

**National and Kapodistrian University of Athens
Department of English Language and Literature**

**MA Programme “English Language, Linguistics and Translation”
Specialization: “Translation Studies and Interpreting”**

**From Translation to Transformation:
Contact-Induced Language Change in Greek via
Neural Machine Translation from English**

Georgia-Anastasia Stavrakidou

ID number: 7563112400009

Supervisor:

Professor Nikolaos Lavidas

Supervising Committee:

Professor Nikolaos Lavidas

Dr. Diamantoula Korda, Associate Lecturer

Professor Emerita Maria Sidiropoulou

January 2026

Declaration page

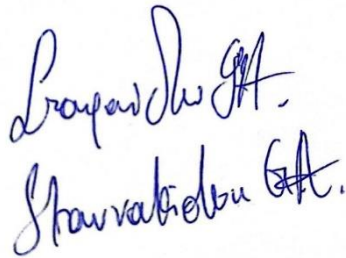
Declaration

This submission is my own work. Any quotation from, or description of, work of others is acknowledged herein by reference to the sources, whether published or unpublished.

Name: Georgia-Anastasia Stavrakidou

Signature

Athens, 26/01/2026

Handwritten signature in blue ink, reading "Georgia-Anastasia Stavrakidou GA." in a cursive script.

To Sophie

ACKNOWLEDGEMENTS

I would like to express my deepest gratitude to my supervisor, Professor Nikolaos Lavidas, for his invaluable guidance, patience and unwavering support throughout this journey. His insightful feedback and encouragement have been fundamental in shaping this dissertation and in helping me grow as a researcher.

I am thankful to all my professors and colleagues in the MA programme for the knowledge they have shared and for the stimulating environment they have created.

On a personal level, I would like to express my gratitude to my family for their unconditional love, patience and constant encouragement. Their support has given me strength throughout this demanding, yet rewarding journey.

Abstract

This dissertation examines linguistic convergence in Greek institutional discourse produced through human translation and neural machine translation (NMT) from English source texts. Drawing on language contact theory, the study conceptualises NMT as a digitally mediated contact environment in which source-language patterns may be systematically reinforced. The analysis addresses three research questions: which syntactic, grammatical, lexical and stylistic shifts emerge in Greek NMT output; whether these shifts indicate convergence toward English linguistic norms suggestive of contact-induced change; and the extent to which e-Translation, Google Translate and DeepL display distinct translational profiles. The empirical material consists of European Commission press releases analysed in close alignment with their Greek renditions produced either by professional human translators or via e-Translation. The same English source texts were additionally submitted manually to Google Translate and DeepL in order to generate controlled Greek outputs. A reference corpus of non-translated Greek institutional press releases issued by the Hellenic Parliament provides a baseline for comparison. Using AntConc, the study combines quantitative and qualitative corpus-based analysis focusing on recurrent convergence-related features such as nominalisation, agency representation, modality and standardised institutional phraseology. The findings indicate systematic convergence toward English-oriented discourse patterns in NMT output at both structural and discourse levels, alongside system-specific translational tendencies rather than a uniform machine translation style. The study contributes to translation studies and contact linguistics by foregrounding neural machine translation as an active site of contemporary language contact.

Keywords: neural machine translation, language, contact, convergence, institutional, discourse

Περίληψη

Η παρούσα διπλωματική εργασία εξετάζει τη γλωσσική σύγκλιση στον ελληνικό θεσμικό λόγο που παράγεται μέσω ανθρώπινης αλλά και νευρωνικής μηχανικής μετάφρασης από αγγλικά κείμενα-πηγές. Με βάση τη θεωρία της γλωσσικής επαφής, η μελέτη προσεγγίζει τη νευρωνική μηχανική μετάφραση ως πεδίο σύγχρονης γλωσσικής επαφής, στο οποίο δομές και μοτίβα της γλώσσας-πηγής ενδέχεται να ενισχύονται συστηματικά. Η ανάλυση επικεντρώνεται σε τρία ερευνητικά ερωτήματα: ποια συντακτικά, γραμματικά, λεξικά και υφολογικά μοτίβα αναδύονται στις ελληνικές αποδόσεις της νευρωνικής μετάφρασης· κατά πόσον τα μοτίβα αυτά υποδηλώνουν σύγκλιση προς αγγλικά γλωσσικά πρότυπα, γεγονός που θα μπορούσε να ερμηνευθεί ως ένδειξη γλωσσικής αλλαγής λόγω γλωσσικής επαφής· και σε ποιο βαθμό τα συστήματα e-Translation, Google Translate και DeepL παρουσιάζουν διακριτά μεταφραστικά προφίλ. Το υλικό της μελέτης αποτελείται από δελτία Τύπου της Ευρωπαϊκής Επιτροπής στην αγγλική γλώσσα και τις αντίστοιχες ελληνικές αποδόσεις τους, οι οποίες έχουν παραχθεί είτε από επαγγελματίες μεταφραστές είτε μέσω του συστήματος e-Translation. Τα ίδια αγγλικά κείμενα-πηγές υποβλήθηκαν επιπλέον χειροκίνητα στα συστήματα Google Translate και DeepL, προκειμένου να παραχθούν ελεγχόμενες ελληνικές εκδοχές. Για λόγους σύγκρισης, χρησιμοποιείται ένα σύνολο μη μεταφρασμένων ελληνικών θεσμικών δελτίων Τύπου της Βουλής των Ελλήνων. Με τη χρήση του AntConc, η μελέτη συνδυάζει ποσοτική και ποιοτική ανάλυση με βάση σώματα κειμένων, εστιάζοντας σε επαναλαμβανόμενα χαρακτηριστικά σύγκλισης, όπως η ονοματοποίηση, η αναπαράσταση της δράσης και της ευθύνης, οι επιλογές τροπικότητας και η τυποποιημένη θεσμική φρασεολογία. Τα ευρήματα δείχνουν ότι οι ελληνικές αποδόσεις της NMT παρουσιάζουν συστηματική σύγκλιση προς αγγλοκεντρικά μοτίβα λόγου, τόσο σε δομικό όσο και σε επίπεδο λόγου, ενώ παράλληλα αναδεικνύονται συστηματικά διαφοροποιημένες μεταφραστικές τάσεις και όχι ένα ενιαίο ύφος μηχανικής μετάφρασης. Η μελέτη συμβάλλει στις Μεταφραστικές Σπουδές και τη Γλωσσική Επαφή αναδεικνύοντας τη νευρωνική μηχανική μετάφραση ως ενεργό πεδίο σύγχρονης γλωσσικής επαφής.

Λέξεις κλειδιά: μηχανική νευρωνική μετάφραση, γλώσσα επαφή, σύγκλιση, θεσμικός, λόγος

Table of Contents	
Declaration page	ii
Acknowledgements	iv
Abstract	v
Περίληψη.....	vi
Chapter 1- Introduction	1
1.1 Background and Rationale	1
1.2 Problem Statement.....	3
1.3 Aims and Objectives.....	3
1.4 Research Questions	4
1.5 Significance of the Study	5
Chapter 2 - Literature Review: Translation, Contact and Change	7
2.1 Introduction to Language Contact Theory.....	7
2.2 English as a Prestige Contact Language in Contemporary Europe.....	9
2.3 English-Induced Linguistic Change in Modern Greek: Evidence from Corpus-Based Studies.....	10
2.4. Discourse and Pragmatic transfer in Translation	13
2.5 From Human to Machine Translation: Evolution, Quality and Algorithmic Mediation	14
2.5.1 The Shift from Human to Neural Translation	14
2.5.2 Quality Evaluation and the Limits of Automatic Metrics	14
2.5.3 System-Specific Behaviour and Algorithmic Translation Voices	16
2.6 Stylistic and Algorithmic Drift in Neural Machine Translation Output	17
2.7 Neural Machine Translation and Greek: An Under-Researched Interface	18
2.8 Concluding Remarks	18
Chapter 3-Methodology	20
3.1 Research Design and Rationale	20
3.2 Data Selection and Sources.....	20
3.4 Use of AntConc and Corpus Analysis Tools	22
3.5 Analytical Framework	25
3.6 Procedures and Workflow.....	26
3.7 Reliability and Limitations	27
Chapter 4-Findings and Analysis.....	29
4.1 Introduction to the Analysis.....	29
4.2 Non-translated Greek institutional discourse: the Hellenic Parliament press corpus	30

4.2.1 Explicit agency and verb-driven syntactic organisation	31
4.2.2 Modality as rhetorical stance rather than programmatic projection.....	33
4.2.3 Evaluation, dialogicity and rhetorical density	35
4.2.4 Interim synthesis: the baseline for convergence	38
4.3 Human-Translated Greek: Register-Sensitive Mediation and Filtered Convergence	39
4.3.1 Nominalisation as structural harmonisation	39
4.3.2 Discourse reframing in headings and slogans	40
4.3.3 Purpose constructions and controlled impersonalisation	41
4.3.4 Institutional jargon.....	42
4.3.5 What the AntConc evidence adds.....	42
4.3.6 Interim conclusion: why HT matters for convergence.....	43
4.4 e-Translation: Machine-translated Greek EU texts	44
4.4.1 Lexical distribution and institutional anchoring	47
4.4.2 Structural correspondence and syntactic mirroring	49
4.4.3 Nominal density and terminological literalism.....	50
4.4.4 Modality and futurity	51
4.4.5 Copular evaluation and agency suppression.....	53
4.4.6 Formulaicity and syntactic regularisation	55
4.4.7 Interim synthesis: the e-Translation profile.....	55
4.5 Machine-translated Greek via Google Translate: source-oriented transfer and procedural convergence	56
4.5.1 Agency: abstraction and process-driven subjects	57
4.5.2 Modality: uniform futurity and projection	58
4.5.3 Syntactic organisation: limited restructuring.....	59
4.5.4 Nominal density and calqued institutional phrases.....	59
4.5.5 Evaluation: copular framing and informational tone	60
4.5.6 Interim assessment.....	61
4.6 Machine-translated Greek (DeepL): fluency-driven restructuring and creative convergence	61
4.6.1 Agency: abstract institutional actors and fluency-driven masking	62
4.6.2 Modality: projection, plausibility and softened futurity.....	63
4.6.3 Syntactic fidelity and nominalising constructional shifts.....	65
4.6.4 Lexical choice, generalisation and terminological dilution.....	66
4.6.5 Evaluation, stance and tonal modulation.....	68
4.6.6 Interim synthesis: the DeepL profile.....	69

4.7 Comparative synthesis: differentiated NMT voices and convergence pathways	70
Chapter 5-Discussion	74
5.1 Interpreting the findings.....	74
5.2 Revisiting the research questions	75
5.3 Neural machine translation as a site of contact-induced change.....	76
5.4 Mediation, filtering and acceleration in machine-mediated translation	78
5.5 Differentiated NMT voices and translational regimes	80
5.6 Implications for Greek institutional discourse	81
5.7 Limitations and scope	82
Chapter 6-Conclusion.....	84
6.1 Overview and restatement of the research focus.....	84
6.2 Summary of key findings.....	84
6.3 Theoretical contribution.....	86
6.4 Methodological contribution	87
6.5 Broader implications.....	87
6.6 Directions for future research.....	88
Appendices	90
Appendix 1 - STs and TTs corpora (Google Drive).....	90
Appendix 2- AntConc Output Samples by Corpus and Translation Mode	91
1.1 Human translated Greek corpus	91
1.2 e-Translation Greek Output	92
1.3 Google Translate output.....	93
1.4 DeepL output.....	95
Appendix 3- AntConc Samples by non-translated (original) Greek texts.....	97
1.5 Non-translated Greek texts	97
Appendix 4- AntConc sample by ST (original English texts)	99
1.6 English STs	99
Appendix 5a- Nominalizations across corpora	100
Appendix 5b- Passive Constructions across corpora	100
References	101

Chapter 1- Introduction

1.1 Background and Rationale

In recent years, the rapid advancement of neural machine translation (NMT) has transformed the landscape of translation technologies and practices. Systems such as *Google Translate* and *DeepL* have significantly improved in terms of fluency, accuracy and contextual awareness, allowing machine translation to reach unprecedented levels of quality. The widespread use of these tools has extended beyond everyday communication, gradually permeating institutional and professional settings. Notably, the European Commission has incorporated NMT into its multilingual infrastructure through the *e-Translation* platform, which facilitates communication for its Press Corner section. This institutional adoption of NMT highlights both the growing trust in automated translation systems and the need to examine their linguistic, stylistic and cultural implications, particularly in smaller languages such as Modern Greek. This technological ubiquity has transformed translation from a specialized practice into a pervasive linguistic phenomenon, potentially shaping the very norms of the target languages involved. Yet, human translators are recruited when it comes to translating Regulations, Laws and official documents. This is mainly the reason why the European Commission has been using e-Translation for News but Human Translators for official Regulations.

This distinction suggests institutional caution regarding the discursive reliability of automatic translation in high-stakes contexts which reflects concerns primarily related to legal responsibility and textual reliability rather than to linguistic correctness per se. The present study, however, shifts the focus from institutional risk to discursive effects, examining how repeated exposure to machine-translated institutional texts may shape patterns of Greek institutional language.

