terms of creativity are as follows: “It is useful but it also can reduce creativity of translators and AI cannot translate a literary work”, “I think getting support from AI can be beneficial for translators but it is not enough in terms of creativity”, “it might be useful but it is not necessary”, “I think we should consider using AI in translation, however it may also affect one’s creativity and make them depended on using it.”

From these answers in the first category, it is understood that the participants consider that it can be useful for translators and/or translation students to get help from AI in translation practice but being completely dependent on it can affect their creativity in a negative way.

On the other hand, the responses of the participants who were positive about the use of AI in translation were as follows: “For me, it would be useful if AI can be used as supporter of translator in terms of post-editing”, “I believe AI is needed for translators in order to reduce the time. I personally prefer an analysis of the source text that is made by AI rather than using complete machine translation”, “it can be very useful for making more accurate and easier translations”, “AI technology contributes a lot to translation; these are speed, quality and variety, so the use of AI should increase”, “AI reduces the time for translators so much”. These statements show that the participants whose responses can be categorized in the second category have completely positive opinions about the use of AI in translation.

6.2. Translation Quality Assessment Results

In the translation implementation phase of the experiment, a total of 18 translation outputs obtained from nine volunteer participants were subjected to translation quality assessment by three expert translator educators within the framework of *The MQM Error Typology* (MQM, 2024). In order to avoid any bias in the translation quality assessments, the expert translator educators did not know who the volunteer participants (translators) were and assessed only the translation outputs without knowing which translation output was produced with the assistance of the T9N101 GenAI model in the pre-translation process. In these assessments, the expert translator educators identified translation errors according to *The MQM Core* (MQM, 2024) and indicated the type, category, sub-category, and severity level of the error. Accordingly, the data obtained from the translation outputs of the volunteer participants and the translation quality assessments of the expert translator educators were scored according to the formulas published by the MQM (2024) and the Error Type Penalty Total (ETPT), Absolute Penalty Total (APT), Per-Word Penalty Total (PWPT), Overall Normed Penalty Total (ONPT), Overall Quality Score (OQS) and Overall Quality Fraction (OQF) results were calculated for each translation output.

In calculating the relevant results, Error Type Weights (ET Weights) were set to 1.0, Penalty Scaler (PS) to 1.0 and Max Score Value (MSV) to 100.00. Meanwhile, the multipliers of the error severity levels are 0 for Neutral, 1 for Minor, 5 for Major and 25 for Critical. Besides, the formula for each calculated result is as follows:

Figure 6.24. Error Type Penalty Total (ETPT) Formula

$$(Neutral \times 0) + (Minor \times 1) + (Major \times 5) + (Critical \times 25) \times 1.0 = ETPT$$

Figure 6.25. Absolute Penalty Total (APT) Formula

$$ETPT_1 + ETPT_2 + ETPT_3 + \dots + ETPT_n = APT$$

Figure 6.26. Per-Word Penalty Total (PWPT) Formula

$$\frac{APT}{Evaluation\ Word\ Count\ (EWC)} = PWPT$$

Figure 6.27. Overall Normed Penalty Total (ONPT) Formula

$$PWPT \times (Reference\ Word\ Count \times 1.00) = ONPT$$

Figure 6.28. Overall Quality Score (OQS) Formula

$$(1 - (PWPT \times 1.00)) \times 100.00 = OQS$$

Figure 6.29. Overall Quality Fraction (OQF) Formula

$$1 - \left(\frac{APT}{EWC} \right) = OQF$$

The data derived from the translation outputs and their quality assessments were calculated with the relevant formulas and the results are as follows:

The first translation by the first volunteer participant (P1), i.e. the translation of ST1, was assisted by the T9N101 GenAI model in the pre-translation process and the first expert translator educator (EXP1) performed the quality assessment of this translation.

Table 6.7. Translation Quality Assessment Report of ST1's Translation

#	Category	Subcategory	Severity	Segment	Explanation
1	Accuracy	Mistranslation	Minor	1	Instead of “İnsan - Yapay Zeka İlişkisinin Yolculuğu” it should be translated as “İnsan - Yapay Zeka İlişkisine Giden Yol”.
2	Locale conventions	Date Format	Minor	2	There should be no comma.
3	Accuracy	Mistranslation	Neutral	3	“yapımından” should be replaced by “yaratılarından”; “yaratıcılığın ve yazarlığın geleceği” should be replaced by “yaratıcılığın geleceği ve yazarlığın tanımı”.
4	Accuracy	Addition	Minor	4	“ve belli ki”
5	Accuracy	Mistranslation	Neutral	5	It is not ‘sürtünme’, it should be translated as ‘sürtüşme’; ‘öngörülen’ should be translated as ‘algılanan’.
6	Linguistic Conventions	Grammar	Major	6	“yapay zeka modellerin Sonuçlarıyla Mücadele etmektedir”: it distorts the meaning. The real meaning of the passage is: “yapay zeka modellerinin yol açtığı (kötü)

					durumlarla uğraşmaktadır.”.
7	Accuracy	Mistranslation	Neutral	7	It should not be translated as “önemli”, it should be “temel”.
8	Style	Awkward style	Neutral	9	The structure and style of the sentence is poorly constructed.
9	Style	Unidiomatic style	Neutral	10	The sentence makes it very obvious that it is a translation.

As a result of EXP1’s translation quality assessment report, a total of nine translation errors were identified in the translation of ST1. The severity level of five of these errors was neutral, three were minor, and one was major, whereas no errors were detected at critical severity level. Accordingly, ST1’s the MQM scores for ST1’s translation are as follows:

Table 6.8. MQM Scoring of ST1’s Translation

Reference Word Count (RWC):	288
Evaluation Word Count (EWC):	244
Absolute Penalty Total (APT):	8.00
Per-Word Penalty Total (PWPT):	0.0328
Overall Normed Penalty Total (ONPT):	9.44
Overall Quality Fraction (OQF):	0.97
Overall Quality Score (OQS):	96.72

The second translation of P1, i.e. translation of ST2, did not receive any AI assistance and was again assessed by EXP1.

Table 6.9. Translation Quality Assessment Report of ST2’s Translation

#	Category	Subcategory	Severity	Segment	Explanation
1	Linguistic conventions	Grammar	Critical	1	The translation is generally incomprehensible.
2	Linguistic conventions	Textual conventions	Critical	1	The translation is generally incomprehensible.
3	Linguistic conventions	Unintelligible	Critical	1	The translation is generally incomprehensible.

4	Linguistic conventions	Grammar	Minor	2	Instead of “yaklaşım üzerinde bir geçiş” it could be “yaklaşımına doğru bir kayma”
5	Linguistic conventions	Grammar	Critical	3	The translation is generally incomprehensible.
6	Linguistic conventions	Textual conventions	Critical	3	The translation is generally incomprehensible.
7	Linguistic conventions	Unintelligible	Critical	3	The translation is generally incomprehensible.
8	Style	Unidiomatic style	Minor	4	Instead of “keşfettirecektir” it could be “araştıracaktır”.
9	Accuracy	Mistranslation	Major	7	“savunuculuk” is replaced by “tarafarlık”.
10	Accuracy	Omission	Major	7	The expression “democratize etmek” is omitted.
11	Style	Inconsistent style	Neutral	1-8	The present tense conjugations are inconsistent regardless of the source text.

EXP1 identified a total of eleven translation errors in the translation quality assessment of ST2’s translation. Of these translation errors, six are at critical severity level, two are at major severity level, two are at minor severity level and one is at neutral severity level. Accordingly, the scores for the translation of ST2 are as follows:

Table 6.10. MQM Scoring of ST2’s Translation

Reference Word Count (RWC):	180
Evaluation Word Count (EWC):	160
Absolute Penalty Total (APT):	162.00
Per-Word Penalty Total (PWPT):	1.0125
Overall Normed Penalty Total (ONPT):	182.25
Overall Quality Fraction (OQF):	-0.01
Overall Quality Score (OQS):	-1.25

Another informative text, ST3, was translated by P2. No AI assistance was received in the pre-translation process. The quality assessment of the translation was also performed by EXP1.

Table 6.11. Translation Quality Assessment Report of ST3's Translation

#	Category	Subcategory	Severity	Segment	Explanation
1	Linguistic conventions	Grammar	Critical	1	It is an incomprehensible translation, especially due to translation choices in some words.
2	Linguistic conventions	Textual conventions	Critical	1	It is an incomprehensible translation.
3	Linguistic conventions	Unintelligible	Critical	1	It is an incomprehensible translation.
4	Accuracy	Mistranslation	Critical	2	Ad verbum translation with machine translation effect.
5	Accuracy	Mistranslation	Critical	3	Ad verbum translation with machine translation effect.
6	Linguistic conventions	Grammar	Critical	3	Ad verbum translation-induced bad syntax.
7	Linguistic conventions	Textual conventions	Critical	3	Ad verbum translation-induced bad syntax.
8	Linguistic conventions	Grammar	Critical	4, 5, 6	Translations resulting in incorrect meaning. For example, “kağıt” is used instead of “makale”.
9	Linguistic conventions	Textual conventions	Critical	4, 5, 6	Translations resulting in incorrect meaning.
10	Terminology	Wrong term	Major	1, 2, 7, 8	e.g. “recruitment” instead of “işe alım” and “katılımcı toplama”
11	Terminology	Inconsistent use of terminology	Major	1, 2, 7, 8	e.g. “recruitment” instead of “işe alım” and “katılımcı toplama”
12	Accuracy	Mistranslation	Critical	8	Ad verbum translation with machine translation effect.

EXP1 identified a total of twelve translation errors in ST3's translation quality assessment report. While ten of these errors are at critical level, two of them are at major level. The scores of ST3's translation are given below.

Table 6.12. MQM Scoring of ST3's Translation

Reference Word Count (RWC):	168
Evaluation Word Count (EWC):	151
Absolute Penalty Total (APT):	260.00
Per-Word Penalty Total (PWPT):	1.7219
Overall Normed Penalty Total (ONPT):	289.27
Overall Quality Fraction (OQF):	-0.72
Overall Quality Score (OQS):	-72.19

ST4 was also translated into Turkish by P2, however, this time the T9N101 GenAI model's features was used in the pre-translation process. ST4's translation quality assessment was conducted by again EXP1. The results of the assessment can be found below.

Table 6.13. Translation Quality Assessment Report of ST4's Translation

#	Category	Subcategory	Severity	Segment	Explanation
1	Linguistic conventions	Grammar	Minor	2	Grammatical error that can be corrected with the equivalent of "aynı zamanda" after the comma.
2	Linguistic conventions	Unintelligible	Minor	2	Same as error one.
3	Accuracy		Minor	2	"türdeş" instead of "aynı cinsten".
4	Linguistic conventions	Grammar	Minor	3	The phrase "oluşturmayı" should follow the subordinate clause.
5	Linguistic conventions	Punctuation	Minor	4	"trafik/faaliyet" instead of "trafik faaliyeti.
6	Linguistic conventions	Grammar	Minor	5	"görebileceklerdir" instead of "görecektir".
7	Terminology	Wrong term	Major	6	"ücretlendirmenin" instead of

					“telafilendirmenin”; “zorlukların” instead of “karmaşanın”.
--	--	--	--	--	---

Accordingly, a total of seven translation errors were identified: one at major level and six at minor level. The MQM scores of ST4’s translation are as follows:

Table 6.14. MQM Scoring of ST4’s Translation

Reference Word Count (RWC):	158
Evaluation Word Count (EWC):	138
Absolute Penalty Total (APT):	11.00
Per-Word Penalty Total (PWPT):	0.0797
Overall Normed Penalty Total (ONPT):	12.59
Overall Quality Fraction (OQF):	0.92
Overall Quality Score (OQS):	92.03

The last translations in the informative text type were made by P3. In the first translation, i.e. the translation of ST5, P3 was assisted by the T9N101 model in the pre-translation process. The quality assessment of this translation was again conducted by EXP1 and the report is as follows:

Table 6.15. Translation Quality Assessment Report of ST5’s Translation

#	Category	Subcategory	Severity	Segment	Explanation
1	Accuracy	Mistranslation	Critical	1	Accurate translation is “Makine Tercümesi, tercüme midir?”
2	Accuracy	Mistranslation	Major	3	For example, “araştırmacıları” or “akademisyenleri” instead of “bilginleri”; “genişletmek” instead of “yaymak”.
3	Accuracy	Addition	Minor	6	“Takviyesi” is addition.
4	Accuracy	Undertranslation	Major	7	“bir kavramsal kategori olarak çevirinin parçası olmanın daha da merkezine kayacaktır” instead of “üyelik açısından daha merkezi görünecektir”.
5	Accuracy	Omission	Major	7	Same as error seven.

According to EXP1's report, there are five translation errors in the translation of ST5 by P3, one of which is at critical level, three at major level and one at minor level. The scores for the translation of ST5 can be seen below.

Table 6.16. MQM Scoring of ST5's Translation

Reference Word Count (RWC):	127
Evaluation Word Count (EWC):	162
Absolute Penalty Total (APT):	41.00
Per-Word Penalty Total (PWPT):	0.3228
Overall Normed Penalty Total (ONPT):	52.30
Overall Quality Fraction (OQF):	0.68
Overall Quality Score (OQS):	67.72

The translation quality assessment results of the final translation of the informative text type, which was also performed by P3 but this time without any assistance of AI in the pre-translation process, performed by EXP1 are as follows:

Table 6.17. Translation Quality Assessment Report of ST6's Translation

#	Category	Subcategory	Severity	Segment	Explanation
1	Linguistic Conventions	Spelling	Neutral	1	"başarılı" instead of "başaralı".
2	Accuracy	Omission	Critical	3	"among which language is the most thoroughly studied and understood" is omitted.
3	Linguistic Conventions	Unintelligible	Major	3	"çeviri ile çeviri arasındaki ve içindeki" is unintelligible.
4	Linguistic Conventions	Spelling	Neutral	6	"sorunlar" instead of "sorununlar".
5	Accuracy	Untranslated	Critical	7	Untranslated segment.

The translation errors detected in the translation of ST6 are five in total. Of these errors, two are at critical level, one at major level and two at neutral level. The MQM scores are given below:

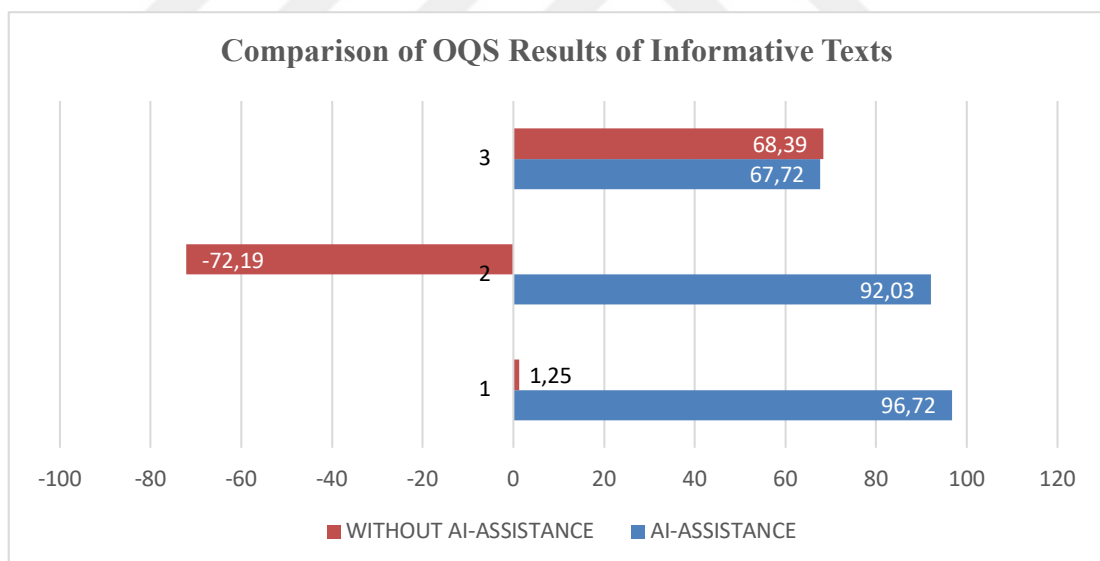
Table 6.18. MQM Scoring of ST6's Translation

Reference Word Count (RWC):	209
Evaluation Word Count (EWC):	174

Absolute Penalty Total (APT):	55.00
Per-Word Penalty Total (PWPT):	0.3161
Overall Normed Penalty Total (ONPT):	66.06
Overall Quality Fraction (OQF):	0.68
Overall Quality Score (OQS):	68.39

In this way, considering the translation quality assessment reports by EXP1 and MQM scores for six translation outputs in total, three with the assistance of the T9N101 GenAI model in the pre-translation process and three without any AI assistance in the pre-translation process, it can be concluded that AI assistance in the pre-translation process had a positive effect on translation quality for informative texts. A comparison of the OQS of the translations of informative texts with and without AI assistance reveals the following result:

Figure 6.30. Overall Quality Score (OQS) Comparison of Translations of Informative Texts with and without AI Assistance in the Pre-Translation Process



When the OQSs were averaged, it was observed that the results of the translation outputs assisted by the T9N101 GenAI model in the pre-translation process was 85.49, while the result of the translation outputs without any AI assistance was -0.85. In addition, in the translations of two out three participants, the effect of AI assistance on translation quality can be clearly seen in the results obtained, while only P3's translation without AI assistance achieved better results by a very small margin.