Previous research has demonstrated that translation, particularly in scientific and institutional genres, functions as a channel of linguistic influence and norm formation. Malamatidou (2013) shows that features such as the passive voice occur with greater frequency in translated Greek popular science texts, while she further

argues (Malamatidou 2017) that translation-induced linguistic change often goes unnoticed precisely because it is introduced through processes of adaptation and institutional normalisation. In this light, the large-scale deployment of neural machine translation in institutional environments raises questions about the cumulative, long-term effects of machine-mediated translation on contemporary Greek institutional discourse. It is this underexplored dimension of contact-induced convergence that the present study seeks to investigate.

In the case of Modern Greek, a language with a relatively small global presence, this exposure is particularly significant. Greek speakers increasingly read and interact with machine-translated content, much of which originates from English-dominated sources. Given the structural and stylistic differences between English and Greek, the consistent presence of English-based syntactic and lexical patterns in Greek NMT outputs raises an important question: could translation technology act as a vector of contact-induced linguistic change?

The concept of *contact-induced change*, traditionally explored in bilingualism and sociolinguistics (Thomason 2001; Winford 2003), refers to the process through which continuous exposure to a dominant language leads to structural convergence in a recipient language. Within the digital age, this contact could occur through machine-mediated translation and not necessarily only through human interaction. Thus, NMT may function as a new form of “digital contact” between languages: subtle, large-scale and algorithmically consistent.

This study is situated at the intersection of translation studies, contact linguistics and digital discourse analysis and aims to explore how repeated patterns in machine-translated Greek might reveal traces of English influence. By comparing three NMT systems, namely e-Translation, Google Translate and DeepL, with authentic, human-produced Greek texts, the research seeks to uncover the distinct patterns of each system as well as the broader sociolinguistic implications they have.

In this way, the study contributes to an emerging field of inquiry that views translation as a process of linguistic transfer and as a potential agent of linguistic transformation within smaller European languages.

1.2 Problem Statement

Although machine translation has been extensively examined in terms of accuracy, post-editing effort and usability, its long-term linguistic consequences remain largely unexplored. Existing research on NMT has primarily focused on system performance, human-machine collaboration and domain-specific translation quality. Much less attention has been given to the possibility that recurrent patterns in NMT output may gradually influence the target language, particularly when such outputs circulate widely and become embedded in public and institutional communication.

1.3 Aims and Objectives

In the Greek context, this gap is especially pronounced. Modern Greek has received minimal scholarly attention regarding the stylistic and structural influence of English-driven NMT output, despite the fact that Greek users are exposed on a daily basis to translations produced by Google Translate, DeepL and the European Commission's e-Translation system. The primary aim of this study is to investigate whether neural machine translation (NMT) functions as a mechanism of contact-induced linguistic influence on Modern Greek. More specifically, the study examines whether English-to-Greek machine-translated output exhibits systematic lexico-grammatical and discourse-level patterns that signal convergence toward English linguistic norms.

To address this aim, the study undertakes a comparative analysis of Greek texts produced under different conditions of linguistic mediation. It analyses machine-translated output generated by three NMT systems, namely e-Translation, Google Translate and DeepL, alongside human-translated texts, drawn from European Commission Press Corner and non-translated Greek institutional discourse (as a baseline for comparison) drawn from the Hellenic Parliament Press Corner. Through this comparison, the study seeks to identify recurring structural, stylistic and pragmatic features in NMT output, to determine whether such features reflect established translation norms or represent intensified patterns associated with

algorithmic mediation. If these translations systematically reproduce English-like syntactic or lexical structures then they may contribute to a subtle convergence toward English linguistic norms.

A further objective of the study is to examine variation across NMT systems in order to assess whether each engine exhibits a distinct translational profile or “voice” in Greek. By situating these findings within a broader contact-linguistic framework, the study aims to contribute to ongoing discussions about technology-driven language change, using Modern Greek as a case study for understanding how neural machine translation may shape linguistic norms in smaller European languages.

The selection of the three neural machine translation systems examined in this study is based on their functional differentiation and widespread use in the Greek context. e-Translation was selected as the official neural machine translation system of the European Commission, specifically designed for institutional communication and extensively used for the dissemination of EU content in Greek. Google Translate was included due to its dominant presence as a general-purpose translation tool and its broad adoption by Greek users for both everyday and professional purposes. DeepL was selected as a widely used alternative NMT system, often perceived as producing higher-quality and more fluent output, particularly in professional and academic contexts. Therefore, these three systems represent distinct NMT paradigms, allowing for a comparative analysis of different convergence pathways and translational profiles within the same source-target language pair.

1.4 Research Questions

In line with the above aims and objectives, the study addresses the following research questions:

1. What linguistic shifts- syntactic, grammatical, lexical, pragmatic and stylistic- emerge in Greek NMT output from English source texts?

2. Do these shifts indicate systematic convergence toward English linguistic norms, suggesting potential contact-induced change?
3. To what extent do Google Translate, DeepL and e-Translation display distinct translational voices or stylistic tendencies in their Greek output?

The research questions are framed within theories of contact-induced language change, particularly as developed by Thomason (2001) and Winford (2003). The study approaches neural machine translation as a form of digitally mediated language contact through which recurrent exposure to English structures may influence patterns of Greek institutional discourse. Accordingly, convergence toward English linguistic norms is examined as a potential outcome of sustained, systematised translation-mediated contact rather than as isolated translational behaviour.

1.5 Significance of the Study

This study is significant at both theoretical and applied levels. Theoretically, it contributes to research on translation and digital language change by examining neural machine translation as a mechanism of sustained linguistic influence in Greek institutional discourse. By focusing on machine-mediated translation practices, the study highlights how recurrent exposure to NMT output may contribute to the diffusion and normalisation of linguistic patterns beyond individual translation events and extends the concept of language influence into the digital sphere, suggesting that *machine translation can itself function as a sociolinguistic agent*.

From an applied perspective, the study offers valuable insights into how automated translation systems shape linguistic norms in smaller or less globally dominant languages such as Greek. As machine translation becomes embedded in public communication through news sites and institutional reports, its linguistic patterns may increasingly set expectations for “standard” language use. Understanding these patterns is therefore essential not only for translation scholars and linguists,

but also for educators, policy makers, computational linguists and developers of NMT systems, who must consider the sociolinguistic implications of their tools.

Finally, by analysing and comparing human-translated texts (from the European Commission) with machine-translated outputs, this research provides empirical evidence for how human and algorithmic translation practices coexist within contemporary hybrid workflows, where professional translators increasingly operate as post-editors of machine-generated text. It offers a foundation for future studies on language technology's role in shaping linguistic evolution and positions Modern Greek as a valuable case study for examining the broader phenomenon of digital contact-induced change across Europe.

Chapter 2 - Literature Review: Translation, Contact and Change

2.1 Introduction to Language Contact Theory

Language contact theory provides the conceptual foundation for understanding how linguistic change emerges when speakers or communities are exposed to a second linguistic system. To begin with, Thomason (2001), conceptualises *contact-induced change* as any structural, lexical, or stylistic shift that would have been unlikely to occur without a specific contact situation. For Thomason, the key mechanisms are *borrowing*, *shift-induced interference*, *diffusion* and *convergence* and they operate along a continuum of intensity. Although her framework was developed for traditional bilingual settings, its principles can be extended to technologically mediated environments, where contact no longer requires direct interpersonal interaction. In this dissertation, neural machine translation (NMT) is viewed as a new way of digital contact, capable of systematically introducing English-derived patterns into Modern Greek through large-scale automated mediation.

Winford's account (2003) further refines the theoretical landscape of language contact by showing that contact is shaped not only by individual bilingualism but also by wider sociolinguistic factors such as diglossia, domain specialisation and asymmetric linguistic dominance. His continuum, which ranges from light lexical borrowing to deep structural convergence, offers a useful framework for understanding how one language may gradually align with another under sustained influence. English currently operates as a global prestige language across institutional, educational and technological domains. Therefore, Winford's model helps explain why certain English features may spread more readily across communicative contexts. When considered alongside neural machine translation, his insights suggest that repeated exposure to English-Greek translation patterns can replicate similar mechanisms of diffusion, even without direct interpersonal bilingual contact. Structural tendencies that recur with high frequency in NMT output may become familiar and eventually normalised, illustrating how technologically mediated communication can participate in broader processes of linguistic alignment.

While Winford conceptualises convergence as a gradual process emerging through sustained sociolinguistic exposure, neural machine translation has the potential to significantly accelerate these dynamics. NMT systems operate through large-scale, highly consistent and repetitive dissemination of translated language, dramatically increasing both the frequency and uniformity of exposure to English-derived structures. Unlike traditional contact settings, where variation and speaker agency introduce filtering and adaptation, algorithmically generated output reduces variability and reinforces recurrent patterns. As a result, linguistic features that would traditionally diffuse slowly through borrowing or structural convergence may become familiar and stylistically unmarked within a much shorter time span. In this sense, NMT does not introduce fundamentally new mechanisms of contact-induced change, but intensifies existing ones by amplifying repetition, consistency and institutional reach.

A complementary perspective is offered by usage-based theories of linguistic change. Bybee (2007) argues that repeated exposure to specific forms creates “*entrenchment*”, whereby high-frequency patterns become cognitively routinised and increasingly favoured over less frequent alternatives. Change emerges through repetition. Patterns that occur frequently gain processing advantages, spread and eventually reshape grammatical norms. In the context of this dissertation, Bybee’s insights help explain why recurrent English-like constructions produced by NMT systems may influence Greek usage over time. If algorithmically generated patterns, such as increased passive-voice constructions, noun–noun compounding or English-style clause order are repeatedly disseminated through official and public-facing texts, they may become stylistically normalised and eventually, linguistically entrenched.

The broader theoretical landscape also includes approaches focusing on linguistic innovation. Aitchison’s metaphor of the “*frayed edges*” (1991) of language highlights that language change begins in unstable zones of variation before emerging as recognisable patterns. These transitional stages signal shifts that traditional grammars often overlook. Her emphasis on examining rather than “tidying away” these irregularities is directly applicable to contemporary NMT outputs, which frequently sit at the border between native and non-native patterns.

These algorithmic “*frayed edges*” could provide insight into potential future developments of Greek under sustained technological influence.

These theoretical perspectives establish a robust framework for investigating neural machine translation as a site of contact-induced linguistic influence. This multi-layered foundation positions the dissertation to examine how English-based patterns generated by NMT systems may mirror and intensify existing trajectories of contact-induced change in Modern Greek.

2.2 English as a Prestige Contact Language in Contemporary Europe

English functions as a Lingua Franca across the world and has more broadly been described as a global language. Crystal (2025), argues that a language attains global status from the sociopolitical impact it may have. Lexical borrowing constitutes one of the most visible manifestations of this influence. Balteiro and Campos (2012: 239–240) show that English operates as a trend-setting language internationally, particularly in domains such as fashion, where lexical items circulate due to cultural prestige rather than lexical necessity. Bybee (2015: 191–192) states that speakers borrow elements that most of the time coexist with native elements, being motivated by the status of the donor language and not by real necessity.

Their findings illustrate how English spreads as a provider of new terminology and as a carrier of cultural authority. The mechanisms they describe provide a useful parallel for translation: just as English-origin fashion terms become naturalised in Greek, English-driven syntactic or stylistic patterns may similarly diffuse through mediated channels such as machine translation. At the broader European level, Pulcini, Furiassi and Rodríguez-González (2012) identify similar trends across languages, showing that Anglicisms frequently spread from specialised registers into everyday communication and that borrowing often co-occurs with subtle shifts in syntax and discourse organisation.

Finally, more recent work by Hilmisdóttir and Peterson (2023) illustrates how *foreign-language contact*, a situation where the influencing language is not territorially or natively present, can still reshape linguistic norms. Their findings

for the Nordic languages demonstrate that English-origin forms may enter everyday usage despite the absence of widespread bilingualism, particularly through media, culture and digital communication. This concept is crucial for the present study, which conceptualises English-Greek NMT interaction as a form of *digital foreign-language contact*. Just as pragmatic borrowings such as “sorry” or “please” have gained localised meanings in Nordic languages, English-derived structures which have circulated through NMT may gradually integrate into Greek as part of evolving stylistic and syntactic norms.

Similarly, Darquennes, Salmons and Vandebussche (2019) emphasise that contact-induced change often results from repeated exposure to high-frequency patterns, even in environments where direct bilingualism is limited.

2.3 English-Induced Linguistic Change in Modern Greek: Evidence from Corpus-Based Studies

Research on Modern Greek over the past two decades demonstrates that English exerts sustained influence on the language, shaping its vocabulary, morphosyntax, phraseology and stylistic preferences. This influence reflects the global role of English as a prestige language and lingua franca, a point highlighted by House (2016), who argues that English functions as a shared communicative medium across diverse linguistic communities. Within such an environment, Greek is increasingly exposed to English norms through media, digital platforms and translation practices, creating fertile conditions for contact-induced change.

Greek-specific research confirms the depth of English influence. Papadopoulou (2016) examined idiomatic and morphosyntactic calques arising from literal translations of English multiword expressions, identifying emerging patterns such as noun-noun compound formations, prepositional calques and agentless passive constructions. These developments align with Thomason’s (2001) view that under conditions of high-intensity contact, borrowing may extend from the lexical into the grammatical domain, promoting structural convergence.

Furthermore, Xydopoulos and Papadopoulou (2018) document a rapidly expanding set of Anglicisms in Greek online fashion discourse, many of which

enter the language without alterations. For instance, words such as “*outfit, must-have* or *vintage*” have been incorporated into Greek. They argue that these borrowings are not just lexical additions but a sort of participation in globalised cultural practices. Borrowed forms thus function as stylistic resources and social markers which depict a cosmopolitan identity.

Building on their earlier work on domain-specific Anglicisms, Papadopoulou and Xydopoulos (2021) extend their investigation to English borrowings in Modern Greek more broadly, adopting a corpus-based approach that combines traditional corpora with large-scale web-derived datasets. Their study examines both direct loanwords and calqued phraseological units, demonstrating that English influence in Greek is not limited to lexical borrowing but also operates at the phraseological and morphosyntactic level. Indicative examples include calqued expressions such as “food for thought” (*τροφή για σκέψη*) and “hot potato” (*καυτή πατάτα*), which increasingly compete with established Greek equivalents like “*αφορμή για προβληματισμό*” (cause for concern) or “*αμφιλεγόμενο ζήτημα*” (controversial issue). Their findings show that many English-derived expressions enter Greek through informal, web-based communication and initially remain absent from conventional corpora and dictionaries. By comparing transliterated and non-transliterated loan forms, as well as calqued phrases with established Greek equivalents, they provide empirical evidence of ongoing competition, partial adaptation and gradual institutionalisation. This work highlights the web as a key site for the diffusion of Anglicisms and reinforces the view that English-induced change in Greek unfolds through frequency-driven exposure and usage, rather than abrupt structural replacement.

A crucial contribution to this topic comes from Malamatidou’s research (2013), which provides direct evidence that translation itself functions as a vector of English-Greek contact. In her 2013 comparable-corpus study of Greek popular science writing, she demonstrated that translated Greek texts display increased use of passive constructions, shifts toward English-like clause ordering and overall reduced syntactic variation. It is important to note that Greek, as a relatively free word-order language, differs from English which follows a fixed subject-verb-object (SVO) syntax. It was therefore revealed that the translators favoured the

English syntax when they translated scientific discourse. These patterns reflect a tendency to align Greek with English informational and stylistic preferences. Her findings illustrate how repeated exposure to translated discourse can reshape the normative profile of Greek genres over time. Her later methodological framework of corpus triangulation (Malamatidou 2017) reinforces this insight by showing that translation-induced patterns can be more reliably identified when compared across parallel, comparable and non-translated corpora. This principle informs the methodological approach of the present study.

Furthermore, Malamatidou (2017) provides a crucial theoretical refinement in the study of translation-induced language change by foregrounding the role of adaptation as a mechanism through which linguistic influence may remain largely unnoticed. While previous research has established translation as a site of language contact, Malamatidou argues that a predominant focus on overt change has obscured the processes through which copied linguistic features become integrated into the receiving language. Drawing on Johanson's Code-Copying Framework, she demonstrates that translation-induced change does not necessarily manifest through direct structural transfer, but rather through the adaptive reshaping of copied elements to fit target-language patterns. Her corpus-based analysis of passive voice reporting verbs in Greek popular science, shows that although English-derived frequential copies enter Greek through translation, they undergo combinational adaptation, particularly with respect to word order, aligning with native Greek syntactic preferences. This adaptive process allows copied features to circulate and stabilise without triggering perceptions of foreignness or disruption, thereby explaining why such changes often go unnoticed by language users. By reconceptualising translation as a contact situation in which adaptation mediates between stability and change, Malamatidou strengthens the argument that translation functions not as a direct cause of linguistic change, but as a facilitating environment in which contact-induced developments may emerge and potentially become conventional over time.

Alongside the findings reported in previous research, similar tendencies can already be observed in translated Greek institutional texts, including those examined in the present study.

2.4. Discourse and Pragmatic transfer in Translation

Juliane House (1997) contributes a complementary perspective through her distinction between overt and covert translation. While covert translations aim to produce texts that function as if originally written in the target language, House's empirical analyses show that the pursuit of naturalness often results in the transfer of source-language discourse norms, pragmatic preferences and textual organisation patterns into the target text. This phenomenon underscores how translation may reproduce lexical or syntactic structures as well as the communicative assumptions and interactional styles associated with the source language. In contexts of English-Greek translation, such pragmatic transfer is particularly relevant because it reflects how English discourse conventions may become embedded in Greek translation practice.

Lawrence Venuti situates these linguistic effects within broader cultural patterns. His critique of fluency and domestication argues that translation is shaped by cultural and linguistic hierarchies, which influence the stylistic choices translators make. When English occupies a dominant global position, domesticating translation practices may implicitly import English stylistic preferences into the target language, even as translators aim for naturalness. Venuti's work highlights the link between linguistic convergence and broader ideological structures, demonstrating that translation cannot be separated from the sociocultural contexts in which it operates.

This conceptualisation of translation as a mediator of linguistic contact provides the foundation for examining neural machine translation (NMT) in the subsequent sections. The question that arises is not whether NMT replicates known tendencies of translationese, but whether the scale, consistency and algorithmic regularity of its outputs intensify these pathways of influence, thereby accelerating contact-induced convergence between English and Modern Greek.

2.5 From Human to Machine Translation: Evolution, Quality and Algorithmic Mediation

2.5.1 The Shift from Human to Neural Translation

The transition from human translation to machine-assisted and fully automatic translation marks a critical shift in the history of interlingual communication. While early approaches such as rule-based (RBMT) and statistical machine translation (SMT) exhibited predictable structural limitations, the development of neural machine translation (NMT) has transformed both the process and the product of translation. NMT systems generate fluent, target-language output at scale, enabling their integration into professional workflows as well as everyday digital communication.

A significant breakthrough came with neural machine translation (NMT). Neural architectures, such as those implemented in Google Translate, DeepL and more recently e-Translation, operate as end-to-end systems capable of modelling long-distance dependencies, contextual coherence and stylistic consistency. As Doherty stated (2016) technological advances have led to unprecedented changes in translation as a means of interlingual communication. This transition dramatically improved output fluency and cohesion. Yet, as Doherty also notes, MT technologies today shape translation workflows and the linguistic production consumed daily by millions of readers. Consequently, NMT output contributes to a new mode of technologically mediated language contact, in which algorithmically generated structures circulate widely and repeatedly within a linguistic community.

2.5.2 Quality Evaluation and the Limits of Automatic Metrics

As MT evolved from statistical machine translation (SMT) to NMT, questions of quality and stylistic fidelity grew increasingly central. Traditional automatic evaluation metrics such as BLEU and METEOR, although widely used in MT research, have been shown to capture only surface-level correspondences while ignoring deeper issues of style, discourse function and contextual appropriateness. Specia, Raj and Turchi (2010) distinguish between machine translation evaluation

and quality estimation, arguing that linguistic quality must be inferred from patterns in the output rather than measured through fixed references. This methodological shift underscores the present study's emphasis on corpus-based and qualitative analysis.

From a contact-linguistic perspective, reliance on automatic evaluation metrics such as BLEU and METEOR may be particularly misleading. These metrics tend to reward surface-level similarity, grammatical well-formedness and lexical overlap with reference translations, while remaining insensitive to stylistic naturalness, discourse-level alignment and target-language norms. As a result, NMT output that closely mirrors English syntactic patterns, nominal density or information packaging may receive high scores despite exhibiting stylistic anglicisation. In this sense, metric-based evaluation may obscure precisely the types of convergence phenomena that are central to contact-induced change, by conflating formal correctness with linguistic naturalness in the target language.

Research in specialised domains reinforces the limitations of metric-driven evaluation. O'Shea, Sosoni and Stasimioti (2023), examining Greek–English legal translation (Law texts), found that post-edited NMT output achieves levels of fluency comparable to human translation, while exhibiting a different error profile, with a higher concentration of stylistic and verity-related issues. Although no major differences were observed in overall accuracy or fluency, their findings point to a tension between efficiency and stylistic control in institutional translation workflows. From a contact-linguistic perspective, such stylistic deviations are particularly relevant in highly codified genres, where repeated exposure to NMT output may have implications for normative expectations over time.

Briva-Iglesias, Dogru and Cavaleiro Camargo (2024) extend the evaluation debate by comparing Google Translate with large language models, including GPT-4, in the legal domain. While automatic evaluation metrics ranked Google Translate higher, human evaluators judged GPT-4's translations as equally or in some cases, more contextually adequate and fluent. This divergence highlights the limitations of metric-based evaluation, which tends to privilege surface-level correspondences and underscores the importance of human assessment in

capturing contextual and stylistic adequacy. The authors therefore call for a re-evaluation of traditional automatic metrics, a position that aligns with the methodological stance adopted in the present study, which prioritises corpus-based and qualitative linguistic analysis over metric-driven scoring when examining the stylistic and structural effects of NMT output.

2.5.3 System-Specific Behaviour and Algorithmic Translation Voices

The findings of these studies illustrate a broader shift in translation research: from assessing isolated translation products to understanding how algorithmic mediation reshapes stylistic, syntactic and pragmatic tendencies in the target language. Human translation has historically served as a conduit for structural and stylistic convergence; NMT, with its scale, consistency and ubiquity, has the potential to accelerate these processes. This technological evolution frames the central argument of the present dissertation: that neural machine translation should be examined not only as a computational tool but as a potential agent of contact-induced linguistic change in Modern Greek.

Comparative studies further reveal systematic differences between MT systems, reinforcing the need for stylistic evaluation. Hidalgo-Ternero (2021), examining Google Translate and DeepL (ES>EN), demonstrates that DeepL tends to produce more idiomatic and fluent target-language output, whereas Google Translate adheres more closely to source-language syntax. This divergence suggests that each system develops a distinct translational “voice,” shaped by training data and modelling choices. For the purposes of the present dissertation, such findings provide a foundation for investigating whether English-Greek NMT systems also display recognisable stylistic profiles and whether these profiles converge or diverge across engines.

Complementing this perspective, Anastasiou’s (2010) study on idiom treatment offers an earlier baseline for understanding the limitations of automated translation. Analysing rule-based and statistical MT systems, including Systran, Babylon and Google Translate, she found that idioms were frequently rendered literally, resulting in semantic distortion. Although predating neural architectures, her findings expose a persistent challenge: the difficulty of encoding pragmatic

and idiomatic meaning. Literal renderings are still present in NMT to this day, although there has been a significant improvement in NMT “creativity”. Reinterpreted in the contemporary context, this literalism may represent an early form of the stylistic tendencies observed in modern NMT, where algorithmic translation often privileges surface correspondence over idiomaticity. Recurrent exposure to such literalness could normalise English-driven syntactic and phraseological structures in Modern Greek.

Within MT research, additional evidence comes from error-focused analyses such as Anastasopoulos (2019), who examines source-side grammatical mismatches in NMT and demonstrates how such errors propagate structurally into target-language output.

2.6 Stylistation and Algorithmic Drift in Neural Machine Translation Output

As neural machine translation (NMT) becomes embedded in everyday and institutional communication, emerging research has turned towards the stylistic behaviour of automated systems and the extent to which they promote a homogenised translational voice. Rather than focusing solely on accuracy or semantic adequacy, this line of inquiry examines how NMT engines shape rhythm, phrasing, lexical choice and pragmatic tone. These features are central to understanding whether machine-generated output contributes to stylistic convergence in the target language.

A recent pilot study by Corpas Pastor and Noriega-Santíañez (2024) provides important insights into this question. Analysing how several NMT systems handle manipulated idioms and creative multiword expressions, the authors show that although NMT often achieves high levels of fluency and structural well-formed texts, it consistently defaults to literal, high-frequency and low-creativity solutions as mentioned earlier. Human translators, by contrast, introduce contextual adaptation and stylistic innovation. The systematic absence of such creativity in NMT output points towards a stable algorithmic preference for predictable structures, indicating an emerging “machine style” characterised by normalisation, reduction of marked forms and limited pragmatic flexibility.

Another foundational MT study conducted by Vanmassenhove, Shterionov and Way (2019) showed that NMT exhibits reduced lexical richness and favours the overuse of high-frequency vocabulary. Such patterns point to systemic simplification and standardization and may eventually lead to lexical impoverishment. Furthermore, Hovy, Bianchi and Fornaciari (2020) conducted a study on stylistic bias which demonstrated that NMT output carries latent stylistic biases, making translations “sound” older or more male. These results reinforce the understanding that NMT engines import not only linguistic form but also socio-indexical features from their English-heavy corpora, further strengthening their potential as agents of linguistic influence. These studies identify algorithmic regularities that are theoretically relevant to contact-induced change, yet none of them examine how these tendencies manifest within the linguistic system of Greek or how they interact with pre-existing patterns of English influence.