In the second category, six translations were produced in the expressive text type. These translations were performed by P4, P5 and P6, while EXP2 conducted the translation quality assessments. The results of the assessments of the translation outputs in the expressive text type are as follows:

Table 6.19. Translation Quality Assessment Report of ST7's Translation

#	Category	Subcategory	Severity	Segment	Explanation
1	Accuracy	Mistranslation	Major	1	“Eh” fails to capture the tone of “Well!”; lacks the nuance of self-encouragement and reflection. Should be “Pekâlâ!” or similar.
2	Accuracy	Mistranslation	Major	1	Logical reversal: “I shall think nothing of tumbling down stairs” is mistranslated as “başka bir şey düşünmeyeceğim,” implying obsession rather than indifference. Should be “Böylesine bir düşüşten sonra, merdivenlerden yuvarlanmayı hiç önemsemem!”
3	Accuracy		Minor	1	Use of “takla ata ata” is too literal and disrupts the whimsical yet composed tone. Better phrased as “merdivenlerden yuvarlanmayı...”.
4	Accuracy		Minor	2	“Aman! Evde beni ne cesur ilan ederler.” sounds outdated and unnatural; a more fluent version would be “Ne kadar cesur olduğumu düşünürler!”
5	Linguistic conventions	Grammar	Minor	4	“Kaç kilometrelerce” is

					redundant. “Kilometrelerce” is sufficient.
6	Terminology	Wrong Term	Critical	8	“Eylem” is used instead of “enlem” for “latitude.” This is a critical terminology error.
7	Accuracy	Omission	Major	7	The clause “as there was no one to listen to her, still it was good practice to say it over” is omitted entirely, removing philosophical reflection.
8	Accuracy		Minor	9	“İhtişamlı” does not match “grand words”; a more accurate option is “kulağa hoş ve önemli gelen.”

In the translation quality assessment of the translation of ST7, which was translated by P4 with the assistance of the T9N101 GenAI model in the pre-translation process, EXP2 found a total of eight translation errors. Of these errors, one was at critical level, three were at major level and four were at minor level. Based on this, the MQM scores for the translation of ST7 are as follows:

Table 6.20. MQM Scoring of ST7’s Translation

Reference Word Count (RWC):	183
Evaluation Word Count (EWC):	138
Absolute Penalty Total (APT):	44.00
Per-Word Penalty Total (PWPT):	0.3188
Overall Normed Penalty Total (ONPT):	58.35
Overall Quality Fraction (OQF):	0.68
Overall Quality Score (OQS):	68.12

The second translation by P4 was carried out without any AI assistance and translation quality assessment report is presented below.

Table 6.21. Translation Quality Assessment Report of ST8’s Translation

#	Category	Subcategory	Severity	Segment	Explanation
1	Accuracy	Mistranslation	Major	2	“Antipathies” is a deliberate malapropism for “Antipodes.” Rendering it literally as “Antipatiler” loses the humor and Carroll’s linguistic play.
2	Accuracy	Mistranslation	Major	2	The phrase “fall right through the earth” suggests falling completely through the planet and emerging on the other side (a humorous exaggeration). The Turkish translation “tam dünyaya düşebilir miyim” fails to convey this. It translates as “Can I fall onto the earth?” rather than through it. The crucial nuance of total passage is lost, eliminating the fantastical element of the fall. A correct rendering should include the sense of “delip geçmek or tam öbür tarafından çıkmak, preserving the absurdity of the situation.
3	Accuracy	Mistranslation	Major	2	“To come out among the people that walk with their heads downward” refers humorously to the people living on

					the opposite side of the Earth (in the Antipodes), who, from Alice’s perspective, would appear to be upside down. The translation “insanların aşağı doğru düşen kafalarını görmek” literally means “to see the people’s heads falling downward”, which is not only illogical but visually absurd in the wrong way. It fails to express the whimsical imagination of gravity being reversed or of people living “upside down” on the other side of the world. A more accurate and playful rendering would convey this idea of inverted orientation, such as “başları aşağıya dönük yürüyen insanlarla karşılaşmak” or “baş aşağı yürüyen insanların arasına çıkmak.”
4	Accuracy	Omission	Major	8	“There was nothing else to do” is mistranslated. “Keza, aşağı düşmekten başka yapabileceği başka bir şey yoktu” is unnecessarily

					explanatory and clumsy
5	Style	Language register	Minor	5	“Bakar mısınız efendim” is overly formal and does not match Alice’s innocent, childlike tone. A more natural phrasing like “Affedersiniz hanımefendi” or “Burası Yeni Zelanda mı, Avustralya mı acaba?” would better fit the whimsical and polite curiosity of a child.
5	Accuracy	Mistranslation	Major	5	“Havalı havalı konuşurken” mistranslates the playful and imaginative “fancy curtsying as you’re falling through the air!” This is not about speaking “fancily” but about imagining the absurd act of curtsying while falling. The original wonder and humor are entirely lost, replaced with an unrelated colloquialism.
6	Accuracy	Omission	Major	5	The direct question “Do you think you could manage it?” is rendered as “peki ya sen havadan düşerken bunu yapabilir misin?”, but this makes it sound like a direct

					challenge rather than a rhetorical, playful musing. The tone is too literal and lacks the speculative, humorous feel of the original.
7	Linguistic conventions	Grammar	Minor	10	“Umarım beni çay vaktindeki gibi hatırlarlar” mistranslates the subject; “beni” is incorrect. It should refer to Dinah’s saucer, not Alice herself.
8	Terminology	Wrong Term	Major	13	“Hiç sana göre fare yok” is too colloquial and unrefined for a literary translation.
9	Accuracy	Omission	Major	16	The final clause “it didn’t much matter which way she put it” is completely lost, removing the philosophical humor.
10	Style	Language Register	Minor	7	“Hayatta soramam” is too strong and definitive; the original is a soft, hesitant reflection.
11	Audience appropriateness	Culture-specific reference	Minor	5	“Bakar mısınız efendim” feels excessively formal and doesn’t match Alice’s playful tone.
12	Accuracy	Mistranslation	Critical	14	“Kediler yarasa yer mi orasını bilemem tabii” shifts the tone from speculative to dismissive, losing the

					original's dreamy and playful pondering
--	--	--	--	--	---

EXP2 identified a total of twelve translation errors in the translation of ST8. While one of these errors is at critical level, eight of them are at major level and three of them are at minor level. The scores for the translation of ST8 calculated accordingly are as follows:

Table 6.22. MQM Scoring of ST8's Translation

Reference Word Count (RWC):	200
Evaluation Word Count (EWC):	259
Absolute Penalty Total (APT):	69.00
Per-Word Penalty Total (PWPT):	0.3450
Overall Normed Penalty Total (ONPT):	89.36
Overall Quality Fraction (OQF):	00.66
Overall Quality Score (OQS):	65.50

ST9 was translated by P5 without the assistance of AI and assessed by EXP2. The translation quality assessment report for the translation of ST9 is given below.

Table 6.23. Translation Quality Assessment Report of ST9's Translation

#	Category	Subcategory	Severity	Segment	Explanation
1	Accuracy	Omission	Minor	2	The source text's title "The Period" was not translated into Turkish, resulting in the loss of a key structural element.
2	Accuracy	Omission	Major	3	The iconic repetitive rhythm of "it was..." is not reflected in the Turkish version. The absence of "hem... hem..." constructions weakens the rhetorical structure.
3	Accuracy	Mistranslation	Major	3	"Şüphcilik" inaccurately

					translates “incredulity.” The correct term is “inkâr” or “inanmamazlık.” This alters the philosophical tone.
4	Accuracy	Mistranslation	Major	3	The segment “Cennete gidiyorduk ya da tam tersi yönde ilerliyorduk” misses the dramatic polarity. A better rendering is “Hepimiz ya doğrudan cennete gidiyorduk ya da doğrudan cehenneme.”
5	Accuracy	Mistranslation	Major	4	“Tanrı için, şeytan için üstünlük ancak kıyastadır” is meaningless in Turkish and doesn’t capture “superlative degree of comparison only.” This reflects a critical misunderstanding.
6	Accuracy	Mistranslation	Major	4	The phrase “gürültülü otoriteler” is a literal translation of “noisiest authorities” but doesn’t convey the intended meaning in Turkish. A more appropriate translation would be “en gürültücü otoriteler” or “en çok ses çıkaran otoriteler,” which better captures the idea of prominent or outspoken figures.
7	Accuracy	Mistranslation	Major	4	The sentence “onu geri almak da ısrar ediyorlar” is unclear and doesn’t

					accurately reflect the original meaning. The original suggests that some authorities insisted on interpreting the period in extreme terms, either positively or negatively. A clearer translation might be “onu yalnızca olumlu ya da olumsuz en üstün derecede değerlendirmekte ısrar ediyorlardı.”
8	Accuracy	Addition	Major	4	The sentence “Tanrı için, şeytan için üstünlük ancak kıyastadır” is confusing and doesn’t correspond to any part of the original text. It seems to be an erroneous addition and should be omitted.
9	Linguistic conventions	Grammar	Minor	4	Incorrect comma usage after “benziyordu,” leading to a disjointed sentence. Proper punctuation is essential for clarity and flow in Turkish.
10	Accuracy	Mistranslation	Major	5	The phrase “queen with a plain face” is translated as “sade yüzlü bir kraliçe,” which conveys simplicity rather than lack of beauty. A more accurate translation would be “ifadesiz yüzlü” or “sıradan yüzlü.”

11	Linguistic conventions	Grammar	Minor	5	The sentence structure is cumbersome due to the repetition of “ve” and the use of “varmış” twice. This affects the readability and flow of the sentence.
11	Audience appropriateness	Culture-specific reference	Minor	6	“Ekmek ve balıktan oluşan devlet hazinesi” is a literal but contextually incorrect rendering of the biblical allusion “State preserves of loaves and fishes.” This refers to political privilege and corruption, not actual treasury.
12	Accuracy	Omission	Major	6	The nuance of “clearer than crystal” is reduced to “kristalden daha berrak olacağına inanıyorlar.” The certainty conveyed in the original is weakened. This reflects a critical misunderstanding.

According to the report by EXP2, there are twelve translation errors in the translation of ST9. Of these errors, nine were identified to be at major level and three at minor level. The MQM scores for the translation of ST9 according to these errors and their severity levels are as follows:

Table 6.24. MQM Scoring of ST9’s Translation

Reference Word Count (RWC):	190
Evaluation Word Count (EWC):	109
Absolute Penalty Total (APT):	49.00
Per-Word Penalty Total (PWPT):	0.4495

Overall Normed Penalty Total (ONPT):	85.41
Overall Quality Fraction (OQF):	0.55
Overall Quality Score (OQS):	55.05

Other translation by P5 was produced by using the T9N101 model in the pre-translation process, i.e., with AI assistance. P5’s translation of ST10 was also assessed by EXP2.

Table 6.25. Translation Quality Assessment Report of ST10’s Translation

#	Category	Subcategory	Severity	Segment	Explanation
1	Accuracy	Omission	Minor	2	The chapter title “The Mail” remains untranslated. This is a missed opportunity to localize the heading for the Turkish audience. A suitable translation such as “Posta Arabası” or “Posta Seferi” would align better with both the content and historical setting.
2	Linguistic conventions	Grammar	Minor	3	The word order is awkward and heavy: “kasım ayının sonlarına doğru bir cuma günü uzanan yol Dover yoluydu” is clumsy. The phrase should prioritize clarity and natural flow, e.g., “Kasım ayının sonlarında, bir cuma gecesi, Dover yolu uzanıyordu...”
3	Accuracy	Mistranslation	Major	3	“This history has business” is an idiomatic phrase indicating the narrative’s concern with these characters; “bu tarihin ilk iş yaptığı kişiler” is a literal and awkward rendering, failing to

					convey that the narrative is introducing key characters.
4	Linguistic conventions	Grammar	Major	4	“Dover postasına doğru uzanıyordu” mistranslates spatial relations. The sentence is awkward and lacks clarity. “Dover postası” should be clarified as “posta arabası” consistently.
5	Accuracy		Major	5	“Koşu takımı o kadar ağırdı ki” mistranslates “the hill, and the harness, and the mud, and the mail were all so heavy.” This omits the cumulative effect and rhetorical weight of the list in the source text.
6	Accuracy	Omission	Major	5	The irony in “with the mutinous intent of taking it back to Blackheath” is lost. The tone becomes flat and factual rather than humorous and ironic.
7	Linguistic conventions	Grammar	Minor	6	“Hayvani kuvvetin kanun içerisinde yasaklanmış olan savaş maddesini okumuşlardı” is convoluted and nearly incomprehensible. The irony about the horses reading the “article of war” is lost.
8	Style	Language register	Major	7	“Hepsinin başları önüne eğilmiş ve kuyrukları titretti” is mechanically correct but lacks the poetic

					rhythm and somber mood of the original.
9	Accuracy	Omission	Major	8	The vivid rhetorical flourish of “like an unusually emphatic horse, denying...” is lost. The translated sentence merely suggests hesitation rather than theatrical denial.
10	Linguistic conventions	Grammar	Minor	8	“Heyy! Dur biraz!” is a poor and culturally awkward rendering of “Wo-ho! so-ho-then!” This phrase should sound more natural and reflective of a coachman’s call. This should be rendered more idiomatically, such as “Hooop! Yavaş!” or “Hoop, dur bakalım!”
11	Accuracy	Mistranslation	Major	9	“İçini derin bir huzursuzluk kaplamış gibi görünüyordu” mistranslates “was disturbed in mind.” This introduces unnecessary speculation instead of simply conveying his unease.
12	Terminology	Wrong Term	Major	8	The term “şoför” is an anachronism and entirely out of place for a historical narrative set in the 18th century. The correct term should be “arabacı” or “sürücü” to reflect the era accurately.
13	Accuracy	Mistranslation	Major	8	The entire rhetorical comparison “like an unusually emphatic horse, denying that

					the coach could be got up the hill” is flattened into a literal statement: “arabanın tepeye çıkabileceğini kestiremiyordu.”
14	Terminology	Wrong Term	Major	9	“Lider” is a modern and abstract term unsuitable for describing a horse leading a team. In this historical and literal context, it should be translated as “öndeki at” or “baştaki at.” Dickens refers to the near leader—the horse positioned at the front closest to the driver.

The number of translation errors detected by EXP2 in the translation of ST10 is fourteen, ten of which are major and four of which are minor errors. The MQM scores calculated are as follows:

Table 6.26. MQM Scoring of ST10’s Translation

Reference Word Count (RWC):	176
Evaluation Word Count (EWC):	264
Absolute Penalty Total (APT):	54.00
Per-Word Penalty Total (PWPT):	0.3068
Overall Normed Penalty Total (ONPT):	81.00
Overall Quality Fraction (OQF):	0.69
Overall Quality Score (OQS):	69.32

ST11 was translated by P6 with the assistance of GenAI model in the pre-translation process. The translation quality assessment report by EXP2 is below.

Table 6.27. Translation Quality Assessment Report of ST11’s Translation

#	Category	Subcategory	Severity	Segment	Explanation
1	Accuracy	Mistranslation	Major	4	“Munich” should be “Münih” in Turkish;

					Bistritz is left untranslated. In Turkish – Bistrita. Same for “Vienna,” which should be “Viyana.”
2	Linguistic conventions	Grammar	Minor	4	Awkward structure in “Ertesi sabah Vienna’ya vardım Aslında...” Missing comma after “vardım,” causing run-on sentence.
3	Accuracy	Mistranslation	Major	4	“ertelendi” incorrectly implies the train was officially postponed, rather than delayed. Correct form: “Tren bir saat gecikti.”
4	Audience appropriateness	Culture-specific reference	Minor	5	“Buda-Pesth” is retained instead of updated “Budapeşte”; the historical name may be justified but should be indicated as such for readers.
5	Accuracy	Omission	Major	6	The sentence about fearing to go far from the station is omitted, removing an important character detail about Harker’s cautiousness.
6	Linguistic conventions	Grammar	Major	7	“İlk izlenimim... oluyor” uses present tense, breaking the reflective, journal-style narration. Correct tense is “olmuştu” or “hissetmişim.”
7	Accuracy	Untranslated	Major	7	“Danube” remains untranslated; it should be “Tuna Nehri” to align with

					target language conventions.
8	Accuracy	Mistranslation	Critical	7	“adeta Türk egemenliğine hapsetti” introduces an oppressive and emotional tone absent from the source. The original refers to historical and cultural remnants, not captivity. Should be “bizi Türk egemenliği dönemine ait geleneklerin izleriyle buluşturdu”
9	Accuracy		Minor	7	“cezbedip” adds an unnecessary emotional overtone, not present in the original calm, observational narrative.
8	Accuracy	Mistranslation	Major	8	“Oradan ayrıldıktan sonra...” is vague; it omits the nuance of leaving on time. Corrected as “Zamanında yola çıkıp...” to preserve original meaning.
9	Linguistic conventions	Grammar	Minor	9	“Bir gece Hotel Royale’de kaldım” lacks locational emphasis. Better phrased as “Burada, Hotel Royale’de bir gece kaldım.”
10	Accuracy	Mistranslation	Major	10	“Öğle yemeğinde hatta akşam yemeği...” misrepresents “or rather supper.” Corrected as “Akşam yemeği olarak...” for clarity and accuracy.

11	Accuracy	Addition	Minor	10	“Pul kızarmış biberli tavuk” introduces extra details not present in the source text.
12	Terminology	Wrong term	Minor	11	“Mem.” is misunderstood in the translation and turned into a directive. It is a Latin abbreviation for memorandum (note to self), which should be translated as “Not:” or “Kendime not:” to preserve the journal annotation style.
13	Accuracy	Mistranslation	Major	12	“Kesinlikle bunu yemeliyim” incorrectly introduces obligation and personal desire. The original simply indicates availability (“should be able to get it anywhere”). Needs to be translated as “...bulabileceğimi söyledi.”
14	Terminology	Wrong Term	Minor	12	“Carpathians” is untranslated; should be “Karpattlar.” The original term refers to a specific geographical region, which requires correct localization.
15	Linguistic conventions	Grammar	Minor	13	“Bu yerde çok etkisinin olduğunu farkettim” is unidiomatic. Correct form is “Burada Almanca bilgimin çok işe yaradığını fark ettim.”