2.7 Neural Machine Translation and Greek: An Under-Researched Interface

Existing research suggests that neural machine translation systems develop recognisable stylistic tendencies shaped by algorithmic modelling, which may contribute to convergence effects when NMT output circulates widely in the target language. However, despite the rapid expansion of NMT research over the past decade, the linguistic impact of such systems on Modern Greek remains largely under-explored. Current studies focus primarily on accuracy and terminology management, offering limited insight into the broader structural and contact-induced consequences of sustained exposure to machine-generated Greek. This gap is particularly significant given the increasing role of automated translation in institutional communication, journalism and everyday digital discourse, and directly motivates the empirical analysis undertaken in this dissertation.

2.8 Concluding Remarks

The literature reviewed in this chapter shows that English-Greek linguistic contact, translation-mediated influence and the emerging stylistic tendencies of neural MT

form an interconnected field of inquiry. Together, these strands of research establish the conceptual foundation for the present study and clarify why English-to-Greek NMT output provides a productive site for investigating potential patterns of convergence, structural alignment and system-specific translational behaviour. Building on these insights, the next chapter outlines the methodological framework and corpus design through which these questions will be examined.

Chapter 3-Methodology

3.1 Research Design and Rationale

This study adopts a mixed-method research design that integrates corpus-based analysis with qualitative stylistic examination in order to investigate patterns of linguistic behaviour in English-to-Greek neural machine translation within institutional press-release discourse. The design enables the systematic examination of syntactic, grammatical, lexical and stylistic tendencies across human-translated and machine-generated Greek, with particular attention to convergence effects and system-specific variation.

A mixed-method approach is appropriate because it allows for the triangulation of quantitative corpus evidence with close qualitative interpretation. Corpus-based translation studies have demonstrated the value of genre-controlled corpora for identifying recurrent structural and lexical patterns (Baker 1993; Malamatidou 2017), while research in contact linguistics highlights the importance of tracing systematic tendencies of transfer and convergence when evaluating potential contact-induced effects (Thomason 2001; Winford 2003). In addition, work on machine translation evaluation supports the use of data-driven methodologies for examining system behaviour at scale (Specia et al 2010).

Importantly, the study does not pursue a prescriptive assessment of translation quality. Instead, it focuses on patterned linguistic behaviour in translated and machine-translated Greek, interpreting recurrent choices as indicators of convergence tendencies within contemporary institutional discourse.

3.2 Data Selection and Sources

The corpus design is centred on a set of English source texts consisting of European Commission press releases. These texts were originally retrieved from the Commission's Press Corner and were rendered into Greek through two institutional pathways. Some press releases were translated by professional human

translators, while others were automatically translated by the European Commission's neural machine translation system e-Translation. In line with institutional practice, the texts which were translated by human translators were not translated through e-Translation and vice versa.

The press releases selected for analysis were chosen due to their institutional relevance and public significance within the European Union. As official communications issued by central EU bodies, these texts carry discursive authority and circulate widely among European citizens, making them a key site where English institutional discourse is routinely transformed into Greek through translation. Their institutional status ensures that the English source texts represent standardised, influential models of policy communication, rather than marginal language use.

In addition, the thematic scope of the selected press releases reflects issues of broad public interest, such as governance, social policy, migration, environmental initiatives and international cooperation to name a few. These domains are regularly addressed in EU communication and are highly salient for European audiences, which enhances the ecological validity of the dataset. The combination of institutional authority, thematic relevance and routine public dissemination makes these texts particularly well suited for examining how English source discourse is systematically re-encoded in Greek through human and machine-mediated translation, and how such processes may contribute to patterns of translation-induced convergence.

For the purposes of this study, all English source texts were additionally processed manually using Google Translate and DeepL, regardless of whether their official Greek versions were produced by human translators or by e-Translation. This step generated controlled Greek outputs from two general-purpose NMT systems under identical input conditions. The inclusion of these controlled outputs allows for systematic comparison across institutionally deployed NMT, general-purpose NMT systems and human translation, while holding the English source text constant.

In order to assess the extent to which translated and machine-translated Greek converges toward English-informed discourse patterns, the study also incorporates

a reference corpus of non-translated Greek institutional texts. This corpus consists of original press releases issued by the Hellenic Parliament and represents autonomous Greek institutional discourse independent of direct source-language influence. It serves as a baseline against which the linguistic features of human-translated and machine-translated Greek can be contrasted, enabling the identification of potential convergence effects which may be attributed to translation-mediated language contact.

All core corpora analysed in this study consist of contemporary texts and were compiled to comparable sizes of approximately 19,000 words each. Text selection aimed for temporal proximity and topical breadth typical of institutional press releases, while maintaining consistent genre constraints. Texts were analysed without prior linguistic annotation.

3.3 Corpus Compilation and Preparation

All corpora were compiled manually to ensure transparency and control over sources, genre constraints and production mode. Texts were collected in digital form, organised into separate subcorpora and stored as individual documents to preserve internal variation. Minimal pre-processing was applied: no lemmatisation, part-of-speech tagging or automated cleaning procedures were introduced, in order to retain naturally occurring linguistic patterns in institutional Greek. The datasets were imported into AntConc and analysed using identical queries and procedures across corpora. Controlled outputs generated via Google Translate and DeepL were stored as supplementary datasets and analysed separately from the institutional corpora.

3.4 Use of AntConc and Corpus Analysis Tools

The corpus analysis in this study was conducted using AntConc (version 4.3.1.), a corpus linguistics toolkit developed by Laurence Anthony, which enables systematic exploration of lexical, phraseological and structural patterns across large text datasets. AntConc was employed to examine distributional tendencies

and recurring linguistic features across human-translated Greek, machine-translated Greek and non-translated Greek institutional corpora, with particular emphasis on identifying indicators of contact-induced change and translation-related convergence toward English-influenced discourse norms.

The Keyword in Context (KWIC) function was used to analyse the contextual behaviour of selected lexical items and constructions. By displaying each search term within its immediate co-text, the KWIC tool facilitated close qualitative inspection of how recurrent expressions operate syntactically and pragmatically across the different corpora. This made it possible to identify patterned uses of institutional and reporting language, such as formulaic introductory frames, preferred clause structures, modal constructions and voice selection. These features are particularly salient in translated and machine-generated institutional discourse, where textual conventions tend to stabilise through repetition. The KWIC analysis thus served as a bridge between quantitative frequency data and qualitative linguistic interpretation. KWIC analysis was conducted separately for target and reference corpora, allowing for qualitative comparison of contextual and phraseological behaviour rather than direct frequency-based contrast.

To state an example, KWIC concordance analysis was used to examine passive constructions across corpora by displaying the immediate syntactic environment of each occurrence. The concordance lines enabled close inspection of how agency is expressed or systematically backgrounded in translated, machine-translated and non-translated Greek.

This made it possible to observe whether passive constructions systematically occur without explicit agents or with abstract institutional entities in subject position and to distinguish isolated grammatical choices from stabilised discourse tendencies. Comparing KWIC lines across target and reference corpora further enabled assessment of whether passive constructions perform similar discourse functions or whether their distribution and pragmatic load vary systematically as a function of translation mode.

The Word List tool was employed to generate frequency lists for each corpus, allowing for systematic comparisons of lexical distribution and prominence.

Frequency data were used to assess lexical concentration and the prevalence of high-frequency, unmarked forms, which have been associated in previous research with simplification and normalisation tendencies in translated language. Differences in lexical profiles across human-translated, machine-translated and non-translated Greek texts were interpreted as indicators of stylistic homogenisation and reduced lexical diversity, particularly in neural machine translation output.

To complement the analysis of individual lexical items, the Collocates tool was used to examine habitual co-occurrence patterns within a defined span. Collocational analysis enabled the identification of stable phraseological environments and recurring semantic associations surrounding key lexical items and grammatical markers. This approach was particularly useful in tracing the emergence of conventionalised institutional frames and in assessing whether machine-translated Greek reproduces English-driven phraseological preferences. Collocational patterns were interpreted in terms of semantic prosody and formulaicity, contributing to the analysis of how repeated exposure to translated and machine-generated language may reinforce specific structural and stylistic norms in contemporary Greek.

In addition, Regular Expressions (regex) searches were employed to capture morphologically and syntactically related forms that could not be retrieved through simple string searches. Regex patterns were used to identify inflectional variants, modal constructions, passive and impersonal structures and recurring syntactic templates characteristic of institutional discourse. This allowed for a more comprehensive examination of grammatical tendencies and structural regularities across corpora, supporting the analysis of convergence at the morphosyntactic level.

These AntConc tools enabled a triangulated analytical approach, combining quantitative frequency analysis with qualitative contextual interpretation. The integrated use of KWIC, word frequency lists, collocational analysis and regex-based pattern searching provided a robust methodological framework for identifying systematic linguistic tendencies and for assessing the extent to which neural machine translation functions as a site of ongoing language contact and

structural influence in contemporary Greek. The results generated through these procedures are discussed in detail in Chapter 4, where quantitative tendencies are interpreted alongside close qualitative analysis of representative examples.

3.5 Analytical Framework

The analytical framework examines convergence-related tendencies across four interrelated levels: syntax, grammar, lexis, style and discourse.

At the syntactic level, the analysis focuses on clause structure and information packaging, including word order preferences, passive constructions and the use of impersonal or abstract subjects, particularly where such patterns resemble English structuring. At the grammatical level, attention is given to tense–aspect choices and modality, especially in the expression of obligation, institutional commitment and future-oriented reference in press-release discourse. Lexical analysis addresses recurrent lexical choices, collocational patterns, calques and degrees of abstraction and nominalisation. At the stylistic and discourse level, the analysis considers institutional voice, impersonality and register consistency.

Across all levels, linguistic features are interpreted as indicators of convergence when they occur systematically in translated and machine-translated Greek in comparison with the non-translated reference corpus.

Operational definition of convergence

In this study, convergence is understood not as the presence of isolated linguistic features, but as the systematic recurrence of comparable patterns across texts and corpora. A structure, lexical choice or stylistic tendency is treated as convergent when it displays distributional consistency within translated or machine-translated corpora and differentiates these corpora from non-translated Greek.

Convergence is assessed through the combined consideration of quantitative salience and qualitative stability. Quantitatively, features are considered convergent when they occur with noticeably higher frequency or broader distribution in translated and machine-translated Greek than in non-translated

institutional discourse. Qualitatively, convergence is established when such features perform similar discourse functions across contexts, for example through the recurrent backgrounding of agency, the preference for abstract institutional subjects or English-like information packaging. This approach conceptualises convergence as a gradual, distributional phenomenon emerging through sustained translation-mediated language contact.

3.6 Procedures and Workflow

The workflow was designed to ensure comparability and interpretive validity by combining iterative corpus exploration with contextual verification.

First, each core corpus was imported into AntConc and analysed separately, ensuring that identical queries could be applied across datasets. Second, exploratory corpus analysis was conducted through concordance, frequency and keyword functions to identify salient distributions of high-frequency grammatical items and recurrent institutional patterns. Third, concordance-based examination was used to evaluate collocational tendencies and recurring frames associated with institutional discourse, including patterns connected to futurity, obligation and procedural formulation.

Then, quantitative observations guided qualitative close reading. Concordance lines and representative excerpts were examined in broader context to establish discourse function, stylistic value and the extent to which patterns reflect systematic tendencies rather than isolated topic effects.

In parallel, controlled outputs generated via Google Translate and DeepL were analysed using the same procedure. These outputs were used to support intra-NMT comparison and to identify system-specific translational preferences. Across the workflow, patterns were interpreted as convergence indicators only when they were supported by contextual evidence and occurred systematically across multiple texts.

3.7 Reliability and Limitations

This study adopts several methodological safeguards to enhance the reliability and interpretive validity of its findings, while acknowledging the limitations inherent in corpus-based exploratory research on neural machine translation.

Reliability is supported through strict genre control, corpus comparability and methodological consistency. All primary corpora consist of institutional press-release discourse addressing similar communicative purposes, registers and audiences, minimising the risk that observed differences reflect genre variation rather than mode of production. The corpora were compiled to comparable sizes of approximately 19,000 words, and identical analytical procedures and search queries were applied across datasets using AntConc. Quantitative observations were systematically verified through concordance-based contextual analysis, combining distributional evidence with qualitative close reading to reduce the risk of overgeneralisation.

Several limitations must nevertheless be acknowledged. The corpora analysed are relatively modest in size and restricted to a specific institutional domain. While this enhances internal validity and analytical control, it limits the generalisability of the findings to other genres, registers or communicative settings. The study therefore does not aim to represent English-Greek neural machine translation as a whole, but focuses on institutional press releases as a socially salient and high-impact genre.

In addition, although the analysis investigates convergence toward English-informed patterns, it does not claim to establish direct causal language change in Greek. The findings are interpreted as indicators of systematic convergence tendencies within translated and machine-translated texts, rather than evidence of completed or irreversible change. The study also does not incorporate reception-based or speaker-oriented sociolinguistic data, nor longitudinal diachronic evidence, and therefore cannot assess individual uptake or long-term diffusion beyond institutional discourse.

Finally, while controlled outputs from Google Translate and DeepL enable systematic intra-system comparison, these outputs are generated under

experimental conditions and do not circulate institutionally in the same way as e-Translation press releases. Findings related to these systems are therefore interpreted cautiously and are used primarily to illustrate system-specific stylistic tendencies.

Despite these limitations, the study provides a methodologically transparent and empirically grounded framework for examining digitally mediated convergence phenomena in contemporary Greek institutional discourse.

Chapter 4-Findings and Analysis

4.1 Introduction to the Analysis

This chapter presents the empirical analysis and findings of the study, drawing on the genre-controlled corpora described in Chapter 3. The analysis examines linguistic patterns across different modes of institutional Greek production in order to assess whether English-to-Greek neural machine translation contributes to systematic convergence toward English-language norms and whether distinct machine translation systems display differentiated discourse profiles.

The analysis adopts a comparative perspective across non-translated Greek institutional texts, human-translated institutional texts and machine-translated outputs, supplemented by controlled outputs generated via Google Translate and DeepL. All datasets are aligned in terms of communicative function, register and institutional context, allowing observed differences in linguistic behaviour to be interpreted primarily in relation to mode of production.

Findings are derived through the combined use of quantitative corpus-based analysis and qualitative stylistic examination. Corpus evidence is used to identify recurrent lexical, grammatical and syntactic patterns, which are then examined in context to assess their discourse functions and stylistic effects, including abstraction, impersonality, agent backgrounding and institutional voice. Particular attention is given to constructions that reflect English-like structuring and to variation in stylistic consistency across translation systems.

Throughout the chapter, linguistic features are interpreted cumulatively rather than in isolation, with convergence understood as a patterned tendency emerging across translated and machine-translated texts. The analysis does not evaluate translation quality but focuses on patterns of linguistic production and circulation within institutional discourse. Chapter 4 is structured along a progressive scale of mediation, moving from non-translated Greek institutional discourse through human translation, to different forms of neural machine translation, enabling

convergence effects to be observed relative to both endogenous Greek norms and increasing degrees of algorithmic intervention.

4.2 Non-translated Greek institutional discourse: the Hellenic Parliament press corpus

This section examines non-translated Greek institutional discourse as a baseline for the subsequent comparative analysis of human-translated and NMT mediated texts. The corpus consists of press releases, parliamentary reports, official announcements and institutional communications published by the Hellenic Parliament. These texts are produced natively in Greek and are not subject to mediation through translation, making them methodologically crucial for identifying endogenous features of contemporary Greek institutional language.

The primary objective of this section is to establish how agency, stance, evaluation, modality and syntactic organisation are conventionally realised in original Greek institutional discourse. By mapping these patterns prior to any comparison with translated or machine-translated outputs, the analysis avoids treating English-mediated structures as an implicit norm and allows convergence effects to be identified as *contact-induced* rather than inherent properties of Greek.

To begin with, the corpus reveals a discourse tradition characterised by explicit attribution of responsibility, dense speaker anchoring and a preference for finite, verb-driven clause structures. Institutional actions, evaluations and positions are routinely linked to identifiable actors, including ministers, parliamentary representatives, committees and political parties, through reporting verbs, stance predicates and evaluative constructions. This anchoring plays a central role in the construction of accountability and institutional authority within Greek parliamentary discourse.

At the same time, the corpus displays high rhetorical density and dialogicity. Parliamentary communication is structured as an ongoing argumentative exchange in which positions are advanced, contested and justified, often through direct quotation, reported speech and evaluative framing. Rather than suppressing

subjectivity, Greek institutional discourse makes stance visible and interactionally salient, even in formally informational genres.

Crucially for the present study, syntactic organisation emerges as functionally aligned with these discourse goals. Clause structure favours finite verbal predicates and relatively autonomous clausal units, while nominalisation and abstract process encoding remain comparatively constrained. This syntactic profile supports explicit agency marking, temporal anchoring and evaluative positioning and contrasts with the more depersonalised, nominal-heavy styles commonly observed in English institutional discourse.

By establishing these baseline characteristics, this section provides the necessary reference point for assessing whether and how translated and NMT generated Greek texts converge toward English-like institutional norms. The following subsections examine these features in detail, focusing on agency, modality, evaluation, syntactic organisation and their combined role in shaping resistance or susceptibility to contact-induced language change.

4.2.1 Explicit agency and verb-driven syntactic organisation

A defining feature of the non-translated Greek institutional corpus is the systematic and overt encoding of agency through explicit speaker attribution and finite verbal predicates. Institutional actions, evaluations and policy positions are consistently anchored to identifiable human or collective actors, such as ministers, party leaders, parliamentary representatives, committees and governmental bodies. This anchoring is not incidental but constitutive of Greek parliamentary discourse, where accountability and authority are discursively enacted rather than backgrounded.

This discourse-level orientation toward explicit agency is closely linked to the verb-driven syntactic organisation of original Greek institutional texts. Across the corpus, propositions are introduced through finite verbal predicates that encode action, stance, evaluation or responsibility, resulting in a high degree of syntactic autonomy at clause level. Unlike translated institutional discourse, and particularly NMT output, which frequently favours nominalisation, pre-modification and

clause compression, non-translated Greek exhibits a strong preference for clausal articulation and syntactically complete propositions.

The pervasive use of reporting and stance verbs in finite forms explicitly links propositions to speakers and decision-makers. Verbs function as structural pivots organising information and anchoring meaning to agents. In this sense, verb-centred predication operates as a core mechanism through which agency, responsibility and syntactic autonomy are jointly realised in non-translated Greek institutional discourse. Typical examples from the corpus include formulations such as:

- (1) **ST:** τόνισε ο πρωθυπουργός
‘the Prime Minister emphasised’
- (2) **ST:** ανέφερε ο υπουργός
‘the Minister reported’
- (3) **ST:** υπογράμμισε η υπουργός Εργασίας
‘the Minister of Labour underscored’
- (4) **ST:** κατηγόρησε την κυβέρνηση ο πρόεδρος του ΣΥΡΙΖΑ-ΠΣ
‘the President of SYRIZA-PS accused the government’
- (5) **ST:** δήλωσε ότι η κυβέρνηση θα συνεχίσει να στηρίζει...
‘he reported that the government will continue to support ...’

Figure 1 shows the use of reporting and stance verbs

Hits: 130 Page Size 100 hits 1 to 100 of 130 hits			
File	Left Context	Hit	Right Context
Καιρο, ...	του ΟΗΕ. Στη συνέχεια, ο Αντιπρόεδρος της ΒτΕ	τόνισε	ότι η Ελλάδα υποστηρίζει την ανασυγκρότηση κ
ιακοινοβ...	Έκθεση της Ευρωπαϊκής Επιτροπής για το 2025.	Υπογράμμισε	ότι η Ελλάδα συγκαταλέγεται στα 12 κράτη-μέλ
Ανθρωπι...	και εμπορίου. Ο Πρόεδρος της Ομάδας Φιλίας	τόνισε	ότι η Βουλή των Ελλήνων θα συνεχίσει να στηρι
Προτάσει...	αι την υλοποίηση έργων στρατηγικής σημασίας.	Υπενθύμισε	ότι η Ελλάδα αναμένεται να λάβει σημαντικά κο
Βελοπουλ...	δο, είναι δείγμα αντιθεσμικότητας». Παράλληλα,	τόνισε	ότι η ίδια έχει θέσει αρκετές φορές το ζήτημα
Προτάσει...	ζούλιο της Διεθνούς Έκθεσης Θεσσαλονίκης και	τόνισε	ότι η αλλαγή που προβλέπει περιορισμένη συμμ
Hellenic ...	ύν αυτά τα προβλήματα». Για το Παλαιστινιακό	Υπογράμμισε	ότι η αναβαθμισμένη θέση της Ελλάδας επιβεβε
Προτάσει...	ιζόμενοι με τον νόμο περί δημοσίου λογιστικού.	Διευκρίνισε	ότι η ανταμοιβή για επίτευξη στόχων δεν επιφι
Προτάσει...	ού και διαφανούς επενδυτικού περιβάλλοντος.	Τόνισε	ότι η ενίσχυση της διοικητικής λειτουργίας υπη
αρμενιαι...	η για την πρόσκληση και τη θερμή υποδοχή και	τόνισε	ότι η επίσκεψή του στην Ελλάδα αποτελεί σημα
Ανθρωπι...	αθερότητα και την ανοικοδόμηση του Λιβάνου.	Τόνισε	ότι η επιστροφή της πλήρους διπλωματικής παι
Tsiaras ...	υν βουλευτών Ο Θεοφάνης Παπάς, από την ΝΔ.	τόνισε	ότι η ευλογία των αιγοπροβάτων απειλεί την ε
ιακοινοβ...	Ιεσμική και οικονομική διασύνδεση μεταξύ τους.	Τόνισε	ότι η θεσμική σταθερότητα, η ταχύτητα και η α

Agency is therefore encoded both syntactically through subject-predicate relations and pragmatically through the choice of verb.

For instance, in parliamentary reporting on foreign policy debates, evaluative responsibility is explicitly assigned as seen in the following example:

(6) **ST (Greek):** Ο Σωκράτης Φάμελλος κατηγορήσε τον πρωθυπουργό ότι έχει οδηγήσει τη χώρα σε διεθνή απομόνωση.

Back translation: ‘Sokratis Famellos accused the Prime Minister of having led the country into international isolation’.

Here, the verb *κατηγορήσε* ‘accused’ foregrounds both the act of evaluation and the evaluator, leaving no ambiguity as to who advances the critical stance. The proposition is not presented as an abstract assessment but as a situated political act performed by a specific speaker.

Similarly, in institutional announcements and press releases, commitments and future-oriented positions are attributed to agents rather than abstract entities:

Passive constructions do occur in the non-translated corpus, particularly in procedural or legal contexts. For instance, “the agreement was signed” *υπεγράφη η συμφωνία* or even “the bill was approved” *εγκρίθηκε το νομοσχέδιο*. However, even in such cases, agency can be retrieved through co-textual attribution or surrounding clauses that identify the responsible actors. Passivization thus operates as a genre-conditioned choice rather than a systematic strategy of agency suppression.

The cumulative evidence indicates that original Greek institutional discourse does not favour depersonalised political action. On the contrary, it displays a strong preference for explicit agency marking and speaker attribution, which aligns with the dialogic and adversarial nature of parliamentary communication. This pattern establishes a crucial baseline for the study: any systematic attenuation of agency observed in human-translated or NMT-generated Greek texts cannot be attributed to inherent properties of Greek institutional language, but must instead be examined as a translation or technology-induced shift.

4.2.2 Modality as rhetorical stance rather than programmatic projection

In the non-translated Greek institutional corpus of the Hellenic Parliament, modality does not primarily function as a mechanism for policy projection or

future-oriented planning. Instead, it operates as a rhetorical resource for indexing institutional stance and commitment grounded in the present communicative context rather than in speculative or programmatic futurity.

A salient feature of the corpus is the restricted use of core modal auxiliaries (e.g. can *μπορεί*, must *πρέπει*, should *θα έπρεπε*) in either epistemic or deontic senses. Rather than constructing hypothetical scenarios or outlining conditional future actions, speakers overwhelmingly rely on assertive declarative structures, often reinforced by stance verbs, evaluative predicates and evidential framing. This pattern contrasts with translated or machine-mediated institutional texts, where modality frequently expands as a strategy of abstraction and depersonalisation.

When future reference does occur, it is typically embedded within predicates that signal institutional continuity and commitment, rather than realised as autonomous modal projection.

When epistemic uncertainty is acknowledged, it is tightly controlled and strategically circumscribed.

(7) **ST (Greek):** Δεν υπάρχει επιστημονική τεκμηρίωση που να εγγυάται ότι ο εμβολιασμός θα αποδώσει.

Back translation: ‘There is no scientific evidence guaranteeing that vaccination will be effective’.

Rather than employing epistemic modals such as “may” *μπορεί* or “is likely to” *ενδέχεται*, the speaker anchors uncertainty in the absence of evidence, shifting the burden of justification away from subjective judgment and toward institutionalised knowledge regimes such as science and expertise. Modality is thus externalised and objectified, reinforcing epistemic authority while limiting interpretive openness.

Across the corpus, this pattern produces a discourse that privileges assertiveness over speculation and present authority over future contingency. Modality functions less as a grammatical system for encoding possibility or obligation and more as a discursive strategy for managing legitimacy, responsibility and institutional voice. This modal economy contributes to the overall syntactic and pragmatic stability of

non-translated Greek institutional discourse, establishing a baseline characterised by low hypothetical density, high epistemic closure and strong speaker commitment. This baseline becomes analytically salient when contrasted with translated and machine-generated Greek, where modality tends to proliferate abstract agency and dilute rhetorical force, as discussed in subsequent sections.

4.2.3 Evaluation, dialogicity and rhetorical density

Another salient feature of the non-translated Greek institutional corpus is the high degree of explicit evaluation, dialogic orientation and rhetorical density. Unlike translated EU press releases, which tend to privilege informational compression and depersonalised process descriptions, parliamentary Greek discourse is characterised by overt stance-taking, intertextual positioning, and dense rhetorical layering.

A. Evaluation as overt stance-taking

Evaluation is systematically encoded through lexical choice, predicative adjectives and metaphorical expressions, often carrying strong axiological polarity. Speakers do not merely report events or positions but actively judge, criticise, legitimise or delegitimise political actions.