16	Accuracy	Addition	Minor	13	“ah o olmasaydı ben ne yapardım” adds unnecessary emotional drama. The original is reflective, not dramatic. Should be “doğrusu, o olmasa ne yapardım bilmiyorum.”
----	----------	----------	-------	----	--

The translation quality assessment report for ST11’s translation shows that there are sixteen translation errors in total. EXP2 indicated that one of these translation errors was at critical level, eight at major level and seven at minor level and the MQM scores are as follows:

Table 6.28. MQM Scoring of ST11’s Translation

Reference Word Count (RWC):	134
Evaluation Word Count (EWC):	226
Absolute Penalty Total (APT):	69.00
Per-Word Penalty Total (PWPT):	0.5149
Overall Normed Penalty Total (ONPT):	116.37
Overall Quality Fraction (OQF):	0.49
Overall Quality Score (OQS):	48.51

The last text in the expressive text type, ST12, was translated by P6 without any AI assistance. This translation was also assessed by EXP2.

Table 6.29. Translation Quality Assessment Report of ST12's Translation

#	Category	Subcategory	Severity	Segment	Explanation
1	Accuracy	Omission	Major	2	Entire sentence about Bistriz's stormy existence and the Borgo Pass is omitted, eliminating critical historical and geographical context.
2	Accuracy	Mistranslation	Major	3	The sentence is fragmented and grammatically incomplete: "50 yıl önce büyük yangınlar sonucu oluşan yıkıcı tahribatlarla dolu Bistriz" lacks a verb and feels like an unfinished thought.
3	Linguistic conventions	Grammar	Minor	4	"Hayatta kalanlar ise kıtlık ve hastalıklarla mücadele etti" introduces information not explicitly in the source. The sentence structure should focus on the casualties and circumstances rather than shift perspective to the survivors.
4	Accuracy	Mistranslation	Major	5	The phrase "hoş bir o kadar da modası geçmiş bulduğum" reverses the intended tone of delight; the source indicates pleasure at the hotel's old-fashioned character, not a critical view.
5	Style	Language register	Major	6	"Kuşkusuz kapıya vardığımda...karşılaşacağımı düşünmüştüm" is a speculative construction, but the narrator doesn't expect to see the woman; he actually encounters her. This distorts the sequence of events.
6	Terminology	Wrong term	Minor	8	There is a typo in this sentence: "Adamin

					kucağına fisıldadı”. It should be “kulağına”.
7	Terminology	Wrong term	Minor	10	“Carpathians’a hoşgeldin” should localize the place name or add a note; also, the correct Turkish spelling is “hoş geldin”.
8	Accuracy	Omission	Major	13	“A place on it is kept for you” is entirely omitted. The translation only says “Yarın saat 3’te hazır ol,” removing the assurance that a seat is reserved for the traveler.
9	Accuracy	Omission	Major	15	“I trust that your journey from London has been a happy one” is mistranslated. The Turkish version implies this journey has been pleasant, not the journey from London, which loses the direct reference to his long trip.

As a result of translation quality assessment of ST12, a total of nine translation errors were identified, six of which were major and three of which were minor errors. The MQM scores are presented below.

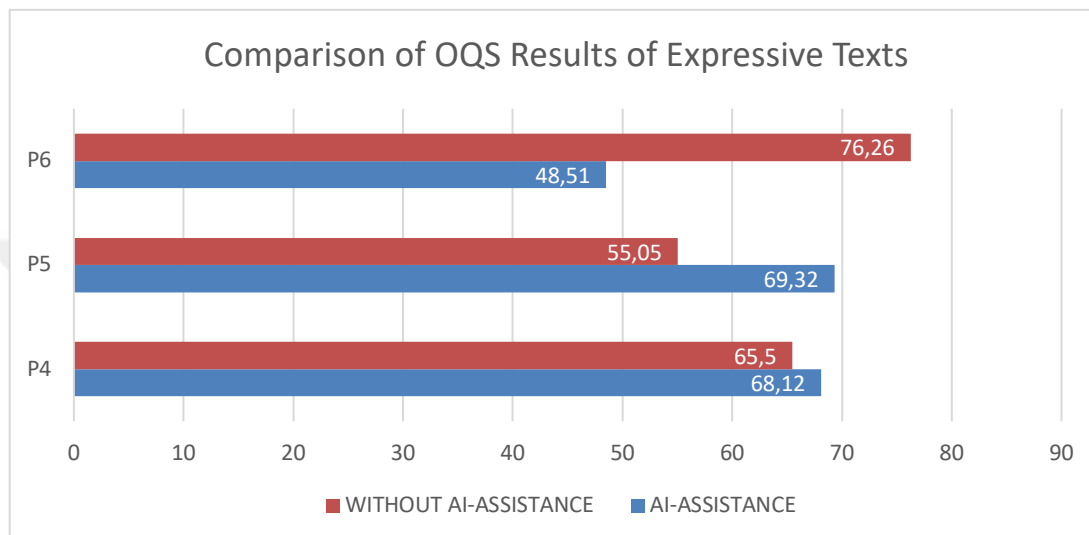
Table 6.30. MQM Scoring of ST12’s Translation

Reference Word Count (RWC):	139
Evaluation Word Count (EWC):	291
Absolute Penalty Total (APT):	33.00
Per-Word Penalty Total (PWPT):	0.2374
Overall Normed Penalty Total (ONPT):	69.09
Overall Quality Fraction (OQF):	0.76
Overall Quality Score (OQS):	76.26

A similar result was obtained in the translations of expressive texts as in the translations of informative texts. Regarding the translation quality assessment results and scores of the expressive texts translated by P4, P5 and P6 with and without the

assistance of the T9N101 GenAI model in the pre-translation process, it was observed that AI assistance had a positive effect on translation quality in the translation outputs of P4 and P5. Two out of three participants who translated expressive texts achieved better scores in the translations they performed with the assistance of AI in the pre-translation process is a significant and promising result for the aims of this study.

Figure 6.31. Overall Quality Score (OQS) Comparison of Translations of Expressive Texts with and without AI Assistance in the Pre-Translation Process



However, in general, when we analyze the OQSs of the translation outputs of expressive texts with and without AI assistance, the average OQSs of the translations performed with the assistance of the T9N101 GenAI model in the pre-translation process is 61.98, while the average OQSs of the translations performed without any AI assistance was 65.60. Although these results seem to be quite close to each other, the positive effect of AI assistance in the pre-translation process on translation quality could not be as clearly observed as in the case of informative text type translations. Accordingly, considering these results, it can be concluded that future studies should focus more on the expressive text type by further improving the dynamics, features and many other factors specific to expressive texts in the GenAI models developed for the pre-translation process.

In the third category, P7, P8 and P9 translated texts of operative type. EXP3 conducted the translation quality assessments of ST13, ST14, ST15, ST16, ST17 and ST18's translation outputs. The first translation for which translation quality assessment was conducted is ST13, which was translated by P7 with the assistance of GenAI model in the pre-translation process and the results for which are presented below.

Table 6.31. Translation Quality Assessment Report of ST13's Translation

#	Category	Subcategory	Severity	Segment	Explanation
1	Accuracy	Omission	Minor	1	In “The future belongs to us: youth”, the word “youth” is omitted. Although this omission is compensated for by the word “gençler” in the next line, it is clear that the emphasis on “youth” in the title is important in a text with such an addressing function, and should be conveyed. However, it is also true that the slogan “gelecek bizimdir” implicitly emphasizes youth. Therefore, the minor severity level is considered as a transposition problem.
2	Accuracy	Mistranslation	Minor	3	“governments” is translated as “yetkililer”. As a target-oriented usage, “devlet yönetimlerini” or “devlet yetkililerini” would be more appropriate.
3	Accuracy		Minor	5	The use of long sentences and unnecessary words impedes fluency in Turkish. Fluency can be increased by breaking sentences.
4	Accuracy		Minor	6	The consecutive use of “çıkarmak” and “for this reason” breaks the accuracy. A usage such as “çıkarmak için” would solve this problem.
5	Linguistic conventions	Grammar	Major	8	This translation is not accurate and consistent in terms of

					grammatical structure and meaning.
6	Terminology	Wrong term	Major	10	“Grade level” is translated as “lisansüstü”. The meaning is not correct. In addition, it was observed that the sentence structure of the source text could not be analyzed grammatically and semantically and could not be translated into Turkish correctly and consistently.
7	Linguistic conventions	Punctuation	Minor	10	When the necessary punctuation marks are omitted or placed in unnecessary places in long sentences, fluency and comprehensibility are impaired.
8	Accuracy	Overtranslation	Minor	12	The use of unnecessary words/phrases such as “ancak ve ancak” disrupts the correct and understandable transfer of meaning.
9	Accuracy	Addition	Minor	14	“Together” is translated with both “hep birlikte” and “herkes için”. This unnecessary additional use hinders fluency.

According to the translation quality assessment report by EXP3, a total of nine translation errors were identified in the translation of ST13, two of which were major, seven of which were minor errors. The MQM scores calculated accordingly are as follows:

Table 6.32. MQM Scoring of ST13’s Translation

Reference Word Count (RWC):	272
Evaluation Word Count (EWC):	273
Absolute Penalty Total (APT):	17.00

Per-Word Penalty Total (PWPT):	0.0625
Overall Normed Penalty Total (ONPT):	17.06
Overall Quality Fraction (OQF):	0.94
Overall Quality Score (OQS):	93.75

The other translation performed by P7 is the translation of ST14 and no AI assistance was received. EXP3's report assessing the translation of ST14 is given below.

Table 6.33. Translation Quality Assessment Report of ST14's Translation

#	Category	Subcategory	Severity	Segment	Explanation
1	Accuracy	Mistranslation	Minor	5	The translation should be like "hükümetlerin, iklim değişikliği konusunda eğitimi, iklim değişikliğinin ne olduğundan ziyade iklim değişikliğine nasıl uyum sağlanacağı ve ne yapılabileceği düzlemine kaydırmaları gerekmektedir". It is not that the essence of the meaning has not been conveyed at all, but the correct and fluent transfer between the Source Text and the Target Text has not been realized.
2	Linguistic conventions	Punctuation	Minor	6	"daha sonra da" is redundant. The sentence could have continued with a

					correct use of punctuation (,).
3	Style	Language register	Minor	9	“ancak ve ancak” is not equivalence of “so that”. It could be connected with “ki, çözüm bulmak için birlikte çalışabilelim”.
4	Linguistic conventions	Grammar	Minor	11-12	“genişliği ve derinliği”, modals and affixes must be consistent. Coherence must be observed.
5	Linguistic conventions	Grammar	Minor	13	It’s “bize de”. Error in the use of -de, da for as well in Turkish.

The translation quality assessment of ST14 conducted by EXP3 identified a total of five translation errors. All of these five translation errors are of minor severity level. The scores of ST14 are shared below.

Table 6.34. MQM Scoring of ST14’s Translation

Reference Word Count (RWC):	180
Evaluation Word Count (EWC):	149
Absolute Penalty Total (APT):	5.00
Per-Word Penalty Total (PWPT):	0.0336
Overall Normed Penalty Total (ONPT):	6.04
Overall Quality Fraction (OQF):	0.97
Overall Quality Score (OQS):	96.64

Another operative text, ST15, was translated into Turkish by P8 without the assistance of AI in the pre-translation process. The results of the translation quality assessment for the translation of ST15 conducted by EXP3 are as follows:

Table 6.35. Translation Quality Assessment Report of ST15’s Translation

#	Category	Subcategory	Severity	Segment	Explanation
1	Terminology	Wrong term	Minor	5	The use of “kesin” makes the meaning ambiguous when it could have been something like “tavuk etini didikleyin” or “tavuk etini ufak parçalara ayırın”. However, it is not completely wrong.
2	Accuracy	Omission	Major	4	This segment (semantically important) is missing.
3	Accuracy	Omission	Minor	9	It should be “parmakla veya bir çatalla Bastırarak”, but the finger part is omitted, leaving out a piece of information that should be conveyed in a user/target-oriented translation.
4	Accuracy	Mistranslation	Major	10	“Tuzlu suda, daha da iyisi et/sebze suyunda raviolileri kaynatarak pişirin” would have been a correct translation.

The number of errors detected in the translation of ST15 is four, two of which are major errors and two of which are minor errors. Accordingly, the MQM scores of ST15 are given below.

Table 6.36. MQM Scoring of ST15’s Translation

Reference Word Count (RWC):	262
Evaluation Word Count (EWC):	159
Absolute Penalty Total (APT):	12.00
Per-Word Penalty Total (PWPT):	0.0755
Overall Normed Penalty Total (ONPT):	19.77

Overall Quality Fraction (OQF):	0.92
Overall Quality Score (OQS):	92.45

In the second translation performed by P8, the T9N101 GenAI model was used in the pre-translation process. P8’s translation of ST16 in the operative text type into Turkish was again assessed by EXP3 and the report is as follows:

Table 6.37. Translation Quality Assessment Report of ST16’s Translation

#	Category	Subcategory	Severity	Segment	Explanation
1	Style	Language register	Minor	3	“everything” is translated as ‘her şey’, which is correct, but in such a textual setting it would have been more appropriate to use “hepsini” in accordance with local conventions.
2	Style	Language register	Minor	4	“Ara sıra karıştırın ve ince bir yapıya yoğunlaşana kadar pişirin. Karışım inceldiği zaman bir süzgeç yardımıyla süzün ve kullanmaya hazır bir domates sosunuz olacaktır.” This translation does not conform to local conventions and makes fluency difficult. It can be translated as “Ara sıra karıştırarak, incelip sos kıvamına gelene kadar kaynatın. Bir süzgeç yardımıyla süzün. Sosunuz kullanıma hazırdır”
3	Style	Language register	Minor	15	“add a reasonable portion” could have been replaced by “uygun miktarda” or “yeter miktarda” in Turkish, taking into

					account the linguistic conventions of the recipe text. “Büyük miktarda” is ambiguous.
--	--	--	--	--	---

In the translation quality assessment of ST16 conducted by EXP3, three translation errors were detected, all of which were minor errors, and the scores of the translation are as follows:

Table 6.38. MQM Scoring of ST16’s Translation

Reference Word Count (RWC):	203
Evaluation Word Count (EWC):	285
Absolute Penalty Total (APT):	3.00
Per-Word Penalty Total (PWPT):	0.0148
Overall Normed Penalty Total (ONPT):	4.21
Overall Quality Fraction (OQF):	0.99
Overall Quality Score (OQS):	98.52

The final translations in the translation implementation phase in general and in the operative text type were performed by P9, and translation quality assessments were made by EXP3. The first text translated by P9 was ST17, which was realized with the assistance of the T9N101 GenAI model in the pre-translation process. The translation quality assessment report of ST17 is presented below.

Table 6.39. Translation Quality Assessment Report of ST17’s Translation

#	Category	Subcategory	Severity	Segment	Explanation
1	Style	Language register	Minor	1	The “Adab-ı Muaşeret Kuralı” could have been considered as an option for localization at the linguistic level. In this kind of text and translation task, localization could have been applied to the whole text as a general translation strategy. However, the translator’s

					choice is also an acceptable one.
2	Linguistic conventions	Grammar	Minor	3	A translation along the lines of “iyi bir dinleyici olmak, iyi bir konuşmacı olmak kadar vazgeçilmezdir ve iyi bir çevrede yetişmiş bir insanı en kolay dinleyici rolündeyken fark edebilirsiniz”, a more fluent translation could have been achieved with word economy and correct syntax.
3	Linguistic conventions	Grammar	Minor	4	It should have been “usanmışlık ve ilgisizlik”, there needs to be modal and affixal consistency between the words.
4	Linguistic conventions	Grammar	Minor	7	The translation should have been something like “bazı kişiler bu görgü ihlaline mazeret olarak, karşıdakinin kötü bir tavırla iyi bir hikayeyi bozduğunu ileri sürerek karşı çıkar, ancak bu sorunu düzeltmez”. There is confusion and ambiguity.

In the translation quality assessment of ST17, four translation errors were identified, all of which were minor errors. Accordingly, MQM scores are presented below.

Table 6.40. MQM Scoring of ST17's Translation

Reference Word Count (RWC):	224
Evaluation Word Count (EWC):	150
Absolute Penalty Total (APT):	4.00
Per-Word Penalty Total (PWPT):	0.0267
Overall Normed Penalty Total (ONPT):	5.97
Overall Quality Fraction (OQF):	0.97

Overall Quality Score (OQS):	97.33
-------------------------------------	-------

The last text translated by P9 was ST18 and no AI assistance was received in the pre-translation process. The quality assessment results for the translation of ST18 by EXP3 are as follows:

Table 6.41. Translation Quality Assessment Report of ST18's Translation

#	Category	Subcategory	Severity	Segment	Explanation
1	Accuracy	Mistranslation	Minor	3	A more fluent translation could have been “kendinizi konuştuğunuz kişiyle aynı seviyede tutun ve bilgiçlik taslayan bir aptal olarak görülme riskine karşılık, kullanmanız muhtemel herhangi bir ifade veya kelimeyi açıklamaktan kaçının”. There is an interference of English into Turkish, which strains fluency.
2	Style	Language register	Minor	4	A usage such as “dair” instead of “yönelik” will increase accuracy. There should be a consistency such as “konu ve amaçlara” instead of “konu ve amaçlarınıza”.
3	Linguistic conventions	Grammar	Minor	5	“Sohbet konunuzun beraberinde olduğunuz kişilere uydurun.” Subject and object do not match.