(8) **ST (Greek):** φιάσκο η εξωτερική πολιτική της κυβέρνησης!

Back translation: ‘the government’s foreign policy is a fiasco!’

(9) **ST (Greek):** επικίνδυνη κυβέρνηση

Back translation: ‘a dangerous government’

(10) **ST (Greek):** νομοσχέδιο εργασιακού Μεσαίωνα

Back translation: ‘a bill that brings about a Middle Ages labour’

(11) **ST (Greek):** νομοθέτημα-λαιμητόμος στα δικαιώματα του λαού

Back translation: ‘a legislative guillotine for the people’s rights’

Such formulations illustrate that evaluation is lexically embedded. This contrasts sharply with translated EU discourse, where evaluation is typically backgrounded

or encoded through abstract nouns which carry softer connotations (e.g. *challenges, priorities, objectives*).

B. Dialogicity and interactional positioning

Greek parliamentary discourse is intrinsically dialogic. Utterances are explicitly positioned against other voices, past statements or anticipated counter-arguments. This dialogicity is realised through direct address, second-person reference, irony, rhetorical questions and reported confrontation.

(12) **ST (Greek):** Μας είπατε ότι υπηρετείτε το διεθνές δίκαιο. Ποιο δίκαιο;

Back translation: ‘You told us that you serve international law. What law?’

(13) **ST (Greek):** Γιατί δεν κάνετε ΑΟΖ; Και τι μας λέτε γι’ αυτό;

Back translation: ‘Why don’t you establish an EEZ? And what do you tell us about that?’

(14) **ST (Greek):** Ποιον κοροϊδεύετε;

Back translation: ‘Who are you fooling?’

These constructions foreground interaction, not consensus. Meaning is produced through confrontation and response, rather than through neutral exposition.

C. Rhetorical density and figurative language

The corpus exhibits a high degree of rhetorical density, understood as the co-presence of evaluative lexis, metaphor, repetition and parallelism within compact stretches of discourse. Figurative language is not ornamental but argumentative, serving to intensify persuasion and emotional alignment. The following examples illustrate this tendency:

(15) **ST (Greek):** σιγά-σιγά, ξηλώνετε το πουλόβερ της προστασίας της εργασίας, νήμα-νήμα.

Back translation: ‘little by little, you are unraveling the sweater of labour protection, thread by thread.’

(16) **ST (Greek):** ήρεμα νερά είναι και τα νερά του βάλτου.

Back translation: ‘still waters can also be swamp waters.’

Such metaphorical compression is virtually absent from NMT-mediated institutional texts, which tend to normalise or literalise figurative input.

D. Syntactic autonomy and clause expansion

The non-translated corpus consistently favours clause expansion over compression. Complex ideas are articulated through coordinated or subordinated clauses rather than through dense nominal groups. This yields syntactically autonomous units that can stand independently as acts of assertion, accusation, commitment or evaluation. The examples below are indicative:

- (17) **ST (Greek):** Η κυβέρνηση έχει επιλέξει έναν δομημένο διάλογο, ο οποίος βασίζεται σε τρεις πυλώνες.

Back Translation: ‘The government has chosen a structured dialogue, which is based on three pillars.’

- (18) **ST (Greek):** Τόνισε ότι η εφαρμογή των μέτρων ανήκει στην ευθύνη των περιφερειών.

Back translation: ‘He stressed that the implementation of the measures is the regions’ responsibility.’

Such structures preserve argumentative clarity and allow speakers to incrementally build meaning, rather than embedding multiple relations within a single nominalised phrase.

E. Limited nominalisation and controlled abstraction

While nominalisation is present, particularly in procedural or legal contexts, it does not dominate syntactic organisation. Abstract nouns (e.g. *ενίσχυση* ‘strengthening’, *υλοποίηση* ‘implementation’, *συμμόρφωση* ‘compliance’) typically typically co-occur with verbs and are embedded within clausal structures, rather than functioning as autonomous nominal heads.

- (19) **ST Greek:** Η εφαρμογή των μέτρων προϋποθέτει τη συνεργασία όλων των φορέων.

Back translation: ‘The implementation of the measures presupposes the cooperation of all bodies.’

Here, abstraction is syntactically contained and does not obscure agency or process. This contrasts with translated institutional discourse, where nominalisations frequently replace verbal predication altogether.

F. Resistance to syntactic convergence

The predominance of verb-driven syntax in non-translated Greek institutional discourse reflects a broader resistance to syntactic convergence toward formal English-derived institutional norms, which typically privilege:

- nominal groups over clauses
- passive constructions over active predication when the agent is not explicitly reported
- abstract processes over agentive actions
- SVO syntax

In the Greek parliamentary corpus, syntax remains agent-oriented, temporally grounded and discursively expandable, preserving the language's capacity to encode responsibility and stance at sentence level.

4.2.4 Interim synthesis: the baseline for convergence

The non-translated Greek institutional corpus establishes a clear structural baseline against which human-translated and NMT-mediated texts can be evaluated. Greek parliamentary discourse is characterised by verb-centred syntax, explicit agency, high evaluative and dialogic density and clausal autonomy, reflecting established conventions of Greek institutional communication rather than translation-induced structuring.

Within this baseline, propositions are anchored to finite verbal predicates and identifiable agents, ensuring discursive accountability and limiting abstraction. Clause expansion is favoured over nominal compression, while evaluative stance and dialogicity are foregrounded rather than neutralised. Passive constructions and abstract nouns, where present, remain syntactically and discursively constrained.

Crucially, this profile indicates that abstraction, depersonalisation and reduced evaluative salience are not inherent properties of Greek institutional discourse. Any systematic shifts toward nominalisation, attenuated agency abstraction observed in human-translated or NMT-mediated outputs must therefore be attributed to translational mediation and contact-induced convergence rather than to target-language norms. This baseline provides the point of reference for the comparative analyses that follow.

4.3 Human-Translated Greek: Register-Sensitive Mediation and Filtered Convergence

The analysis of the human-translated (HT) Greek corpus reveals a distinct translational profile characterised by register-sensitive mediation rather than mechanical surface convergence with English. While the Greek output is clearly shaped by sustained contact with English EU institutional discourse, translators consistently intervene at the syntactic, phraseological and discourse levels to align the source material with established conventions of Greek administrative and legal language so as to provide intelligible translations. As a result, convergence in the HT corpus is selective, filtered and institutionally regulated, rather than transparent or literal.

4.3.1 Nominalisation as structural harmonisation

One of the clearest and most significant patterns in the HT corpus is the systematic restructuring of English verb-driven coordination into parallel nominal frames. This is not a trivial stylistic choice but a deliberate harmonisation strategy that neutralises English verbal sequencing in favour of Greek administrative symmetry.

(1) **ST (Original English):** ...to lower bills and boost independence.

TT (Human-translated Greek): ...τη μείωση των λογαριασμών και την ενίσχυση της ανεξαρτησίας.

Back translation: ‘the reduction of bills and the strengthening of independence.’

Here, the English verb “boost” is not rendered verbally (to boost ‘να ενισχύσει’, even though Greek allows such a construction. Instead, it is nominalised (strengthening-ενίσχυση), producing a balanced nominal pair ‘μείωση-ενίσχυση’. This choice actively resists English verb-centred sequencing and conforms to Greek policy drafting norms, where parallel nominal structures are preferred in institutional discourse as they are considered more formal.

Therefore, this pattern demonstrates that human translation does not transmit English syntax unfiltered. On the contrary, it re-encodes propositional content through target-language conventions, limiting surface-level convergence while preserving institutional coherence.

Figure 2 illustrates the frequency of abstract nouns in the HT corpus

KWIC					Plot	File View	Cluster	N-Gram	Collocate	Word	Keyword	Wordcloud	ChatAI
Total Hits: 987					Page Size		100 hits		1 to 100 of 987 hits				
	File	Left Context				Hit							
1	Commissi...	ταιρείες, επιτάχυνση της ανάπτυξης νέων τεχνολογιών,				επέκταση		της πρόσβασης σε					
2	Ειδησεογ...	ία με την Ευρωπαϊκή Τράπεζα Επενδύσεων με στόχο τη				διευκόλυνση		της πρόσβασης σε					
3	Simpler E...	ή δέσμη μέτρων για τον ψηφιακό τομέα αποσκοπεί στη				βελτίωση		της πρόσβασης σε					
4	Simpler E...	ων στους φυλλομετρητές και στο λειτουργικό σύστημα.				Βελτίωση		της πρόσβασης σε					
5	Simpler E...	νέφους: Τόνωση των ευρωπαϊκών εταιρειών TN με την				απελευθέρωση		της πρόσβασης σε					
6	ψηφιακοί...	ένων υψηλής ποιότητας για την TN. Αυτό περιλαμβάνει				επέκταση		της πρόσβασης μέ					
7	ψηφιακοί...	ομένα ενίσχυση των ευρωπαϊκών εταιρειών TN με την				απελευθέρωση		της πρόσβασης σε					
8	ψηφιακοί...	βελτιώσουν την εμπειρία των χρηστών στο διαδίκτυο.				Βελτίωση		της πρόσβασης στ					
9	Αποφάσε...	την 1η Ιουλίου 2024. Οι νέοι κανόνες αποσκοπούν στην				επιτάχυνση		της ανάπτυξης αν					
10	Αποφάσε...	ζους. Καθορίζουν οριζόντια και εγκάρσια μέτρα για την				προώθηση		της ανάπτυξης αν					

4.3.2 Discourse reframing in headings and slogans

A second strong indicator of human mediation emerges in the treatment of English headings and slogans, especially those relying on gerunds or compressed evaluative phrasing. Rather than calquing non-finite English forms, translators consistently expand or reframe them to fit Greek rhetorical expectations.

(2) **ST (Original English):** Striving to be the first climate-neutral continent.

TT (Human-translated Greek): Καταβάλλουμε κάθε προσπάθεια για να γίνουμε η πρώτη κλιματικά ουδέτερη ήπειρος.

Back translation: ‘We are making every effort to become the first climate-neutral continent.’

The English gerund “*striving*” is replaced by a finite verbal construction (*καταβάλλουμε κάθε προσπάθεια-we are making every effort*), introducing explicit agency and rhetorical elaboration. This transformation does not arise from grammatical necessity but from register adaptation, embedding the message within a Greek institutional style that favours explicit verbal framing and collectivity over slogan-like compression. The use of the first-person plural in “*καταβάλλουμε κάθε προσπάθεια*” constructs a shared institutional subject and invites the reader to align with a collective effort which is typical of the Greek discourse.

A comparable strategy appears in evaluative headings:

(3) **ST (Original English):** Delivering on our promises

TT (Human-translated Greek): Εκπλήρωση των υποσχέσεών μας

Back translation: ‘Fulfilment of our promises’

Here, the English action-oriented gerund is recast as an abstract nominal heading, aligning with policy documentation norms. In both cases, translators resist surface convergence and instead re-design discourse structure in accordance with target-language institutional rhetoric.

4.3.3 Purpose constructions and controlled impersonalisation

English EU texts frequently foreground institutional agency through purposive verbs such as “*aim, seek or commit*”. In the HT corpus, these constructions are systematically reformulated into impersonal or purpose-oriented frames, reflecting Greek legal drafting conventions.

(4) **ST (Original English):** It aims to cut emissions by at least 50% by 2030.

TT (Human-translated Greek): Σκοπός της είναι, μέχρι το 2030, να έχουν μειωθεί οι εκπομπές κατά τουλάχιστον 50%.

Back translation: ‘Its objective is that, by 2030, emissions will have been reduced by at least 50%.’

The English verb-driven structure is replaced by an abstract nominal predicate (*Σκοπός της είναι* ‘its objective is’), followed by an impersonal passive clause. This restructuring suppresses overt agency while enhancing legal precision. Also, the passive here is not imposed by Greek norms but it has been selected by the translator as a precautionary institutional strategy. This suggests that convergence in HT texts, where present, operates through selective and translator-mediated institutional strategies rather than through systematic structural alignment.

4.3.4 Institutional jargon

In legally codified contexts, particularly infringement procedures, the HT corpus exhibits exceptional terminological stability, further distinguishing human translation from both non-translated Greek and machine-translated output.

Table 1 shows institutional terminology

Original English	Human-translated Greek
letter of formal notice	προειδοποιητική επιστολή
reasoned opinion	αιτιολογημένη γνώμη
infringement procedure	διαδικασία επί παραβάσει

These equivalents do not reproduce English surface structure but correspond to long-established Greek EU legal terminology. Their consistent use presupposes institutional memory and legal expertise, reinforcing intertextual continuity across EU Greek documentation. This behaviour confirms that human translation acts as a stabilising mechanism, anchoring discourse in existing institutional language rather than introducing compositional or literal renderings.

4.3.5 What the AntConc evidence adds

AntConc findings reinforce these qualitative observations by revealing system-level regularities rather than isolated stylistic choices. Word lists and KWIC

concordances show a strong preference for abstract nouns, evaluative predicates such as *είναι καθοριστικής σημασίας* ‘it is of crucial importance’, and controlled futurity (e.g. *θα αποτελέσει* ‘will constitute’). N-gram analysis further confirms reliance on prefabricated institutional frames (e.g. *η Επιτροπή* ‘the Commission’, *κράτη μέλη* ‘member states’, *αιτιολογημένη γνώμη* ‘reasoned opinion’), indicating norm-driven translation behaviour rooted in institutional conventions rather than individual stylistic creativity.

However, these patterns do not amount to transparent or mechanical surface convergence with the English source texts. Instead, they point to a filtered and mediated form of alignment characteristic of human translation, whereby English discourse organisation exerts influence on Greek output only after being selectively reshaped through professional judgment, target-language norms and institutional drafting practices. Human translators thus operate as active mediators, preserving institutional coherence while preventing strict source-language replication. This mediated alignment is illustrated in Figure 2.

Figure 2 presents the most frequent n-grams extracted from the HT corpus

N-Gram Types 13884/13884 N-Gram Tokens 19410/19410 Page Size 100 hits		1 to 100 of 13884 hits			
Type	Rank	Freq	Range		
1 επιτροπή αποφάσισε να	1	63	2		
2 της ευρωπαϊκής ένωσης	2	56	2		
3 δικαστήριο της ευρωπαϊκής	3	52	2		
4 στο δικαστήριο της	4	51	2		
5 αποστέλλει αιτιολογημένη γνώμη	5	43	1		
6 να αποστέλλει αιτιολογημένη	5	43	1		
7 η ευρωπαϊκή επιτροπή	7	42	4		
8 αποφάσισε να αποστέλλει	8	40	1		
9 για τον λόγο	8	40	2		
10 τον λόγο αυτό	8	40	2		
11 ευρωπαϊκή επιτροπή αποφάσισε	11	39	2		
12 τα κράτη μέλη	12	38	6		
13 δύο μηνών για	13	37	1		
14 μηνών για να	13	37	1		
15 μπορεί να αποφασίσει	13	37	1		
16 να αποφασίσει να	13	37	1		
17 προθεσμία δύο μηνών	13	37	1		

4.3.6 Interim conclusion: why HT matters for convergence

Taken together, the evidence demonstrates that human translation constitutes a buffered contact environment in English-Greek institutional communication. Convergence is already observable at the levels of abstraction, modality and discourse organisation, yet it is actively regulated through nominalisation, impersonalisation, discourse reframing and terminological conventionalisation.

Human translators do not replicate English surface patterns mechanically; they mediate, normalise and institutionalise them.

This register-sensitive mediation sharply distinguishes human-translated Greek from neural machine translation output analysed in the following section. The HT corpus therefore provides a critical baseline: it shows that convergence begins before algorithmic mediation, but also that human translation still resists direct surface transfer. Against this backdrop, the impact of NMT can be assessed not as a rupture, but as an intensification of already existing tendencies.

4.4 e-Translation: Machine-translated Greek EU texts

e-Translation explicitly frames its output through an institutional disclaimer that accompanies automatically translated content on EU websites. The disclaimer states that the translation is produced automatically, without human intervention and that the European Commission does not guarantee its accuracy nor assume responsibility for potential errors. Users are explicitly advised not to rely on e-Translation for legally binding texts, which are instead made available through official human translations.

Figure 3 presents the disclaimer in e-Translation output

Χρήση αυτόματης μετάφρασης στον Europa

Αποποίηση ευθύνης

Η μετάφραση αυτή παράγεται από το eTranslation, ένα εργαλείο αυτόματης μετάφρασης που παρέχει η Ευρωπαϊκή Επιτροπή. Η αυτόματη μετάφραση μπορεί να σας δώσει μια βασική ιδέα του περιεχομένου σε γλώσσα που κατανοείτε. Παράγεται αυτοματοποιημένα, με μηχανικά μέσα, χωρίς ανθρώπινη παρέμβαση. Η ποιότητα και η ακρίβεια της αυτόματης μετάφρασης μπορεί να διαφέρουν σημαντικά, ανάλογα με το είδος του κειμένου και τα διαφορετικά γλωσσικά ζεύγη. Η Ευρωπαϊκή Επιτροπή δεν εγγυάται την ακρίβεια και δεν αναλαμβάνει καμία ευθύνη για πιθανά σφάλματα. Μέρος του περιεχομένου (όπως εικόνες, βίντεο, αρχεία κ.λπ.) ενδέχεται να μην έχει μεταφραστεί λόγω τεχνικών περιορισμών του συστήματος.

Μην χρησιμοποιείτε το eTranslation για μετάφραση της νομοθεσίας της ΕΕ. Τα αυθεντικά κείμενα στις 24 επίσημες γλώσσες διατίθενται στο [Eur-Lex](#). Δείτε επίσης τη [γλωσσική πολιτική του Europa](#) καθώς και την [ανακοίνωση νομικού περιεχομένου](#) (η οποία περιλαμβάνει την πολιτική σεβασμού της ιδιωτικότητας και την ανακοίνωση για τα δικαιώματα πνευματικής ιδιοκτησίας).

This institutional self-positioning is discursively significant. While e-Translation produces highly standardised and authoritative Greek, the accompanying disclaimer simultaneously suspends full institutional responsibility for the content.

As a result, normative and procedural language is disseminated at scale, yet explicitly framed as provisional and non-authoritative.

The analysis of the machine-translated Greek corpus produced via the European Commission’s e-Translation system reveals a strong and systematic convergence towards English institutional discourse. Across policy areas, including climate and energy, financial markets, migration, social policy, research and innovation, the Greek output consistently preserves the lexical and syntactic patterns of the English source texts, with limited adaptation to established conventions of Greek institutional and administrative language.

At the lexical level, e-Translation shows a pronounced tendency towards literal transfer and calquing of English terminology. Key policy and technical terms are rendered through direct equivalence rather than functional or idiomatic reformulation, resulting in Greek formulations that closely mirror English phrasing. This is not only evident in specialised domains such as finance and capital markets, where English technical vocabulary is often retained or minimally adapted, but also in broader policy discourse, where evaluative and abstract nouns (e.g. “action”, “approach”, “response”) are reproduced in Greek with limited semantic modulation. The outcome is a lexically dense Greek text that aligns more closely with English institutional jargon than with naturalised Greek administrative prose.

Figure 4 illustrates the frequency of abstract nouns in the e-Translation corpus

File	Left Context	Hit	Right Context
1 Οι ...	ΕΕ και το 57 % συμφωνούν με τη	χρηματοδότηση	της ΕΕ για την αγορά και την προμ.
2 ναρκωτικ...ια μια φιλόδοξη και συντονισμένη		προσέγγιση	της ΕΕ για την προστασία της δημ.
3 Η ΕΕ ...έργειας Η εφαρμογή του σχεδίου		δράσης	της ΕΕ για την οικονομικά προσιτή
4 ναρκωτικ...ά με τη στρατηγική και το σχέδιο		δράσης	της ΕΕ για τα ναρκωτικά Τι εγκρίνε
5 τερματισ...υνδρομής στα θύματα. Το σχέδιο		δράσης	της ΕΕ για τα ανθρώπινα δικαιώμα
6 Together ...ομό της ακαδημαϊκής ελευθερίας.		Προσέγγιση	της ΕΕ για την ασφάλεια της έρευν
7 Η ΕΕ ...και ανεξαρτησία, μειώνοντας την		εξάρτηση	της ΕΕ από εισαγόμενα ορυκτά και
8 Η ΕΕ ...α μειώσει ακόμη περισσότερο την		εξάρτηση	της ΕΕ από τις εισαγωγές ορυκτών
9 10ης ...στο ενδεικτικό χρονοδιάγραμμα		έκδοσης	της ΕΕ είναι η δημοπρασία γραμμο
10 Ημερήσια...στο ενδεικτικό χρονοδιάγραμμα		έκδοσης	της ΕΕ είναι η δημοπρασία γραμμο
11 ναρκωτικ...ει ενισχύει την ετοιμότητα και την		αντίδραση	της ΕΕ στις τρέχουσες και μελλοντ
12 ναρκωτικ...αι καθορίζουν μια ολοκληρωμένη		απάντηση	της ΕΕ στις προκλήσεις για την ασ
13 ναρκωτικ...ο μακροπρόθεσμο πλαίσιο για τη		δράση	της ΕΕ στον τομέα της πολιτικής γι

Syntactically, the e-Translation output is characterised by a strong preference for English-like clause structures. Passive constructions, agentless formulations and

extended nominal phrases are consistently maintained, reflecting the dominant syntactic patterns of English EU policy communication. Verbal constructions that would typically be rendered more dynamically or explicitly in Greek are instead preserved in their English-influenced passive or impersonal form. As a result, agency is frequently backgrounded and responsibility is framed in abstract, procedural terms, in line with English governance discourse. This syntactic alignment contributes to a perception of structural rigidity and reduced discursive flexibility in the Greek output.

At the level of discourse organisation, the e-Translation output closely follows the overall structure of English EU genres. Greek texts reproduce the sequencing typical of English institutional communication, including headline-driven openings, early presentation of quantitative information, clearly segmented sections and standardised closing background paragraphs. These organisational patterns are transferred into Greek with little reordering, resulting in texts that reflect English institutional structuring rather than established Greek rhetorical conventions, such as more gradual thematic development or alternative information prioritisation.

The cumulative effect of these lexical, syntactic and structural choices is the production of a Greek institutional register that can be described as *English-shaped Greek*. While the texts are grammatically well-formed and terminologically consistent, they exhibit limited register sensitivity to Greek administrative traditions. The machine-translated output thus reflects not merely translation from English into Greek, but a broader process of discourse convergence, whereby English institutional norms are reproduced and stabilised within Greek through automated translation.

Importantly, this convergence appears consistent across diverse policy domains and text types, suggesting that it is not driven by subject-matter specificity but by the systemic characteristics of the e-Translation engine itself. The system prioritises terminological consistency, structural alignment and institutionally bounded equivalence, resulting in Greek texts that retain the voice, rhythm and governance logic of the English originals. These findings position e-Translation as a powerful vector for the diffusion of English institutional discourse into Greek,

with implications for longer-term patterns of stylistic and syntactic convergence in EU-mediated Greek texts. Yet, one must admit that the renderings are intelligible and creative. But, while e-Translation does not operate through word-for-word transfer, its creative reformulations remain tightly constrained by institutional templates and alignment with English source patterns.

4.4.1 Lexical distribution and institutional anchoring

Word frequency and range analysis of the e-Translation corpus reveals a highly stabilised and institutionally anchored lexical profile. High-frequency items such as *Επιτροπή* ‘Commission’, *ΕΕ* ‘EU’, *στρατηγική* ‘strategy’, *μέτρα* ‘measures’, recur systematically across texts with wide range but limited contextual variation. These items function as fixed institutional anchors rather than as lexically adaptive choices sensitive to local discourse conditions.

Unlike human-translated Greek, where institutional terminology may be selectively rephrased or pragmatically redistributed, the machine-translated output exhibits strong preference for canonical equivalents that closely mirror English source formulations. This pattern suggests algorithmic lexical stabilisation driven by translation memory alignment and probabilistic selection, rather than interpretive mediation.

A further aspect of this institutional anchoring concerns lexical formality. In the example below, the English verb “adopt” is rendered as *ενέκρινε* rather than *υιοθέτησε*, reflecting a preference for legally established Greek administrative terminology. This tendency extends beyond individual lexical choices, manifesting in the recurrent positioning of abstract institutional entities as grammatical subjects, with policy instruments, frameworks and strategies foregrounded over human or social actors.

(1) ST (Original English): The Commission adopted the 2026 European Semester Autumn Package.

TT (e-Translation Greek): Η Επιτροπή ενέκρινε τη φθινοπωρινή δέσμη μέτρων του Ευρωπαϊκού Εξαμήνου του 2026.

Back translation: ‘The Commission approved the Autumn Package of the European Semester 2026.’

A similar pattern is observed in migration-related texts, where *literal terminological transfer* further intensifies institutional anchoring.

(2) **ST (Original English):** Improved language support and changes to tax relief for people displaced from Ukraine in Latvia.

TT (e-Translation Greek): Βελτίωση της γλωσσικής υποστήριξης και αλλαγές στις φορολογικές ελαφρύνσεις για τους εκτοπισθέντες από την Ουκρανία στη Λετονία.

Back translation: ‘Improvement of language support and changes in tax relief for the displaced from Ukraine in Latvia.’

The lexical choice “displaced” *εκτοπισθέντες* represents a direct transfer and despite the fact that it may be valid in Greek, it is quite uncommon, in the sense that it not a high frequency word. Alternatives such as *πρόσφυγες* ‘refugees’ or *άτομα που έχουν φύγει λόγω πολέμου* ‘persons that have fled due to war’ would be pragmatically more natural. This illustrates how e-Translation prioritises source-driven semantic equivalence over target-language idiomaticity, further reinforcing institutional distance and abstraction.

Across the corpus, such choices accumulate to produce a discourse profile dominated by abstract nouns, nominal policy instruments and institutional actors. Concrete human agency is backgrounded, while processes are framed as impersonal, procedural and administratively governed. Lexical repetition and limited synonymic variation contribute to a sense of formulaicity, positioning e-Translation Greek as a stabilised institutional variety rather than a dynamically mediated target-language text.