4	Accuracy	Undertranslation	Minor	6	In the sentence “neşeli, hafif sohbetler bir dans partisinde vaazın ne kadar yersiz olacağı gibi yersiz olabilir”, a translation of “vaaz ne kadar yersizse o kadar yersiz” would clarify the meaning. The Turkish wording is inadequate and confusing.
5	Locale conventions	Language register	Minor	7	Instead of “berbat” for “beşinci sınıf”, “üçüncü sınıf” would have been appropriate in Turkish. It would be a cultural transfer.

In the translation of ST18 by P9, EXP3 detected a total of five translation errors, all of which were of minor severity. The MQM scores of the translation of ST18 are provided below.

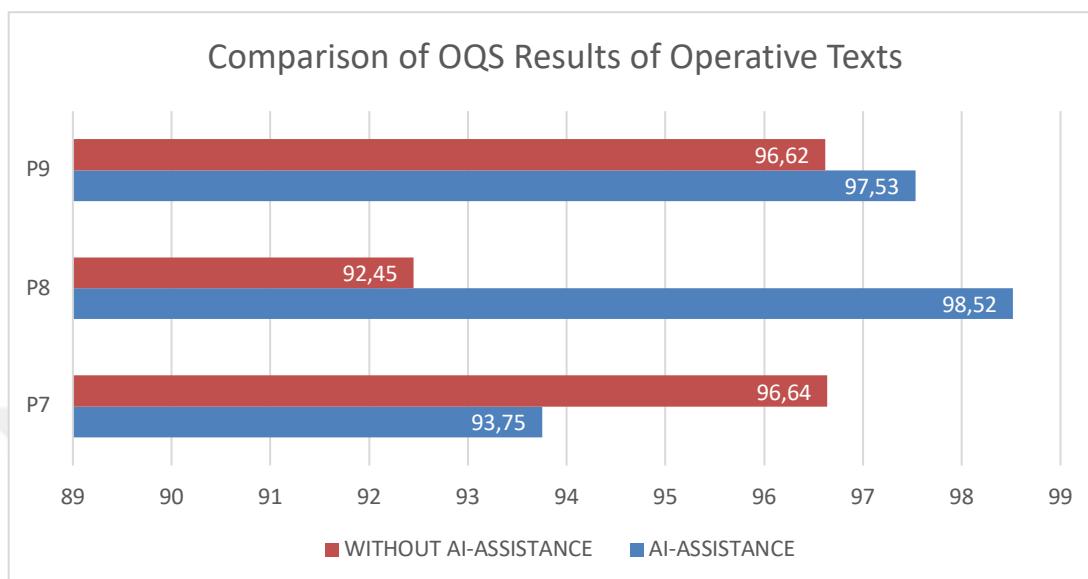
Table 6.42. MQM Scoring of ST18’s Translation

Reference Word Count (RWC):	215
Evaluation Word Count (EWC):	148
Absolute Penalty Total (APT):	5.00
Per-Word Penalty Total (PWPT):	0.0338
Overall Normed Penalty Total (ONPT):	7.26
Overall Quality Fraction (OQF):	0.97
Overall Quality Score (OQS):	96.62

Therefore, it was observed that the OQS results, i.e. the translation quality results, of the translations performed with the assistance of T9N101 GenAI in the pre-translation

process were better for two out of three participants who translated operative texts, as was the case in other text types.

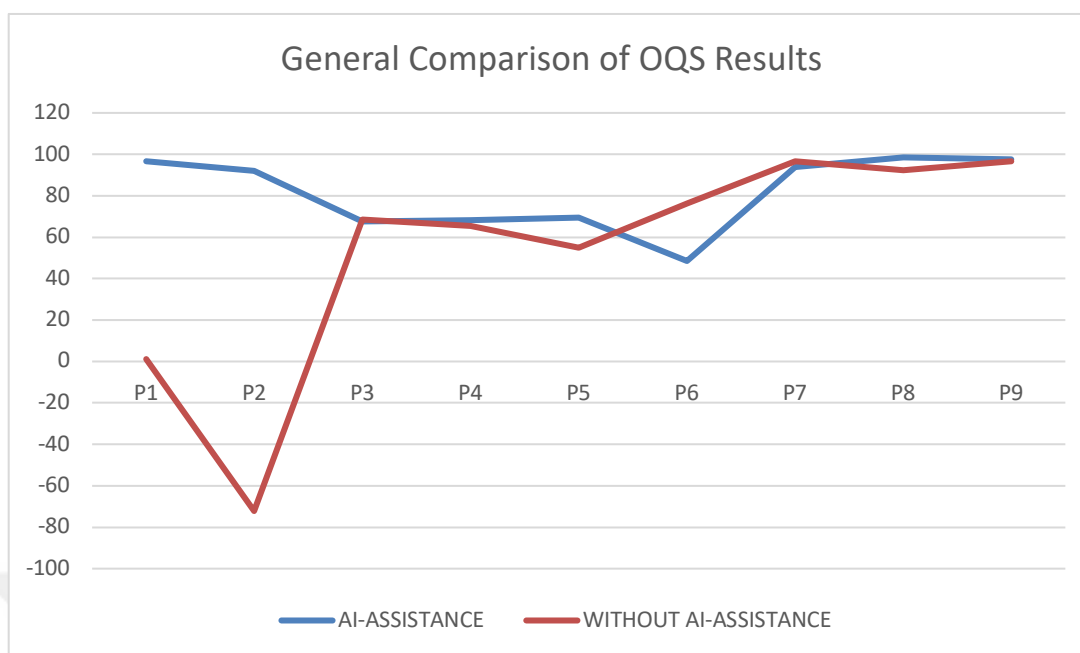
Figure 6.32. Overall Quality Score (OQS) Comparison of Translations of Operative Texts with and without AI Assistance in the Pre-Translation Process



In the operative text type, when the OQSs of the translations performed with and without AI assistance in the pre-translation process are averaged, we can notice that the results are quite close to each other, but the OQS results of the translations performed with AI assistance in the pre-translation process are slightly better. The average OQS of translations with the assistance of T9N101 GenAI model is 96.6, while the average OQS of translations without the assistance of AI is 95.23. In this respect, it can be concluded that, just like in the informative text type translations, receiving AI assistance in the pre-translation process has a positive effect on translation quality in the operative text type.

Furthermore, when analyzing the OQS results of the translation outputs of eighteen texts, nine of which were translated using the T9N101 model in the pre-translation process and nine of which were translated without any AI assistance, we can see that the translation outputs with AI assistance in the pre-translation process achieved much better results.

Figure 6.33. General Comparison of OQS Results

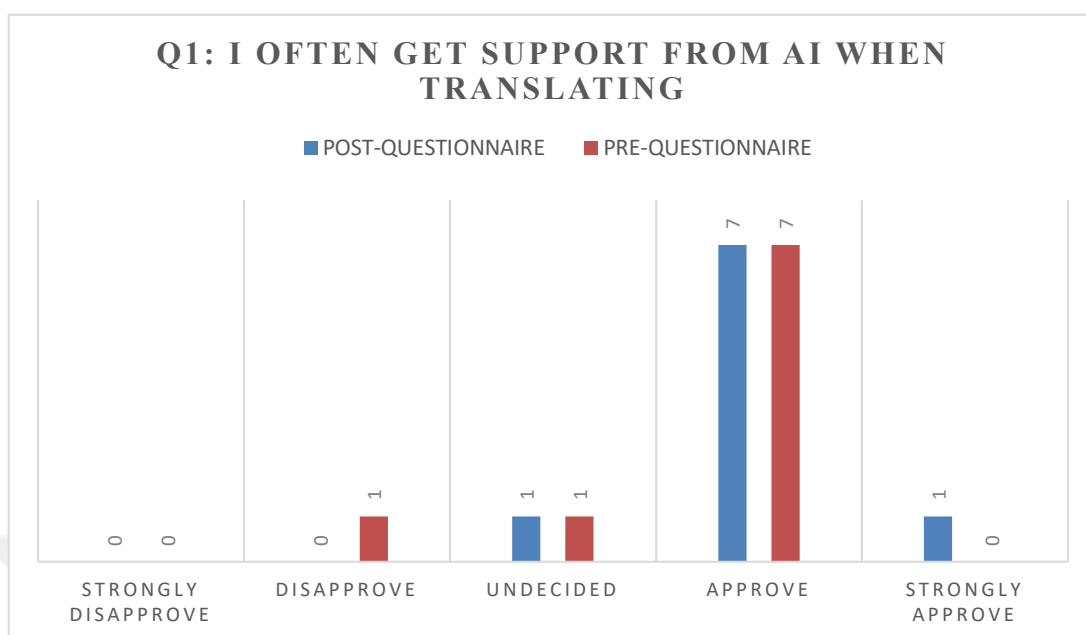


Accordingly, when the OQS results of the texts translated with and without AI assistance are averaged, it is observed that the result for the translations performed with the assistance of the T9N101 GenAI model in the pre-translation process is 81.35, while the result of the translations performed without the assistance of any AI in the pre-translation process is 53.33. It can be inferred from the results of the experiment conducted in this study that, in general, AI assistance in the pre-translation process can have a positive effect on translation quality.

6.3. Post-Implementation Questionnaire Results and Comparison with Pre-Implementation Questionnaire Results

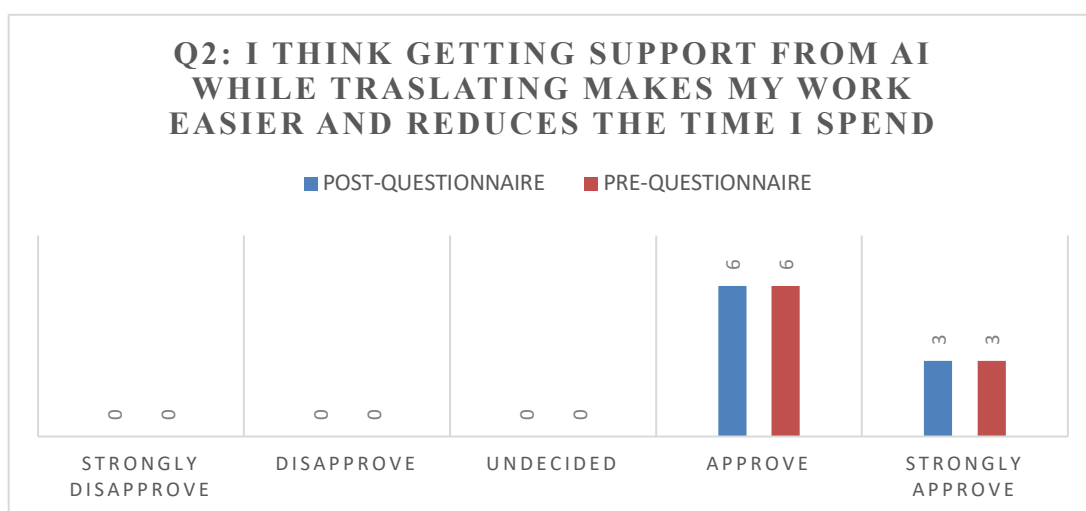
After the completion of the experiment, another questionnaire consisting of a total of eleven questions similar to the questions in the pre-implementation questionnaire was conducted with the participants. While 10 questions in this questionnaire were prepared according to Likert scale, one question was open-ended. The aim of the post-questionnaire was to find out whether the participants' opinions changed after performing two translation tasks with the assistance of the T9N101 GenAI model in the pre-translation process and without any assistance of AI in the pre-translation process. The participants' responses to the post-questionnaire and their comparison with the responses they gave in the pre-questionnaire are given below:

Figure 6.34. The Answers to Question 1 in the Post-Questionnaire and Comparison with the Pre-Questionnaire



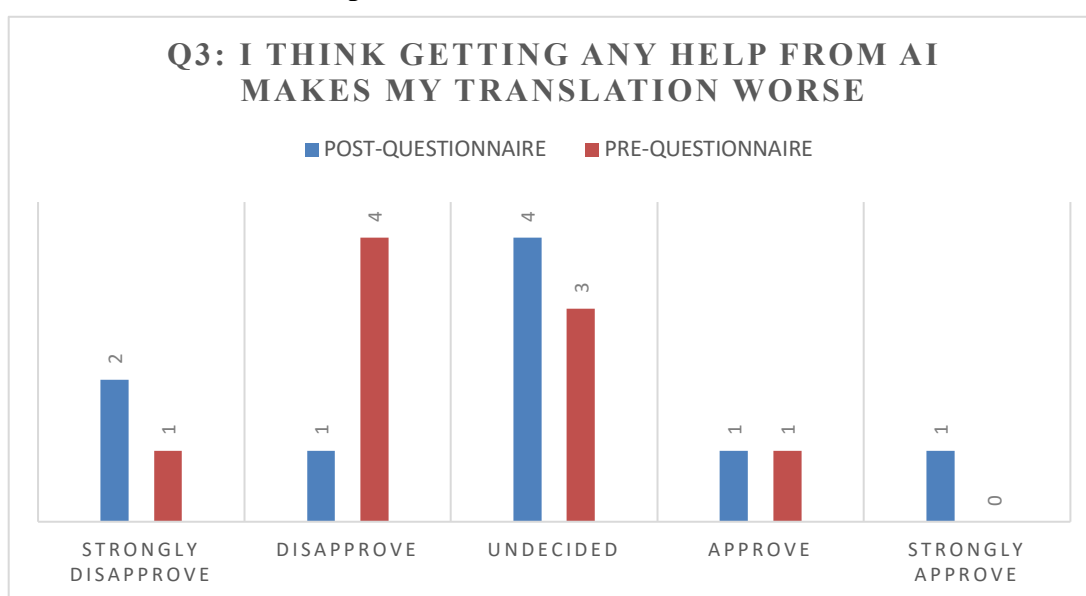
The first question in the post-questionnaire was asked to measure whether participants' opinions about the frequency of getting support from AI when translating would change after using the T9N101 model in the pre-translation process. It was observed that the answers given to this question were almost the same as the answers to the first question in the pre-implementation questionnaire, but one participant changed her/his decision and selected "strongly approve". Accordingly, as the participants did not change their opinions negatively and one participant changed her/his opinion positively it can be inferred that their experience with the T9N101 model had a positive effect in terms of their future use of AI in translation.

Figure 6.35. The Answers to Question 2 in the Post-Questionnaire and Comparison with the Pre-Questionnaire



The second question in the post-questionnaire aimed to find out whether the participants' opinions that AI assistance reduces the time and labor consumed would change after the experiment. The answers to this question also have not changed in a negative way and the participants were still completely positive in this regard, which is promising in line with the objectives of the study.

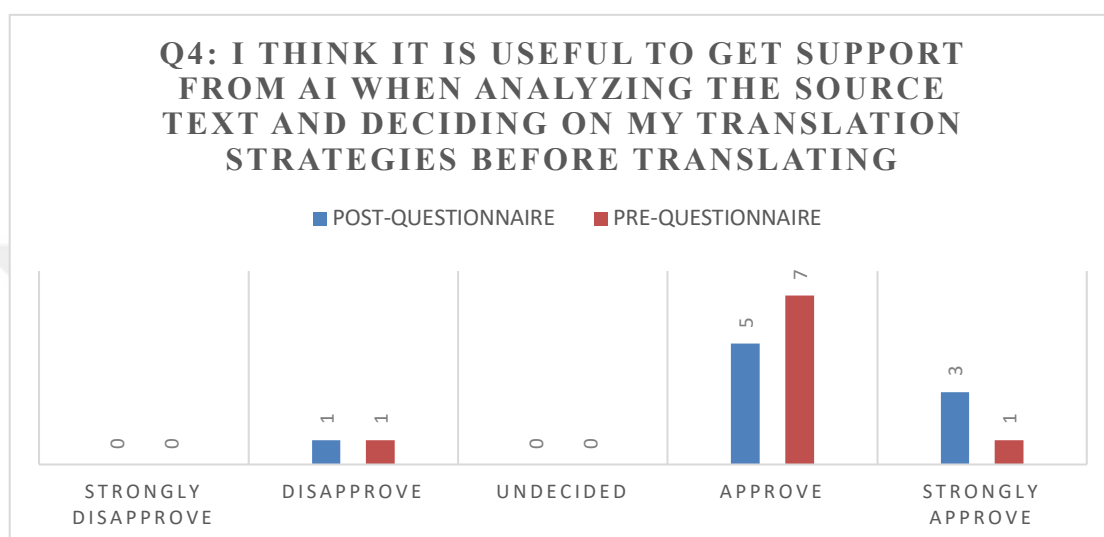
Figure 6.36. The Answers to Question 3 in the Post-Questionnaire and Comparison with the Pre-Questionnaire



Third question sought to elicit the opinions of the participants about one of the major criticisms of AI assistance in translation, namely that it has a negative impact on translation quality, and the responses the participants provided in the post-questionnaire allowed a comparison to be made. In this regard, it was observed that

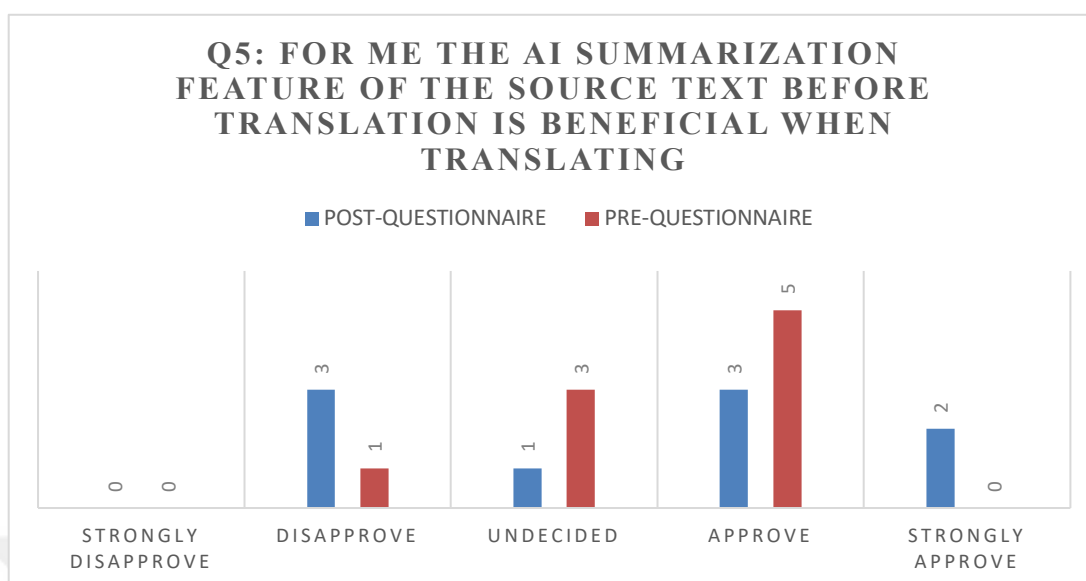
there were differences in the responses of the participants. In the pre-questionnaire, five participants gave negative responses to this question, while in the post-questionnaire, the number decreased to three, the number of participants selected “undecided” increased by one to four and there was one participant who selected “strongly approved”.

Figure 6.37. The Answers to Question 4 in the Post-Questionnaire and Comparison with the Pre-Questionnaire



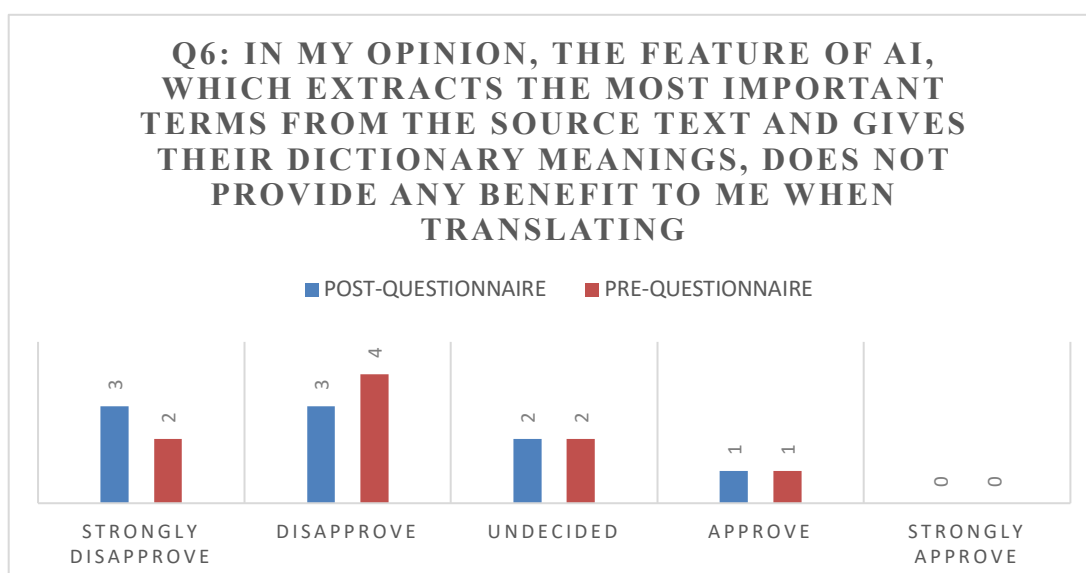
The fourth question aimed to analyze whether the participants’ opinions about the usefulness of AI assistance in source text analysis and determining translation strategies would change. The difference here is that two participants changed their responses by selecting from “approve” to “strongly approve” while most of the participants were already positive and did not change their response. In this regard, it can be concluded that the assistance of AI in the pre-translation process, i.e. using the T9N101 model, positively affected the participants’ opinions on this issue.

Figure 6.38. The Answers to Question 5 in the Post-Questionnaire and Comparison with the Pre-Questionnaire



Responses to the fifth question in the post-questionnaire changed both positively and negatively. In the post-questionnaire, two participants selected “strongly approve”, which indicated a very positive change. On the other hand, two participants selected “disapprove”. Despite this balanced change, an AI-driven source text summarization feature’s effects can be more emphasized and analyzed more in future studies.

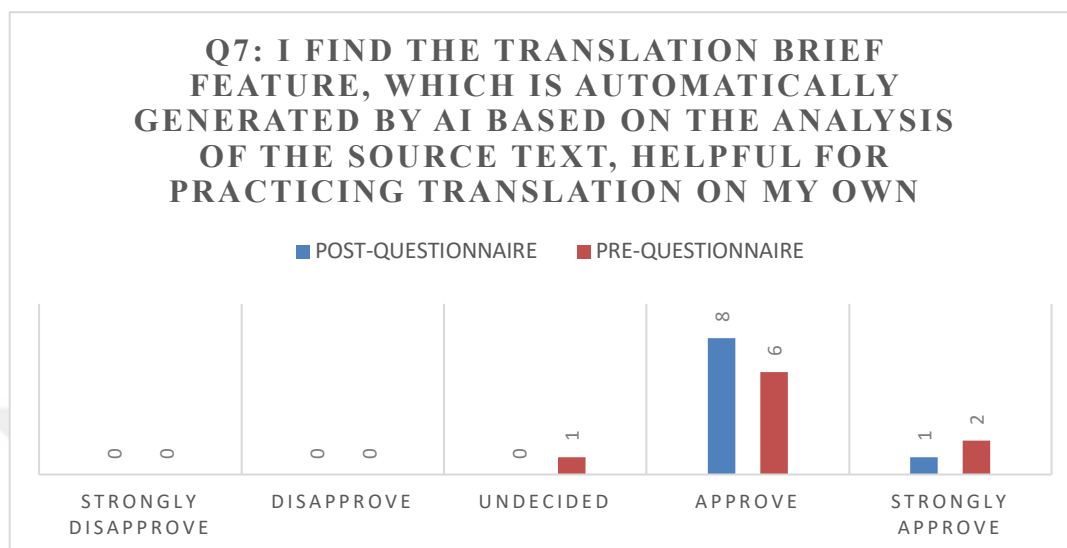
Figure 6.39. The Answers to Question 6 in the Post-Questionnaire and Comparison with the Pre-Questionnaire



The sixth question aimed to learn the participants’ thoughts about the term extraction feature, one of the main features of the T9N101 model, after experiencing the use of this specific function. It was observed that the participants disagreed with the negative

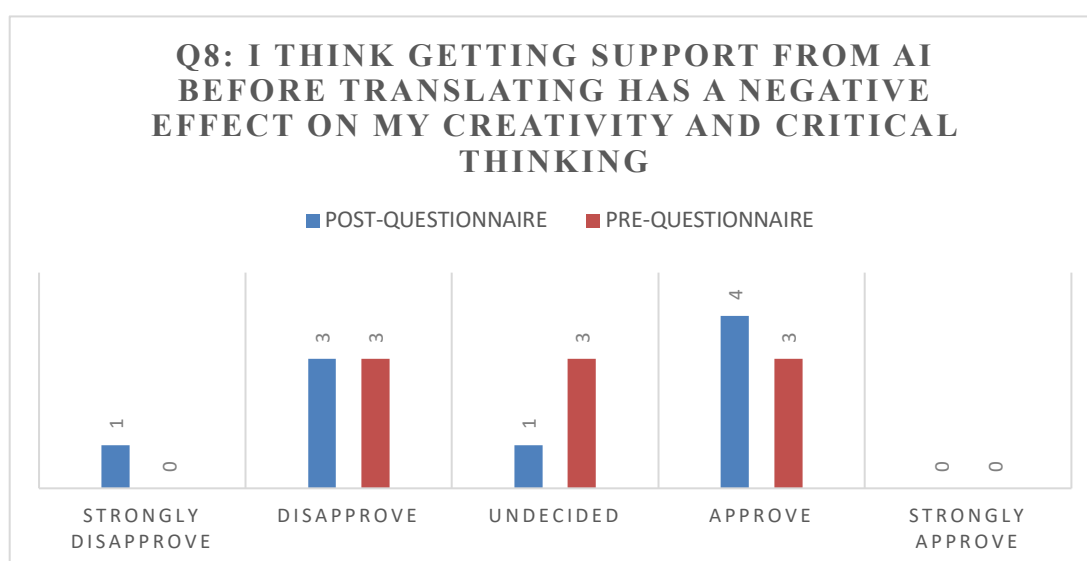
statement in the sixth question, i.e. they mostly selected “strongly disapprove” and “disapprove”.

Figure 6.40. The Answers to Question 7 in the Post-Questionnaire and Comparison with the Pre-Questionnaire



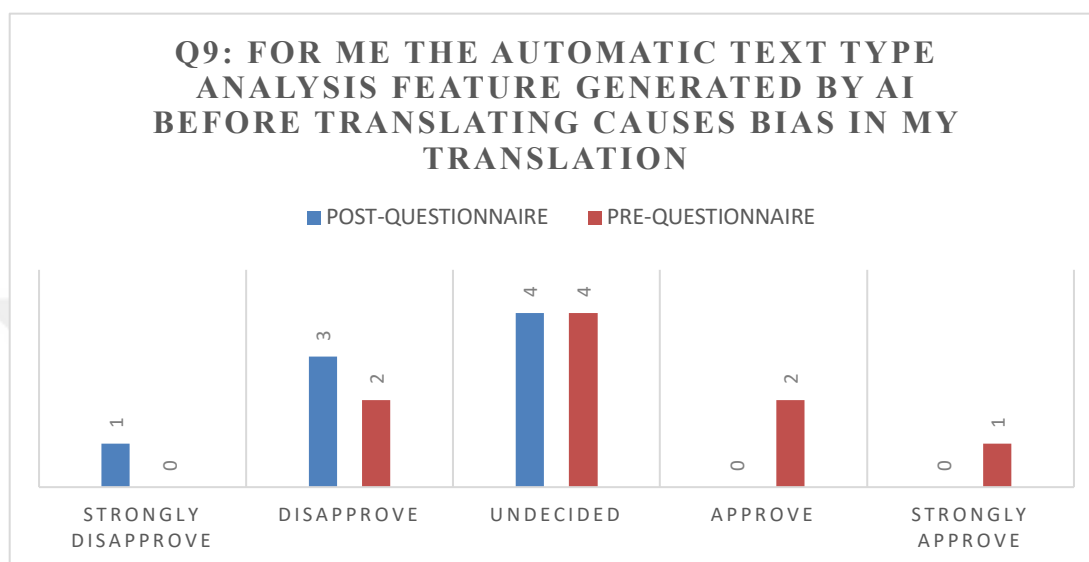
The participants’ responses concerning the translation brief feature of the T9N101 model, which is automatically generated by AI based on source text analysis developed for translation students to practice translation on their own, have turned to be completely positive. One participant, who selected “undecided” in the pre-questionnaire, also stated that this feature is beneficial and expressed a positive opinion.

Figure 6.41. The Answers to Question 8 in the Post-Questionnaire and Comparison with the Pre-Questionnaire



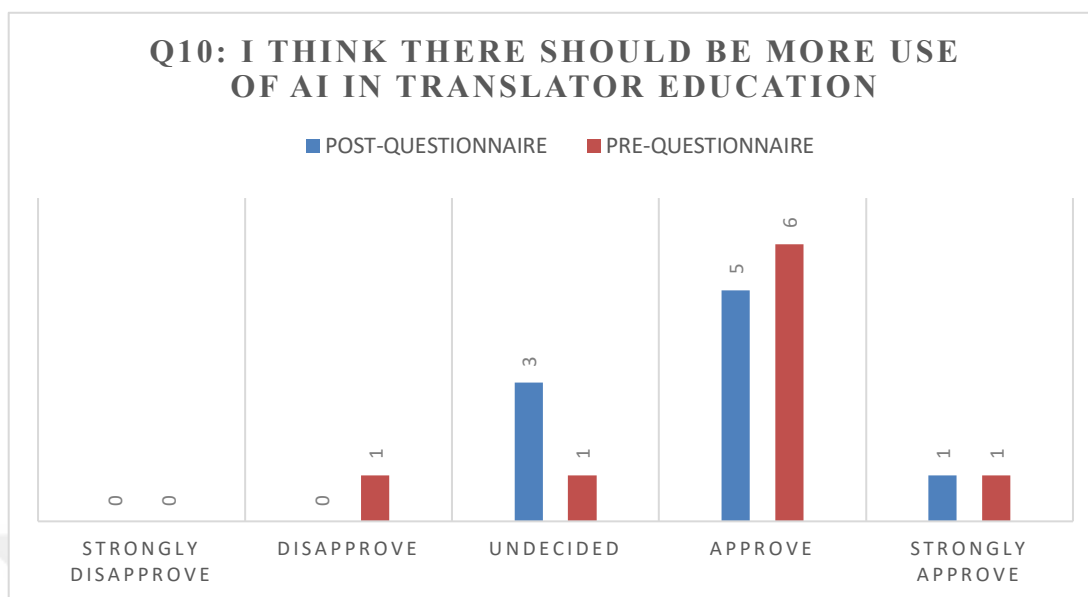
In the responses to the eighth question of the post-questionnaire, it was found that there was a balanced change in the opinions of the participants regarding the negative effect on creativity and critical thinking, which is one the important criticisms concerning AI.

Figure 6.42. The Answers to Question 9 in the Post-Questionnaire and Comparison with the Pre-Questionnaire



The answers to the ninth question of the post-questionnaire were quite positive in line with the objectives of the study. The participants completely selected “disapprove” on the statement ‘for me, the automatic text type analysis feature generated by AI before translating causes bias in my translation’ in the post-questionnaire. In this respect, the change in the participants’ responses is significant in terms of rethinking the idea that AI assistance in the pre-translation process leads to bias in translation.

Figure 6.43. The Answers to Question 10 in the Post-Questionnaire and Comparison with the Pre-Questionnaire



A positive change was also observed in the answers to the tenth question of the questionnaire, ‘I think there should be more use of AI in translator education’. There were no more participants who selected “disapprove”, and this is a significant change in terms of one of the main objectives of this study, which is to gain insights fore more innovative and AI-integrated methods and approaches in translator education.

The last question of the post-questionnaire, i.e. Question 11, is open-ended as in the pre-questionnaire. It can be concluded that all of the participants who responded to this question had a positive opinion about AI assistance in translation and some of them found various feature of the T9N101 model beneficial. The answers of the participants are as follows: “I think it is nice to have AI in translation, because it helped me finding/sorting the terms for my translation”, “I think that AI is so beneficial for translators in terms of gaining time and reducing effort”, “translators should learn using AI, it is crucial for their jobs”, “it provides ease and integrity in translation”, “I think the automatic text type analysis feature is a great feature for translators to spend less time while translating. And there should be more AI features like this”, “AI in translation is one of the best advantages of today’s technology. Thanks to this, translations are faster and in higher quality”, “I believe that technical translation requires more usage of AI, I personally prefer to use AI for summarizing the source texts”.

7. CONCLUSION

In this study, in order to analyze the effect of using Artificial Intelligence (AI) tools in the pre-translation process on translation quality, the T9N101 Generative AI (GenAI) Model, developed by the author of the present thesis, with features such as source text summarization, text type classification, translation brief generation and terminology extraction was developed by focusing on source text analysis, which is one of the most significant tasks in the pre-translation process. T9N101 was pre-trained specifically for the pre-translation process and datasets consisting of hundreds of lines were used for this purpose. The sources used in the training of T9N101 were ethical, open access and copyright-free, and texts that are of informative, expressive and operative text types were specially selected.

The experimental phase of the study was conducted with nine undergraduate Translation and Interpreting Department students. The students were selected based on the criterion that they had successfully passed the Translation Oriented Text Analysis course with a letter grade of BB, which corresponds to a range of 71-76 out of 100. The volunteer participants translated a total of 18 texts from English into Turkish. Each participant translated one of the texts with the assistance of the T9N101 GenAI model in the pre-translation process, whereas in the other translation they did not receive any AI assistance in the pre-translation process. Out of these nine participants, three of them translated informative texts, three of them translated expressive texts, and three of them translated operative texts. Thus, a comparison has been made between the translations produced with the assistance of AI in the pre-translation process and the translations produced without any assistance of AI in the pre-translation process. It was also aimed to provide results and analysis opportunity on whether this situation makes a difference across three main text types.

After the completion of the translation tasks, the translation quality assessment of the outputs of 18 translations produced by nine volunteer participants was carried out by three expert translator educators. These expert translator educators were professors who hold a PhD degree in TS and currently lecturing in a Department of Translation

and Interpreting. Moreover, the expert translator educators conducted translation quality assessments based on *The MQM Error Typology* (MQM, 2024) without knowing the identities of the participants and without knowing which translations had or had not received AI assistance in the pre-translation process.

The data obtained from the translation outputs from nine volunteer participants and their quality assessments by three expert translator educators were individually calculated as Absolute Penalty Total (APT), Per-Word Penalty Total (PWPT), Overall Normed Penalty Total (ONPT), Overall Quality Fraction (OQF) and Overall Quality Score (OQS) results according to the formulas shared by the MQM. When these results are analyzed separately based on text type, especially the OQS results, it has been observed that AI assistance in the pre-translation processes of informative and operative text types had a positive effect on translation quality.

Informative text type is the type in which the effects of AI use on translation quality were most noticeable compared to translations without AI assistance. In this text type, the average OQS results show that the translations performed with the assistance of the T9N101 model in the pre-translation process obtained much better results, similarly, in the operative text type, the translation performed with the assistance of GenAI in the pre-translation process had higher OQS results. On the other hand, a different result was obtained in translations of expressive text type. In the expressive text type, the average of the OQS results of translations performed with the assistance of AI in the pre-translation process is 61.98, whereas the average of the OQS results of the translations realized without any AI assistance was 65.60. Accordingly, it can be concluded that, especially for future studies, the GenAI tools and models to be developed to assist in the pre-translation process of expressive texts should have improved features regarding the characteristics, dynamics and structure of this particular text type.

An overall evaluation of the calculated results of the 18 translation outputs shows that AI assistance in the pre-translation process has a positive effect on translation quality. The average of the OQS results of these 18 translations is as follows: 81.35 for translations with AI assistance in the pre-translation process and 53.33 for translations without AI assistance. It should also be noted that five out of nine participants obtained better translation quality results when they received AI assistance in the pre-translation

process. In this respect, on a participant basis, 55.56% success rate was achieved in parallel with the objectives of the study.

In light of the relevant data, the integration of GenAI into the pre-translation process offers significant and promising potential, especially when grounded in theoretical models such as functionalist approaches and supported by systematic empirical research. By emphasizing the role of function, audience and context in translation, functionalist perspective provides a target-oriented framework within which GenAI solutions can be aligned with real-world and educational demands.

Moreover, it has also been demonstrated that GenAI technologies can be effectively customized to meet the specific demands of informative and operative text types. The model used in this study is designed to assist both translators and translation students in the pre-translation process, with particular emphasis on aligning the function of the source text with appropriate translation strategies. The results indicate that GenAI tools, when developed with text typology and pre-translation analysis in consideration, can provide targeted assistance that contributes to improved translation output.

Another important finding of this study is the change observed in the participants' perceptions of GenAI in translation. The pre- and post-questionnaire responses revealed that translation students who initially held neutral or skeptical views about GenAI assistance developed a more positive attitude after interacting with the T9N101 GenAI model. This change suggests that hands-on experience with functionally designed AI tools can promote greater acceptance and perceived usefulness of technology in translator education. Such findings emphasize the importance of exposure, engagement and contextual relevance in the pedagogical integration of emerging technologies.

Furthermore, the quantitative assessment of translation quality further supports the educational and practical value of GenAI assistance. Analyzing the Overall Quality Scores (OQS) across all translation outputs shows that GenAI assistance in the pre-translation process leads to measurable improvements in quality. This finding confirms the pedagogical hypothesis that improved source text comprehension and strategic planning facilitated by GenAI can positively influence the final translation output. However, the results also point to differences across text types. In particular, the performance of GenAI-assisted translations of expressive texts was relatively lower

compared to other genres, suggesting that the unique features of expressive texts (such as stylistic nuance, tone, and authorial intent) present greater challenges for GenAI solutions. This observation suggests that future research and tool development should pay more attention to the distinctive features of expressive texts, possibly through the improvement of style-sensitive and affect-aware GenAI models.

Taken together, the results of the questionnaires and the experimental analysis highlight the potential for integrating GenAI into translator education in a way that is grounded in TS theories and pedagogically meaningful. By addressing specific tasks in the pre-translation process and aligning them with functionalist approaches, this study offers a contribution to the growing body of knowledge on GenAI in TS. It also offers promising insights for the future development of context-aware, translator-centered GenAI tools and innovative teaching methodologies that reflect the changing needs of the translation profession.

REFERENCES

- Aesop. (6th century BCE). *The fables of Aesop*. Project Gutenberg. <https://www.gutenberg.org/ebooks/28>
- Alcina, A. (2008). Translation technologies: Scope, tools and resources. *Target*, 20(1), 79-102. <https://doi.org/10.1075/target.20.1.05alc>
- Atabekov, A. (2023). Public functions implementation by artificial intelligence: Current practices and prospects for common measures within particular periods across continents and regions. *Societies*, 13(7), 172. <https://doi.org/10.3390/soc13070172>
- Austen, J. (1813). *Pride and prejudice*. Project Gutenberg. <https://www.gutenberg.org/ebooks/1342>
- Austen, J. (1815). *Emma*. Project Gutenberg. <https://www.gutenberg.org/ebooks/158>
- Ayupova, R. (2014). Pretranslation text analysis as a part of translation process. *Procedia – Social and Behavioral Sciences*, 136, 213–216. <https://doi.org/10.1016/j.sbspro.2014.05.316>
- Bai, H., Zhang, Y., & Xiao, Z. (2024). Two novel deep-learning models to predict spontaneous ureteral calculi passage: Model development and validation. *Current Urology*, 18(4), 291–294. <http://journals.lww.com/10.1097/CU9.0000000000000236>
- Biau-Gil, J. R., & Pym, A. (2006). Technology and translation (a pedagogical overview). *Translation Technology and its Teaching*. Servei de Publicacions.
- Birkan Baydan, E., & Karadağ, A. B. (2014). Literary translation workshop: Social constructivist approach classroom activities. *Procedia – Social and Behavioral Sciences*, 152, 984-988. <https://doi.org/10.1016/j.sbspro.2014.09.354>
- Blackwood, A. (1917). *Day and night stories*. Project Gutenberg. <https://www.gutenberg.org/ebooks/45964>
- Buchanan, B. G. (2006). A (very) brief history of artificial intelligence. *AI Magazine* 26(4), 53-60.
- Burns, R. (1787). *Poems and songs of Robert Burns*. Project Gutenberg. <https://www.gutenberg.org/ebooks/1279>
- Bühler, K. (2011). *Theory of language: The representational function of language* (D. F. Goodwin, Trans.; A. Eschbach, Collab.). (Original work published 1934). John Benjamins.
- Cambridge University Press. (2025). *101*. In Cambridge Dictionary. <https://dictionary.cambridge.org/dictionary/english/101>

- Cournos, J., & O'Brien, E. J. (Eds.). (1922). *The best British short stories of 1922*. Project Gutenberg. <https://www.gutenberg.org/ebooks/9363>
- Creative Commons. (n.d.). *About Creative Commons*. <https://creativecommons.org/about/>
- Damassino, N. (2020). The questioning Turing Test. *Minds & Machines*, 30, 563-587. <https://doi.org/10.1002/wics.200>
- Daungsupawong, H., & Wiwanitkit, V. (2024). Upholding ethical standards in research communication: The role of scientific journals in decision-making. *Assam Journal of Internal Medicine*, 14(2), 138. https://doi.org/10.4103/ajom.ajom_12_24
- Dickens, C. (1850). *David Copperfield*. Project Gutenberg. <https://www.gutenberg.org/ebooks/766>
- Doherty, S. (2016). The impact of translation Technologies on the process and product of translation. *International Journal of Communication*, 10, 947-969.
- Doyle, A. C. (1902). *The hound of the Baskervilles*. Project Gutenberg. <https://www.gutenberg.org/ebooks/2852>
- Eliot, G. (1871). *Middlemarch*. Project Gutenberg. <https://www.gutenberg.org/ebooks/145>
- Fielding, H. (1749). *The history of Tom Jones, a foundling*. Project Gutenberg. <https://www.gutenberg.org/ebooks/6593>
- Fitzgerald, F. S. (1925). *The great Gatsby*. Project Gutenberg. <https://www.gutenberg.org/ebooks/64317>
- Garascia, A. (2024). Plants, water, salt, coal: The archival strata of the Victorian photographic book. *Interfaces*, 52. <https://doi.org/10.4000/13p0o>
- Gaspari, F. (2024). The history of translation technologies. In A. Lange, D. Monticelli, & C. Rundle (Eds.), *The Routledge Handbook of the History of Translation Studies* (pp. 324-338). Routledge.
- Ghahramani, A., Lehrer, D., Galicia, P., Pandit, Y., Wang, Z., & Varghese, Z. (2020). Artificial intelligence for efficient thermal comfort systems: Requirements, current applications and future directions. *Frontiers in Built Environment*, 6. <https://doi.org/10.3389/fbuil.2020.00049>
- Giddy, P. (2024). Falling in love. *Methexis*, IV(2), 136–160. <http://methexisjournal.com/wp-content/uploads/2024/11/Patrick-Giddy.pdf>
- Globalization and Localization Association. (2025). *Language services: Translation*. GALA Global. <https://www.gala-global.org/knowledge-center/about-the-industry/language-services>
- Haenlein, M., & Kaplan, A. (2019). A brief history of artificial intelligence: On the past, present, and future of artificial intelligence. *California Management Review*, 61. <https://doi.org/10.1177/0008125619864925>
- Hankins, E., Bousfield, E., Wilks, M., & Jenkins, R. (2024). Diet predicts mind and moral concern towards a broad range of animal categories. *Psychology of Human-Animal Intergroup Relations*, 3. <https://doi.org/10.5964/phair.14597>
- Hatim, B., & Mason, I. (1990). *Discourse and the translator*. Longman.

- Holz-Mänttari, J. (1984). *Translatorisches Handeln: Theorie und Methode*. Suomalainen Tiedekatemia.
- Hughes, M. L., & Karcher, N. R. (2024). Maintaining data quality when using social media for recruitment: Ethical considerations and recommendations. *Methodology*. <https://doi.org/10.5964/meth.13839>
- Jakobson, R. (1959). On linguistic aspects of translation. In R. A. Brower (Ed.), *On translation* (pp. 232-239). Harvard University Press.
- James, M. R. (1925). *A warning to the curious, and other ghost stories*. Project Gutenberg. <https://www.gutenberg.org/ebooks/66881>
- Joyce, J. (1914). *Dubliners*. Project Gutenberg. <https://www.gutenberg.org/ebooks/2814>
- Joyce, J. (1922). *Ulysses*. Project Gutenberg. <https://www.gutenberg.org/ebooks/4300>
- Karakoç, T., & Yetkin Karakoç, N. (2014). The role of postmodern hybrid texts in translation-oriented text analysis (TOTA) courses in translation didactics. *Procedia – Social and Behavioral Sciences*, 141, 70–73. <https://doi.org/10.1016/j.sbspro.2014.05.013>
- Kiraly, D. (2014). *A Social Constructivist Approach to Translator Education: Empowerment from Theory to Practice*. (Original work published in 2000). Routledge. <https://doi.org/10.4324/9781315760186>
- Le Blanc, J. (2024). The advancement of software technology and the evolution of transcription protocols in the field of genetic studies. *Interfaces*, 52. <https://doi.org/10.4000/13p0q>
- Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*, 22(140), 1–55.
- Linares-Pellicer, J., Izquierdo-Domenech, J., Ferri-Molla, I., & Aliaga-Torro, C. (2025). We are all creators: Generative AI, collective knowledge, and the path towards human-AI synergy. *arXiv*. <https://arxiv.org/abs/2504.07936>
- Marlowe, C. (1604). *The tragical history of Doctor Faustus*. Project Gutenberg. <https://www.gutenberg.org/ebooks/779>
- Martín de León, C. (2020). Functionalism. In M. Baker & G. Saldanha (Eds.), *Routledge encyclopedia of translation studies* (3rd ed., pp. 199–203). Routledge.
- Melville, H. (1851). *Moby Dick; or, The whale*. Project Gutenberg. <https://www.gutenberg.org/ebooks/2701>
- Milne, A. A. (1926). *Winnie-the-Pooh*. Project Gutenberg. <https://www.gutenberg.org/ebooks/67098>
- Mohamed, Y. A., Khanan, A., Bashir, M., Mohamed, A. H. H. M., Adiel, M. A. E., & Elsadig, M. A. (2024). The impact of artificial intelligence on language translation: A review. *IEEE Access*, 12, 25553–25579. <https://doi.org/10.1109/ACCESS.2024.3387004>
- Mohsen, M. A. (2024). Artificial intelligence in academic translation: A comparative study of large language models and Google translate. *Psycholinguistics*, 35(2), 134-156. <https://doi.org/10.31470/2309-1797-2024-35-2-134-156>

- Moorkens, J., Castilho, S., Gaspari, F., Toral, A., & Popović, M. (2024). Proposal for a triple bottom line for translation automation and sustainability: An editorial position paper. *The Journal of Specialised Translation*, (41), 2–25. <https://doi.org/10.26034/cm.jostrans.2024.4706>
- More, T. (1516). *Utopia*. Project Gutenberg. <https://www.gutenberg.org/ebooks/2130>
- MQM (Multidimensional Quality Metrics). (2024). *The MQM core typology*. <https://mqm.example.org/core-typology.pdf>
- Munday, J. (2016). *Introducing translation studies: Theories and applications* (4th ed.). Routledge.
- Nida, E. A. (2003). *Toward a science of translating: With special reference to principles and procedures involved in Bible translating* (Original work published 1964). Brill.
- Nikitina, T., & Kasatkina, K. (2018). Integrated approach to text analysis in teaching translation at linguistic department. *SHS Web of Conferences*, 50, Article 01118. <https://doi.org/10.1051/shsconf/20185001118>
- Nord, C. (2006). *Text analysis in translation: Theory, methodology, and didactic application of a model for translation-oriented text analysis* (2nd ed.). (Original work published 1991). Brill.
- Nord, C. (2018). *Translating as a purposeful activity: Functionalist approaches explained* (2nd ed.). Routledge.
- O'Brien, S. (2012). Translation as human-computer interaction. *Translation Spaces*, 1, 101-122. <https://doi.org/10.1075/ts.1.05obr>
- OpenAI. (2024). *ChatGPT-3* (Large language model). <https://openai.com/chatgpt>
- OpenAI. (2024). *ChatGPT-4o* (Large language model). <https://openai.com/chatgpt>
- Öner, I., & Öner Bulut, S. (2021). Post-editing oriented human quality evaluation of neural machine translation in translator training: A study on perceived difficulties and benefits. *transLogos Translation Studies Journal*, 4(1), 100-124. <https://doi.org/10.29228/transLogos.33>
- Öner Bulut, S., & Alimen, N. (2023). Translator education as a collaborative quest for insights into the re-positioning of the human translator (educator) in the age of machine translation: the results of a learning experiment. *The Interpreter and Translator Trainer*, 17(3), 375-392. <https://doi.org/10.1080/1750399X.2023.2237837>
- Paffrath, J. (2024). The measurement of (dis-)embedded identification. *Measurement Instruments for the Social Sciences*, 6. <https://doi.org/10.5964/miss.13783>
- Parker, H. S. E. (2025). Morini, Massimiliano (2022). Theatre Translation: Theory and Practice. *JoSTrans: The Journal of Specialised Translation*, 43(43), 194–196. <https://doi.org/10.26034/cm.jostrans.2025.6952>
- Paun, R.-D. (2023). Scan your life in the digital era. *Annals of Spiru Haret University Economic Series*, 23(2), 37–55. <http://anale.spiruharet.ro/economics/issue/view/155>

- Percival, M. (2024). Decolonial practices around “Portrait of a Man in a Red Suit” (formerly “Portrait of an African”), in the Royal Albert Memorial Museum (RAMM), Exeter. *Interfaces*, 51. <https://doi.org/10.4000/122ds>
- Poe, E. A. (1850). *The works of Edgar Allan Poe, Volume 2*. Project Gutenberg. <https://www.gutenberg.org/ebooks/2148>
- Popşa, R. E. (2023). Digitalization: A strategic approach for the travel and tourism industry. *Expert Journal of Marketing*, 11(2), 181–187. <https://marketing.expertjournals.com/23446773-1113/>
- Project Gutenberg. (n.d.). *Project Gutenberg*. Retrieved January 10, 2025, from <https://www.gutenberg.org>
- Reiss, K. (1976). *Texttyp und Übersetzungsmethode: Der operative Text*. Scriptor Verlag.
- Reiss, K. (1981). Type, kind and individuality of text: Decision making in translation. *Poetics Today*, 2(4), 121–131. <https://www.jstor.org/stable/1772491> (Original work published 1976).
- Reiss, K. (2014). *Translation criticism, the potentials and limitations: Categories and criteria for translation quality assessment* (E. F. Rhodes, Trans.). (Original work published 1971). Routledge.
- Reiss, K., & Vermeer, H. J. (2014). *Towards a general theory of translational action: Skopos theory explained* (C. Nord, Trans.). (Original work published 1978). Routledge.
- Roig-Sanz, D., & Fólica, L. (2021). Big translation history: Data science applied to translated literature in the Spanish-speaking world, 1898–1945. *Translation Spaces*, 10(2), 231–259. <https://doi.org/10.1075/ts.21012.roi>
- Rosenblatt, F. (1957). *The perceptron: A perceiving and recognizing automaton* (Report No. 85-460-1). Cornell Aeronautical Laboratory.
- Sakamoto, A., van Laar, D., Moorkens, J., & do Carmo, F. (2024). Measuring translators’ quality of working life and their career motivation: Conceptual and methodological aspects. *Translation Spaces*, 13(1), 54–77. <https://doi.org/10.1075/ts.23026.sak>
- Scarfone, A., Costa, C., Abraham, D., Pallottino, F., Tocci, F., Benjamin, K., Moscovini, L., Ortenzi, L., Spencer, R., Sandoval, R., Violino, S., Figorilli, S., Vasta, S., & Pascal, S. (2025). Smart IoT device for in field Black Sigatoka Disease recognition and mapping. *Smart Agricultural Technology*, 10, 100762. <http://www.sciencedirect.com/science/article/pii/S2772375524003666>
- Seresová, K., & Breveníková, D. (2019, March 20–22). The role of text analysis in translation. In *Proceedings of the International Conference on Innovations in Science and Education* (Vol. 7, pp. 617–621). Central Bohemia University. <https://doi.org/10.12955/cbup.v7.1428>
- Shakespeare, W. (1597). *Romeo and Juliet*. Project Gutenberg. <https://www.gutenberg.org/ebooks/1513>
- Shakespeare, W. (1623). *The complete works of William Shakespeare*. Project Gutenberg. <https://www.gutenberg.org/ebooks/100>

- Shelley, M. W. (1818). *Frankenstein; or, The modern Prometheus*. Project Gutenberg. <https://www.gutenberg.org/ebooks/84>
- Sun, Y., & Sun, C. (2023). The evaluation and main features of Christiane Nord's text analysis in translation. *Lecture Notes on Language and Literature*, 6(6), Article 060601. Clausius Scientific Press. <https://doi.org/10.23977/langl.2023.060601>
- Trosborg, A. (Ed.). (1997). *Text typology and translation* (Vol. 26). John Benjamins.
- Turing, A. M. (1950). Computing machinery and intelligence. *Mind*, 49, 433-460.
- United States War Department. (2016). *Motorcycle, solo (Harley-Davidson Model WLA)*. Project Gutenberg. <https://www.gutenberg.org/ebooks/51058>
- Vermeer, H. J. (2000). Skopos and commission in translational action (A. Chesterman, Trans.). In L. Venuti (Ed.), *The translation studies reader* (pp. 191-202). (Original work published 1989). Routledge.
- von Wright, G. H. (1971). *Explanation and understanding*. Cornell University Press.
- Yanqing, D., Edwards, J. S., & Dwivedi, Y. K. (2019). Artificial intelligence for decision making in the era of big data – evolution, challenges and research agenda. *International Journal of Information Management*, 48, 63-71.
- Yashchenko, V. (2024). From McCulloch to GPT-4: Stages of development of artificial intelligence. *Artificial Intelligence*, 29(1), 31-44.
- Yuxiu, Y. (2024). Application of translation technology based on AI in translation teaching. *Systems and Soft Computing*, 6. <https://doi.org/10.1016/j.sasc.2024.200072>
- Wang, D., Ling, D., Yu, H., Yu, H., Zhong, J., Liu, J., Diao, L., Wang, Q., Li, R., Zhang, X., & Wang, Y. (2024). Metabolite associations with childhood and juvenile absence epilepsy: A bidirectional Mendelian randomization study. *Psychiatry and Clinical Psychopharmacology*, 35 (1), 14-21. <https://doi.org/10.5152/pcp.2024.24951>
- Wang, Y. (2023). Artificial intelligence technologies in college English translation teaching. *Journal of Psycholinguistic Research*, 52, 1525-1544. <https://doi.org/10.1007/s10936-023-09960-5>
- Weizenbaum, J. (1966). ELIZA—A computer program for the study of natural language communication between man and machine. *Communications of the ACM*, 9(1), 36-45. <https://doi.org/10.1145/365153.365168>
- Wiwanitkit, S., & Wiwanitkit, V. (2024). How much protection can COVID-19 vaccine give compared to no vaccination? A reappraisal. *Assam Journal of Internal Medicine*, 14(1), 51-52. https://doi.org/10.4103/ajaim.ajaim_23_23
- World Health Organization. (2025). *Alcohol and cancer in the European Union: A call to action*. <https://www.who.int/europe/publications/alcohol-and-cancer-in-the-european-union-a-call-to-action>

APPENDICES

Appendix 1. Source Texts

ST1: The advent of sophisticated generative Artificial Intelligence (AI) systems, capable of producing text, images, music, video, code, etc. often indistinguishable from human creations, has ignited a global conversation about the future of creativity and the definition of authorship [Garson, 2023]. Foundational models, often based on complex artificial neural networks (ANNs), can generate novel output across diverse domains, seemingly encroaching upon capabilities previously considered uniquely human. This rapid technological advance has created significant social friction, manifesting primarily as intense controversies surrounding copyright law, intellectual property (IP), and the perceived threat to creative professions [Silberglitt et al., 2023]. Artists, writers, musicians, and coders grapple with the implications of AI models being trained on vast datasets scraped from the Internet, datasets often containing their copyrighted works without explicit permission or compensation [Samuelson and Lemley, 2024].

This tension stems from fundamental misunderstandings about how these AI systems operate. Often treated as black boxes, their internal mechanisms are poorly understood by the public and even by many policymakers and legal experts. This paper contends that a deeper understanding of the connectionist principles underlying generative AI, including its analogies and crucial differences with biological neural networks (BNNs), is essential for navigating the current debates constructively. We argue that generative AI does not steal or copy; rather, it synthesizes patterns learned from data, operating as a form of alternative intelligence and alternative creativity that shares many analogies with our own human brains. Furthermore, the data from which these models learn often represent a vast repository of collective human knowledge and expression, to which most of us have contributed.

ST2: From this perspective, the current focus on adversarial legal battles and attempts at restrictive regulation may be misplaced and ultimately impractical, particularly with the rise of powerful open models [Rombach et al., 2022] that are becoming ubiquitous and easy to use. This paper proposes a shift towards a pragmatic and synergistic approach. Recognizing generative AI as a powerful, albeit different, creative partner derived from our collective digital footprint allows us to move beyond conflict toward collaboration.

This communication will explore the technical underpinnings of generative AI, contrasting its learning mechanisms with human cognition. It will explore the complexities of the copyright dilemma, examining the limitations of current legal frameworks and the impact of open models. It will develop the concept of generative AI as an embodiment of collective knowledge and creativity. Finally, it will advocate for a future focused on human-AI synergy, using these tools to enhance human capabilities, democratize creativity, and tackle complex societal challenges. This interdisciplinary exploration aligns directly with the profound cultural, social, cognitive, economic, ethical, and philosophical implications of this transformative technology from a human-centered perspective.

ST3: Social media is increasingly used to recruit participants for research studies and has been shown to be an effective means of recruitment, in terms of cost, time, and accessibility. However, researchers often struggle with the challenges of using social media for recruitment, as minimal guidance is available. Without careful consideration of the risks to data quality when using social media as a recruitment tool, the overall results of studies can be compromised. This paper provides three hypothetical scenarios based in part on the real-world experiences of researchers using social media-based recruitment (SMR) methods. The scenarios serve as a discussion and learning opportunity for researchers to identify data quality issues with SMR and postulate how issues can be mitigated. Inexperience with SMR can lead to severe flaws in data collection, which can be mitigated early in the study process with appropriate measures in place. Researchers need to proactively educate themselves and take measures to avoid common pitfalls associated with SMR to achieve robust data quality and research integrity.

ST4: Using personal social media accounts for recruitment is often debated. While this action could make respondents more easily identifiable to the primary investigator (PI), it could also result in a nonrandom, homogenous sample if the PI's personal social media accounts are homogenous (Anderson, 2021). If planning a large-scale or longitudinal study, researchers can consider creating social media accounts designed to specifically advertise the study, such as a TikTok or X (formerly Twitter) account. However, if using this method, consider collaboration with information technology and survey design specialists to ensure survey sites can handle high-volume traffic/activity. While use of certain social media platforms can help researchers reach their target audience, keep in mind that online users who are not part of a researcher's intended POI will likely be able to see the online postings as well. Thus, the consideration of compensation for participants and how to advertise compensation for studies becomes an additional layer of complexity when recruiting online.

ST5: 'Yes!'

When the question whether machine translation is translation is framed as an issue of conceptual structure and terminology, it seems hard to come up with anything other than an affirmative answer. Translation scholars have sought to avoid drawing boundaries and have extended their scope with regard to the sign systems and modalities involved and possible source–target relationships. Nor does one find an explicit conceptual requirement for translation to be performed by human agents. In fact, translation by machines was investigated with great ambition and expectations long before the consolidation of Translation Studies as an academic discipline, hence its undisputed position on Holmes’s (1972) map. Therefore, as long as translation is essentially defined as an interlingual rendering, by whatever means, what machines do will easily seem more central to membership in the conceptual category of translation than any of the more recent types of translational activity that have come to attract increasing scholarly attention.

ST6: In a broader perspective, translation has proved to be a very successful “travelling concept” (e.g., Zwischenberger 2017) that has been adopted in a number of fields, mostly on the strength of the basic idea of conversion or transformation from one thing to another, and largely ignoring research in Translation Studies. Examples include the construal of “cultural translation” as a reshaping of ideas and values, as in processes of migration (see Conway 2020), and the notion of translation “from bench to bedside” in biomedical research (Reid and Shamley 2022). Pressed to revindicate the concept of translation in the face of sprawling metaphorical usage, translation scholars will likely foreground operations between and within sign systems for communication, among which language is the most thoroughly studied and understood. And as long as language-based processes seem crucial to the disciplinary identity of Translation Studies, bilingual processing by machine can be a part of that identity that could not easily be air- brushed from the discipline’s map.

Having responded, affirmatively, to the question of machine translation as translation, I will now turn to machine interpreting, starting with some back- ground on the topic and reviewing the state of research. As will be seen, terminological issues loom large and relate to the question to be addressed.

ST7: “Well!” thought Alice to herself, “after such a fall as this, I shall think nothing of tumbling down stairs! How brave they’ll all think me at home! Why, I wouldn’t say anything about it, even if I fell off the top of the house!” (Which was very likely true.)

Down, down, down. Would the fall never come to an end? “I wonder how many miles I’ve fallen by this time?” she said aloud. “I must be getting somewhere near the centre of the earth. Let me see: that would be four thousand miles down, I think—”

(for, you see, Alice had learnt several things of this sort in her lessons in the schoolroom, and though this was not a very good opportunity for showing off her knowledge, as there was no one to listen to her, still it was good practice to say it over) “—yes, that’s about the right distance—but then I wonder what Latitude or Longitude I’ve got to?” (Alice had no idea what Latitude was, or Longitude either, but thought they were nice grand words to say.)

ST8: Presently she began again. “I wonder if I shall fall right through the earth! How funny it’ll seem to come out among the people that walk with their heads downward! The Antipathies, I think—” (she was rather glad there was no one listening, this time, as it didn’t sound at all the right word) “—but I shall have to ask them what the name of the country is, you know. Please, Ma’am, is this New Zealand or Australia?” (and she tried to curtsy as she spoke—fancy curtseying as you’re falling through the air! Do you think you could manage it?) “And what an ignorant little girl she’ll think me for asking! No, it’ll never do to ask: perhaps I shall see it written up somewhere.”

Down, down, down. There was nothing else to do, so Alice soon began talking again. “Dinah’ll miss me very much to-night, I should think!” (Dinah was the cat.) “I hope they’ll remember her saucer of milk at tea-time. Dinah my dear! I wish you were down here with me! There are no mice in the air, I’m afraid, but you might catch a bat, and that’s very like a mouse, you know. But do cats eat bats, I wonder?” And here Alice began to get rather sleepy, and went on saying to herself, in a dreamy sort of way, “Do cats eat bats? Do cats eat bats?” and sometimes, “Do bats eat cats?” for, you see, as she couldn’t answer either question, it didn’t much matter which way she put it.

ST9: It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of Light, it was the season of Darkness, it was the spring of hope, it was the winter of despair, we had everything before us, we had nothing before us, we were all going direct to Heaven, we were all going direct the other way—in short, the period was so far like the present period, that some of its noisiest authorities insisted on its being received, for good or for evil, in the superlative degree of comparison only.

There were a king with a large jaw and a queen with a plain face, on the throne of England; there were a king with a large jaw and a queen with a fair face, on the throne of France. In both countries it was clearer than crystal to the lords of the State preserves of loaves and fishes, that things in general were settled for ever.

ST10: It was the Dover road that lay, on a Friday night late in November, before the first of the persons with whom this history has business. The Dover road lay, as to him, beyond the Dover mail, as it lumbered up Shooter's Hill. He walked up hill in the mire by the side of the mail, as the rest of the passengers did; not because they had the least relish for walking exercise, under the circumstances, but because the hill, and the harness, and the mud, and the mail, were all so heavy, that the horses had three times already come to a stop, besides once drawing the coach across the road, with the mutinous intent of taking it back to Blackheath. Reins and whip and coachman and guard, however, in combination, had read that article of war which forbade a purpose otherwise strongly in favour of the argument, that some brute animals are endued with Reason; and the team had capitulated and returned to their duty.

With drooping heads and tremulous tails, they mashed their way through the thick mud, floundering and stumbling between whiles, as if they were falling to pieces at the larger joints. As often as the driver rested them and brought them to a stand, with a wary "Wo-ho! so-ho-then!" the near leader violently shook his head and everything upon it--like an unusually emphatic horse, denying that the coach could be got up the hill. Whenever the leader made this rattle, the passenger started, as a nervous passenger might, and was disturbed in mind.

ST11: _3 May. Bistritz. _--Left Munich at 8:35 P. M., on 1st May, arriving at Vienna early next morning; should have arrived at 6:46, but train was an hour late. Buda-Pesth seems a wonderful place, from the glimpse which I got of it from the train and the little I could walk through the streets. I feared to go very far from the station, as we had arrived late and would start as near the correct time as possible. The impression I had was that we were leaving the West and entering the East; the most western of splendid bridges over the Danube, which is here of noble width and depth, took us among the traditions of Turkish rule.

We left in pretty good time, and came after nightfall to Klausenburgh. Here I stopped for the night at the Hotel Royale. I had for dinner, or rather supper, a chicken done up some way with red pepper, which was very good but thirsty. (_Mem._, get recipe for Mina.) I asked the waiter, and he said it was called "paprika hendl," and that, as it was a national dish, I should be able to get it anywhere along the Carpathians. I found my smattering of German very useful here; indeed, I don't know how I should be able to get on without it.

ST12: It was on the dark side of twilight when we got to Bistritz, which is a very interesting old place. Being practically on the frontier--for the Borgo Pass leads from it into Bukovina--it has had a very stormy existence, and it certainly shows marks of it. Fifty years ago a series of great fires took place, which made terrible havoc on five

separate occasions. At the very beginning of the seventeenth century it underwent a siege of three weeks and lost 13,000 people, the casualties of war proper being assisted by famine and disease.

Count Dracula had directed me to go to the Golden Krone Hotel, which I found, to my great delight, to be thoroughly old-fashioned, for of course I wanted to see all I could of the ways of the country. I was evidently expected, for when I got near the door I faced a cheery-looking elderly woman in the usual peasant dress—white undergarment with long double apron, front, and back, of coloured stuff fitting almost too tight for modesty. When I came close she bowed and said, “The Herr Englishman?” “Yes,” I said, “Jonathan Harker.” She smiled, and gave some message to an elderly man in white shirt-sleeves,

who had followed her to the door. He went, but immediately returned with a letter:--

“My Friend.--Welcome to the Carpathians. I am anxiously expecting you. Sleep well to-night. At three to-morrow the diligence will start for Bukovina; a place on it is kept for you. At the Borgo Pass my carriage will await you and will bring you to me. I trust that your journey from London has been a happy one, and that you will enjoy your stay in my beautiful land.

“Your friend,

“DRACULA.”

ST13: To coincide with the UN Summit of the Future in New York (22-23 September) and COP29 (11-22 November) we are using our voices to urge governments to prioritize action for a shared, sustainable future by strengthening climate change education.

Education is often overlooked in the fight against climate change. However, by equipping ourselves with knowledge and skills, we can become empowered changemakers and help address climate change now.

We need a seismic shift to mobilize the true potential of climate change education. A new global SDG 4 indicator now monitors green content in national curriculum frameworks and science and social science curricula. It shows that climate change education, where available, is inadequate and not motivating climate action.

When a student learns the science of climate change, they must also learn how to be part of the solution. Starting from early childhood, climate themes should permeate every subject, grade level and debate. Climate change education within the science lab needs to be framed by real world problems and solutions, referring to our local communities, and waking us up to our collective responsibility to act across social, economic, demographic, and justice dimensions.

We all need to be equipped to deal with emotions that come with a better understanding of climate change, and empowered to have conversations about our changing planet. In addition, educational institutions can set an example by implementing sustainable practices and reducing their carbon footprint.

Together, let's advocate for more comprehensive, holistic and effective climate change education to pave the way for a more sustainable future for all.

ST14: To: Governments

We call on governments to:

1. Improve green education content:

Governments must embed environment, sustainability, biodiversity, and climate change education into their curricula in all subjects at all levels.

2. Connect education to the outside world:

Governments need to make the shift from teaching about to teaching how to adapt and act in the face of climate change. Educators and education leaders should incorporate locally and nationally contextualized, social-emotional and action-oriented climate education into the classroom in all subjects and at all levels.

3. Improve cohesion:

Education is part of the solution to climate change. Stop the silos that treat education as separate from other climate mitigation activities so that we can work together to find solutions.

4. Monitor uptake of green education content:

Governments and civil society should regularly report on the breadth and depth of green content in school curricula at all levels.

5. Make room at the table:

Governments need to meaningfully engage with youth in designing and delivering climate change education to ensure that education systems are meeting the needs of 21st century learners.

ST15: RAVIOLI

Put on the bread board about two pounds of flour in a heap; make a hollow in the middle and put in it a piece of butter, three egg-yolks, salt and three or four tablespoonfuls of lukewarm water. Make a paste and knead it well, then let it stand for an hour, wrapped or covered with a linen cloth. Then spread the paste to a thin sheet, as thin as a ten-cent piece.

Chop and grind pieces of roast or boiled chicken meat: add to it an equal part of marrow from the bones of beef and pieces of brains, three yolks, some crumbs of bread soaked in milk or broth and some grated cheese (Parmesan or Swiss). Rub through a sieve and make little balls as big as a hazelnut, which are to be placed at equal distances (a little more than an inch) in a line over the sheet of paste.

Beat a whole egg and pass it over the paste with a brush all around the little balls. Cover these with another sheet of paste, press down the intervals between each ball, and then separate each section from the other with a knife. Moisten the edges of each section with the finger dipped in cold water, to make them stick together, and press them down with the fingers or the prongs of a fork. Then put to boil in water seasoned with salt or, better still, in broth. The ravioli are then to be served hot seasoned with cheese and butter or with brown stock or tomato sauce.

ST16: TOMATO SAUCE

(Salsa di Pomodoro)

Chop together, fine, one quarter of an onion, a clove of garlic, a piece of celery as long as your finger, a few bay leaves and just enough parsley. Season with a little oil, salt and pepper, cut up seven or eight tomatoes and put everything over the fire together. Stir it from time to time and when you see the juice condensing into a thin custard strain through a sieve, and it is ready for use.

When fresh tomatoes are not available the tomato paste may be used. This is a concentrated paste made from tomatoes and spices which is to be had, at all Italian grocers', now so numerous in all American cities. Thinned with water, it is a much used ingredient in Italian recipes. Catsup and concentrated tomato soup do not make satisfactory substitutes as they are too sweet in flavor. Of course canned tomatoes seasoned with salt and a bit of bay leaf, can always be used instead of fresh tomatoes.

This sauce serves many purposes. It is good on boiled meat; excellent to dress macaroni, spaghetti or other pastes which have been seasoned with butter and cheese, or on boiled rice seasoned in the same way (see Risotto). Mushrooms are a fine addition to it.

When using concentrated paste the following recipes will be found to give good results:

Chop one onion, one carrot and a celery stalk: form a little bunch of parsley and other aromatic greens and put everything to brown in a saucepan together with a piece of butter. Add a reasonable portion of tomato paste while cooking, stir and keep on a low fire until the sauce assumes the necessary consistency.

ST17: Having admitted the above to be an incontestable fact, you will also see that it is as great an accomplishment to listen with an air of interest and attention, as it is to speak well.

To be a good listener is as indispensable as to be a good talker, and it is in the character of listener that you can most readily detect the man who is accustomed to good society. Nothing is more embarrassing to any one who is speaking, than to perceive signs of weariness or inattention in the person whom he addresses.

Never interrupt any one who is speaking; it is quite as rude to officiously supply a name or date about which another hesitates, unless you are asked to do so. Another gross breach of etiquette, is to anticipate the point of a story which another person is reciting, or to take it from his lips to finish it in your own language. Some persons plead as an excuse for this breach of etiquette, that the reciter was spoiling a good story by a bad manner, but this does not mend the matter. It is surely rude to give a man to understand that you do not consider him capable of finishing an anecdote that he has commenced.

ST18: In a general conversation, never speak when another person is speaking, and never try by raising your own voice to drown that of another. Never assume an air of haughtiness, or speak in a dictatorial manner; let your conversation be always amiable and frank, free from every affectation.

Put yourself on the same level as the person to whom you speak, and under penalty of being considered a pedantic idiot, refraining from explaining any expression or word that you may use.

Never, unless you are requested to do so, speak of your own business or profession in society; to confine your conversation entirely to the subject or pursuit which is your own speciality is low-bred and vulgar.

Make the subject for conversation suit the company in which you are placed. Joyous, light conversation will be at times as much out of place, as a sermon would be at a dancing party. Let your conversation be grave or gay as suits the time or place.

In a dispute, if you cannot reconcile the parties, withdraw from them. You will surely make one enemy, perhaps two, by taking either side, in an argument when the speakers have lost their temper.

Never gesticulate in every day conversation, unless you wish to be mistaken for a fifth rate comedian.

Appendix 2. Guidelines and Translation Briefs

Guideline for ST1 and ST2: This part of the article entitled “We are all creators: Generative AI, collective knowledge, and the path towards human-AI synergy” will be published as a Turkish translation in a Turkish scientific journal for studies on AI. Accordingly, please translate the source text into Turkish by following the translation brief below.

Translation Brief for ST1 and ST2:

- Intended function: To inform target audience about the general principles of AI
- Target audience: People who read scientific/academic papers and are engaged in AI
- Medium: Scientific journal
- Text type: Informative
- Style: Clear, semi-formal, and concise

Guideline for ST3 and ST4: The article titled “Maintaining data quality when using social media for recruitment: Ethical considerations and recommendations” will be published digitally and in Turkish translation in a scientific journal in the field of Communication Studies.

Translation Brief for ST3 and ST4:

- Intended function: To inform target audience about data quality and ethics.
- Target audience: People who read scientific/academic papers
- Medium: Digital scientific journal
- Text type: Informative
- Style: Clear, semi-formal, and concise

Guideline for ST5 and ST6: The Turkish translation of this article on machine translation and interpreting will be published in a Translation and Interpreting Studies journal where substantial works on these topics is collected and published periodically. Accordingly, please translate this section of the article according to the translation brief below.

Translation Brief for ST5 and ST6:

- Intended function: To inform target audience about machine interpreting

- Target audience: People who read scientific/academic papers about interpreting and machine translation.
- Medium: Scientific journal on Translation and Interpreting Studies
- Text type: Informative
- Style: Clear, semi-formal, and concise

Guideline for ST7 and ST8: A new publishing house in Turkey wants to publish *Alice's Adventures in Wonderland*. The publisher's audience is not specifically children, and this translation is not specifically aimed at children. Please translate the relevant chapter into Turkish according to this information and the translation brief below.

Translation Brief for ST7 and ST8:

- Intended function: To produce a culturally resonant and stylistically faithful Turkish translation of the canonical literary work *Alice's Adventures in Wonderland* for a general readership. The translation should make the work accessible and engaging for Turkish-speaking audiences beyond children, while retaining the whimsical tone, internal monologue, and light philosophical humor of the original.
- Target audience: General literary readers
- Medium: Book
- Text type: Expressive
- Style: Literary and aesthetic tone

Guideline for ST9 and ST10: Charles Dicken's *A Tale of Two Cities* will be republished by a well-established Turkish publishing house. As the previous Turkish translation was quite old, the publisher wants a more recent and modern Turkish translation. According to this information and the translation brief given below, please translate the parts of the novel given to you as the source text into Turkish.

Translation Brief for ST9 and ST10:

- Intended function: To produce a modernized, fluent, and culturally resonant Turkish translation of *A Tale of Two Cities* novel. The translation must reflect the poetic and rhetorical structure of the source text while making it engaging for today's readers.
- Target audience: General literary readers who are seeking classics in contemporary Turkish
- Medium: Book
- Text type: Expressive

- Style: Literary and aesthetic tone, modern and natural Turkish

Guideline for ST11 and ST12: Bram Stoker’s well-known literary work *Dracula* will be translated into Turkish for university literature students and published as a chapter in a university-level literature textbook. Accordingly, and following the translation brief below, please translate the source text into Turkish.

Translation Brief for ST11 and ST12:

- Intended function: To produce a complete Turkish translation of Bram Stoker’s *Dracula* tailored for academic study at the university level.
- Target audience: Undergraduate and graduate students studying English or Comparative Literature
- Medium: Digital and printed textbook chapter
- Text type: Expressive
- Style: Literary, aesthetic, journal, semi-formal tone and cultural references.

Guideline for ST13 and ST14: The campaign launched by UNESCO for global warming will be translated into Turkish and published on UNESCO’s website to raise international awareness. Considering that and complying with the translation brief given below, please translate the source text into Turkish.

Translation Brief for ST13 and ST14:

- Intended function: To produce a clear, motivating, and accessible Turkish translation of the campaign.
- Target audience: Turkish-speaking educators, policymakers, civil society actors, students
- Medium: UNESCO’s website
- Text type: Operative
- Style: Action-driven, modern Turkish and collective language

Guideline for ST15 and ST16: A recipe book for Italian food will be published by a medium-sized Turkish publishing house. Accordingly, and following the translation brief below, please translate the source text into Turkish.

Translation Brief for ST15 and ST16:

- Intended function: To create a clear, accurate, and user-friendly Turkish translation of Italian food recipes.
- Target audience: Turkish-speaking food enthusiasts and home cooks

- Medium: Printed cookbook
- Text type: Operative
- Style: Neutral, practical and action-driven

Guideline for ST17 and ST18: A translation of a book entitled “*The gentlemen’s book of Etiquette and Manual of Politeness: Being A Complete Guide for A Gentleman’s Conduct In All His Relations Towards Society.*” is to be published in a small-scale but long-standing men’s magazine. Accordingly, and following the translation brief below, please translate the given source text into Turkish.

Translation Brief for ST17 and ST18:

- Intended function: To produce a fluent and culturally adapted Turkish translation of a historical etiquette text.
- Target audience: Adult male Turkish readers
- Medium: Small-scale but long-standing men’s magazine
- Text type: Operative
- Style: Neutral, practical and action-drive

Appendix 3. Questionnaires

Pre-Questionnaire:

<i>Yıldız Technical University – Interlingual and Intercultural Translation Studies Master's Program</i>  YILDIZ TEKNİK ÜNİVERSİTESİ PRE-QUESTIONNAIRE Questionnaire Conductor: Furkan SUNAY <table border="1"><thead><tr><th colspan="2">IMPORTANT NOTES</th></tr></thead><tbody><tr><td>•</td><td>This questionnaire was prepared for Furkan Sunay's Master's Thesis under the supervision of Assoc. Prof. Senem Öner Bulut.</td></tr><tr><td>•</td><td>The data obtained from the questionnaire is going to be used for Furkan Sunay's Master's Thesis and other studies.</td></tr><tr><td>•</td><td>Your personal information is not going to be published or shared anywhere.</td></tr><tr><td>•</td><td>Please mark the most appropriate option under each question.</td></tr></tbody></table> Name-Surname: Signature: 1- I often get support from Artificial Intelligence (AI) when translating. ☐ Strongly Disapprove ☐ Disapprove ☐ Undecided ☐ Approve ☐ Strongly Approve 2- I think getting support from AI while translating makes my work easier and reduces the time I spend. ☐ Strongly Disapprove ☐ Disapprove ☐ Undecided ☐ Approve ☐ Strongly Approve 3- I think getting any help from AI makes my translation worse. ☐ Strongly Disapprove ☐ Disapprove ☐ Undecided ☐ Approve ☐ Strongly Approve 4- I think it would be beneficial to get support from AI when analyzing the source text and deciding on my translation strategies before translating. ☐ Strongly Disapprove ☐ Disapprove ☐ Undecided ☐ Approve ☐ Strongly Approve 5- For me, it would be useful when translating if the AI summarizes the source text before translation. ☐ Strongly Disapprove ☐ Disapprove ☐ Undecided ☐ Approve ☐ Strongly Approve 6- A feature where the AI extracts the most important terms from the source text and gives their dictionary meanings would have provided me no benefit when translating. ☐ Strongly Disapprove ☐ Disapprove ☐ Undecided ☐ Approve ☐ Strongly Approve 7- I think a translation brief feature, which is automatically generated by the AI based on the analysis of the source text, would be useful for me to practice translating on my own. ☐ Strongly Disapprove ☐ Disapprove ☐ Undecided ☐ Approve ☐ Strongly Approve 8- I think getting support from AI before translating has a negative effect on my creativity and critical thinking. ☐ Strongly Disapprove ☐ Disapprove ☐ Undecided ☐ Approve ☐ Strongly Approve 9- In my opinion, an automatic text type analysis feature generated by AI before translation would give me a bias in my translation. ☐ Strongly Disapprove ☐ Disapprove ☐ Undecided ☐ Approve ☐ Strongly Approve 10- I think there should be more use of AI in translator education. ☐ Strongly Disapprove ☐ Disapprove ☐ Undecided ☐ Approve ☐ Strongly Approve 11- What do you think about the use of AI in translation? (Open-ended response). Please write any thoughts, suggestions and comments below: 	IMPORTANT NOTES		•	This questionnaire was prepared for Furkan Sunay's Master's Thesis under the supervision of Assoc. Prof. Senem Öner Bulut.	•	The data obtained from the questionnaire is going to be used for Furkan Sunay's Master's Thesis and other studies.	•	Your personal information is not going to be published or shared anywhere.	•	Please mark the most appropriate option under each question.
IMPORTANT NOTES										
•	This questionnaire was prepared for Furkan Sunay's Master's Thesis under the supervision of Assoc. Prof. Senem Öner Bulut.									
•	The data obtained from the questionnaire is going to be used for Furkan Sunay's Master's Thesis and other studies.									
•	Your personal information is not going to be published or shared anywhere.									
•	Please mark the most appropriate option under each question.									

Post-Questionnaire:

Yıldız Technical University – Interlingual and Intercultural Translation Studies Master's Program



POST-QUESTIONNAIRE Questionnaire Conductor: Furkan SUNAY

IMPORTANT NOTES

- This questionnaire was prepared for Furkan Sunay's Master's Thesis under the supervision of Assoc. Prof. Senem Öner Bulut.
- The data obtained from the questionnaire is going to be used for Furkan Sunay's Master's Thesis and other studies.
- Your personal information is not going to be published or shared anywhere.
- Please mark the most appropriate option under each question.

Name-Surname:

Signature:

- 1- I often get support from Artificial Intelligence (AI) when translating.
☐ Strongly Disapprove ☐ Disapprove ☐ Undecided ☐ Approve ☐ Strongly Approve
- 2- I think getting support from AI while translating makes my work easier and reduces the time I spend.
☐ Strongly Disapprove ☐ Disapprove ☐ Undecided ☐ Approve ☐ Strongly Approve
- 3- I think getting any help from AI makes my translation worse.
☐ Strongly Disapprove ☐ Disapprove ☐ Undecided ☐ Approve ☐ Strongly Approve
- 4- I think it is useful to get support from AI when analyzing the source text and deciding on my translation strategies before translating.
☐ Strongly Disapprove ☐ Disapprove ☐ Undecided ☐ Approve ☐ Strongly Approve
- 5- For me, the AI summarization feature of the source text before translation is beneficial when translating.
☐ Strongly Disapprove ☐ Disapprove ☐ Undecided ☐ Approve ☐ Strongly Approve
- 6- In my opinion, the feature of AI, which extracts the most important terms from the source text and gives their dictionary meanings, does not provide any benefit to me when translating.
☐ Strongly Disapprove ☐ Disapprove ☐ Undecided ☐ Approve ☐ Strongly Approve
- 7- I find the translation brief feature, which is automatically generated by AI based on the analysis of the source text, helpful for practicing translation on my own.
☐ Strongly Disapprove ☐ Disapprove ☐ Undecided ☐ Approve ☐ Strongly Approve
- 8- I think getting support from AI before translating has a negative effect on my creativity and critical thinking.
☐ Strongly Disapprove ☐ Disapprove ☐ Undecided ☐ Approve ☐ Strongly Approve
- 9- For me, the automatic text type analysis feature generated by AI before translation causes bias in my translation.
☐ Strongly Disapprove ☐ Disapprove ☐ Undecided ☐ Approve ☐ Strongly Approve
- 10- I think there should be more use of AI in translator education.
☐ Strongly Disapprove ☐ Disapprove ☐ Undecided ☐ Approve ☐ Strongly Approve
- 11- What do you think about the use of AI in translation? (Open-ended response). Please write any thoughts, suggestions and comments below:

Appendix 4. Translation Quality Assessment Report

EXPERT TRANSLATOR EDUCATOR TRANSLATION QUALITY ASSESSMENT FORM

Expert Code:

Source and Target Text Information

Text Code:

Text Type:

Source Text (English):

Target Text (Turkish):

Segmentation (ENG-TR):

#	English (ST)	Turkish (TT)
1		
2		
3		
4		

Translation Brief:

1. Translation Quality Assessment (TOA) – The MQM Error Typology:

#	Category	Subcategory	Severity	Segment	Explanation
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

General overview and additional notes:

Appendix 5. Ethics Committee Approval



YILDIZ TEKNİK ÜNİVERSİTESİ
Sosyal ve Beşeri Bilimler Araştırmaları Etik Kurulu

Toplantı Tarihi: 02.05.2025

Toplantı No: 2025.05

SOSYAL VE BEŞERİ BİLİMLER ARAŞTIRMALARI ETİK KURULU TOPLANTI KARARI

Yürütücülüğünü Üniversitemiz Sosyal Bilimler Enstitüsü öğretim üyelerinden Doç. Dr. Senem Öner Bulut danışmanlığında lisansüstü öğrencisi FURKAN SUNAY tarafından yapılacak olan "The Effect Of Using Artificial Intelligence Tools In Pre Translation Process On Translation Quality Çeviri Öncesi Süreçte Yapay Zeka Araçları Kullanımının Çeviri Kalitesine Etkisi" adlı çalışma ve bu çalışmada kullanılacak veri toplama araçları ve yöntemlerine ilişkin bilgilerde etiğe aykırı herhangi bir bulguya rastlanmamıştır.

Etik Kurul Üyeleri

DocuSigned by:

Prof. Dr. Murat DONDURAN
Başkan

DocuSigned by:

Prof. Dr. Fatih GÜLGEN
Üye

DocuSigned by:

Doç. Dr. Begüm SATICI
Üye

DocuSigned by:

Doç. Dr. Gülbin ÖZKAN
Üye

DocuSigned by:

Prof. Dr. Yiğit EVREN
Üye

DocuSigned by:

Doç. Dr. Nur CEMELELİOĞLU
Üye

DocuSigned by:

Dr. Öğr. Üyesi H. Ağan KARADUMAN
Üye