Overall, lexical distribution in the e-Translation corpus reflects convergence towards English institutional discourse patterns. Rather than adapting institutional language to established norms of Greek administrative style, the system consolidates a source-aligned lexicon that privileges consistency, literal terminological transfer and institutional anchoring over contextual flexibility.

4.4.2 Structural correspondence and syntactic mirroring

Structural correspondence with the English source texts is particularly salient in the e-Translation corpus at the level of clause organisation, sequencing and subordination. English clausal patterns are systematically mirrored in Greek with minimal syntactic reconfiguration, resulting in a high degree of surface isomorphism between source and target texts. This effect is reinforced by the fact that English exhibits a rigid SVO clause structure, which is systematically preserved in the e-Translation output.

One recurrent pattern concerns English verb-infinitive constructions expressing purpose, intention or obligation. These are consistently rendered through parallel Greek *να*-clauses (to+infinitive) that preserve the linear order and argument structure of the source, rather than being restructured into more idiomatic Greek constructions (e.g. nominalisations or finite subordinate clauses with evaluative framing). For example:

(3) **ST (Original English):** The measures aim to strengthen competitiveness and promote sustainable growth.

TT (e-Translation Greek): Τα μέτρα αποσκοπούν στο να ενισχύσουν την ανταγωνιστικότητα και να προωθήσουν τη βιώσιμη ανάπτυξη.

Back translation: ‘The measures aim to strengthen competitiveness and to promote sustainable growth.’

Here, the English coordinated infinitives (*to strengthen, to promote*) are mirrored by coordinated (*να*-) clauses (*να ενισχύσουν, να προωθήσουν*), preserving both syntactic parallelism and linear sequencing. In human-translated Greek, such structures are often reformulated through nominal constructions (e.g. *με στόχο την ενίσχυση...*), but the machine-translated output opts for direct clause-by-clause correspondence.

Across the corpus, syntactic mirroring extends beyond infinitival constructions to clause ordering, coordination patterns and information flow, resulting in the near-intact preservation of English sentence architecture. Rather than mediating between English and Greek syntactic preferences, e-Translation prioritises formal correspondence, producing grammatically acceptable yet visibly source-oriented

Greek output. This pattern reflects controlled syntactic transfer, favouring predictability and consistency over target-language restructuring and contributing to a distinctive machine-mediated institutional style.

4.4.3 Nominal density and terminological literalism

The e-Translation output is characterised by high nominal density, particularly in the treatment of complex English noun phrases. Compact English nominal chains are consistently transferred into Greek through structurally faithful equivalents that preserve modifier stacking, internal hierarchy and informational compression. Rather than redistributing information across clauses or employing periphrastic reformulation, the system reproduces English-style nominal packaging.

Table 2 illustrates this pattern through representative examples from climate and industrial policy discourse

English source term	e-Translation (Greek)	Back translation
clean transition technologies	τεχνολογίες καθαρής μετάβασης	technologies of clean transition
industrial process heat	θερμότητα βιομηχανικών διεργασιών	Heat of industrial process
net-zero emissions technologies	τεχνολογίες μηδενικών καθαρών εκπομπών	technologies of net zero emissions

Across all cases, multi-modifier English compounds are rendered through compressed Greek nominal structures that mirror English modifier order and informational density.

While these constructions are grammatically acceptable and have incorporated into Greek institutional discourse as fixed terms, they were first coined in English. As a result, they reflect the source-language discursive preferences without further human-mediated translation which could introduce syntactic redistribution or explanatory expansion. The convergence observed here lies in the use of systematic replication of English modifier sequencing and nominal compression.

Beyond core institutional terminology, source-oriented lexical behaviour in the e-Translation corpus extends to evaluative language, where experiential descriptions are rearticulated through formulations. This pattern is illustrated in the following

example, where an event-based narrative is reframed through abstract and institutionally aligned lexical choices.

(4) ST (Original English): Both during and in-between sessions, the event took place in a particularly vibrant and engaged atmosphere.

TT (e-Translation Greek): Τόσο κατά τη διάρκεια όσο και μεταξύ των συνεδριών, η εκδήλωση πραγματοποιήθηκε σε μια ιδιαίτερα ζωντανή και αφοσιωμένη ατμόσφαιρα.

Back translation: ‘Both during and between the sessions, the event took place in a particularly lively and devoted atmosphere.’

Here, the evaluative expression “engaged atmosphere” is rendered as *αφοσιωμένη ατμόσφαιρα*, a lexically literal but pragmatically infelicitous formulation in Greek. The adjective *αφοσιωμένος* typically describes people and their commitments, and its extension to an abstract experiential setting is non-idiomatic and unnatural in Greek. This choice reflects source-oriented lexical behaviour, whereby English evaluative meaning is transferred without adjustment to target-language norms, resulting in an abstract and institutionally elevated formulation rather than natural Greek usage.

4.4.4 Modality and futurity

At the level of modality, the e-Translation corpus displays a strong preference for predictive and prospective framing. Future-oriented constructions with *θα* ‘will’, as well as impersonal expectation frames such as *αναμένεται να* ‘it is expected to’ recur in highly stabilised syntactic templates. These forms are systematically followed by abstract or institutional predicates, framing policy initiatives as projected outcomes rather than negotiated or agent-driven actions.

(5) ST (Original English): These measures will significantly contribute to the clean transition and boost competitiveness.

TT (e-Translation Greek): Τα μέτρα αυτά θα συμβάλουν σημαντικά στην καθαρή μετάβαση και στην ενίσχυση της ανταγωνιστικότητας.

Back translation: ‘These measures will contribute significantly to the clean transition and to the strengthening of competitiveness.’

Here, futurity functions as a modal surrogate for obligation or commitment. Rather than articulating explicit responsibility, the action is projected forward as an expected effect, closely mirroring English institutional discourse.

A similar pattern appears in expectation-based constructions. In Example 6, the English expectation frame is reproduced directly through the impersonal construction *αναμένεται να*, preserving the non-committal and predictive stance of the source text.

(6) **ST (Original English):** The reform is expected to benefit thousands of refugees.

TT (e-Translation Greek): Η μεταρρύθμιση αναμένεται να ωφελήσει χιλιάδες πρόσφυγες.

Back translation: ‘The reform is expected to benefit thousands of refugees.’

Here, futurity is framed through an impersonal expectation structure rather than through explicit obligation or commitment. The use of “*αναμένεται να*” allows the proposition to be presented as a projected outcome without assigning responsibility to a specific actor or encoding normative force. This construction therefore maintains modal distance and aligns with the procedural tone characteristic of institutional forecasting.

While expectation-based futurity dominates the modal profile of e-Translation outputs, obligation is not entirely absent. In regulatory contexts, e-Translation selectively activates stronger obligation-oriented constructions, departing from predictive or advisory framing.

(7) **ST (Original English):** ...clarify the ‘prudent person’ principle which governs how IORPs and PEPP providers should invest and manage their asset portfolios to help increase investment into equity.

TT (e-Translation Greek): ...να αποσαφηνίσει την αρχή της «συνετής διαχείρισης» που διέπει τον τρόπο με τον οποίο τα ΙΕΣΠ και οι πάροχοι PEPP θα πρέπει να επενδύουν και να διαχειρίζονται τα χαρτοφυλάκια περιουσιακών στοιχείων τους, ώστε να συμβάλλουν στην αύξηση των επενδύσεων σε μετοχικό κεφάλαιο.

Back translation: ‘...to clarify the principle of ‘prudent management’ which governs the way in which IORPs and PEPP providers must invest and manage

their asset portfolios, in order to contribute to an increase in investments in equity.’

In this case, the advisory modal “*should*” in the English source is rendered as “*θα πρέπει*”, a construction that encodes stronger normative force in Greek institutional usage. This choice results in modal strengthening, reframing the recommendation as a more explicit requirement without fully resorting to categorical obligation markers such “*they must*”. The shift reflects a tendency toward normative clarification in regulatory contexts rather than a simple transfer of modality.

This modal behaviour aligns with EU drafting conventions, where governance-related principles are frequently articulated through obligation-oriented formulations to reduce interpretive ambiguity. Overall, the examples demonstrate that within the e-Translation corpus, expectation-based futurity functions as the default modal frame, while stronger obligation-oriented constructions are selectively employed in legally and regulatorily marked environments, resulting in a stable and institution-oriented modal profile.

4.4.5 Copular evaluation and agency suppression

Another salient feature of the e-Translation output is the extensive reliance on copular constructions centred on *είναι* ‘be’, particularly within evaluative frames such as *είναι αναγκαίο* ‘it is essential’ and *είναι σε θέση να* ‘is in a position’. Concordance evidence indicates that these constructions recur with minimal lexical or syntactic variation across texts.

(8) **ST (Original English):** It is essential to strengthen competitiveness and maintain sound public finances.

TT (e-Translation Greek): Είναι αναγκαίο να ενισχυθεί η ανταγωνιστικότητα και να διατηρηθούν υγιή δημόσια οικονομικά.

Back translation: ‘It is necessary for competitiveness to be strengthened and for sound public finances to be maintained.’

Here, evaluation is detached from any explicit human or institutional agent. The construction foregrounds necessity while backgrounding responsibility, a pattern that closely mirrors English institutional depersonalisation strategies.

A further example illustrates capacity attribution through copular framing:

(9) **ST (Original English):** The EU is well positioned to become a global leader in sustainable bio-based technologies.

TT (e-Translation Greek): Η ΕΕ είναι σε θέση να καταστεί παγκόσμιος ηγέτης στις βιώσιμες τεχνολογίες βιολογικής βάσης.

Back translation: ‘The EU is in a position to become a global leader in sustainable bio-based technologies.’

Such evaluative templates systematically suppress agency by promoting abstract entities (e.g. “measures, strategies, frameworks, the EU policies”) as grammatical subjects while omitting actors, decision-makers or sites of accountability. Compared with human-translated Greek, evaluative expression in the e-Translation corpus appears more rigidly stabilised, contributing to heightened abstraction and reduced syntactic variability.

A further salient feature of the e-Translation output is the systematic replication of English passive constructions. While passive voice is grammatically available in Greek, its dense and repetitive use in the machine-translated texts reflects alignment with English institutional discourse rather than adherence to Greek stylistic norms. This contributes to agent suppression and reinforces a depersonalised, outcome-oriented mode of governance discourse.

(10) **ST (Original English):** The proceeds of the transaction will be used to finance EU policy programmes, most notably in the context of NextGenerationEU and support to Ukraine.

TT (e-Translation Greek): Τα έσοδα της συναλλαγής θα χρησιμοποιηθούν για τη χρηματοδότηση προγραμμάτων πολιτικής της ΕΕ, ιδίως στο πλαίσιο του NextGenerationEU και για τη στήριξη της Ουκρανίας.

Back translation: ‘The proceeds of the transaction will be used for the financing of EU policy programmes, notably in the context of NextGenerationEU and for the support of Ukraine.’

The English passive construction “will be used” is directly replicated in Greek (*θα χρησιμοποιηθούν*), despite the availability of active alternatives that would be more typical in Greek institutional prose. The result is systematic agent suppression, whereby responsibility for action remains implicit, reinforcing a

depersonalised and outcome-oriented governance style aligned with English institutional discourse.

4.4.6 Formulaicity and syntactic regularisation

N-gram and concordance analysis reveal a high degree of formulaicity in the e-Translation output. Formulaicity refers to prefabricated lexical and syntactic patterns. In the current study, recurrent lexical bundles such as “*η Επιτροπή* ‘the Commission’, *κράτη μέλη* ‘member states’, *στο πλαίσιο* ‘within the framework’, *όσον αφορά* ‘regarding’ *etc.*, function as pre-assembled units with limited internal variation. These bundles structure discourse progression and clause sequencing in a highly predictable manner.

- (11) **ST (Original English):** Within the framework of the Innovation Fund, the Commission will support decarbonisation projects.

TT (e-Translation Greek): Στο πλαίσιο του Ταμείου Καινοτομίας, η Επιτροπή θα στηρίζει έργα απαλλαγής από τις ανθρακούχες εκπομπές.

Back translation: ‘Within the framework of the Innovation Fund, the Commission will support decarbonisation projects.’

List structures, enumerations and procedural passages frequently replicate English textual architecture, including parallelism, bullet-style sequencing and additive coordination. The repetition of these structural patterns points to a template-driven mode of production, in which regularity and predictability are prioritised over rhetorical adaptation.

While similar formulaic elements are also present in human-translated Greek, their density and consistency are significantly higher in the e-Translation corpus. This intensified regularisation reflects algorithmic processing constraints and reinforces a discourse profile characterised by structural stability, limited variation and strong alignment with English institutional norms.

4.4.7 Interim synthesis: the e-Translation profile

The evidence from the e-Translation corpus reveals a highly stabilised and internally consistent variety of machine-translated Greek. Lexical normalisation, elevated nominal density, structural mirroring of English source texts, modal

uniformity and extensive formulaicity recur systematically across the dataset. These features indicate that linguistic choices are reproduced through algorithmic regularisation rather than being contextually mediated or rhetorically negotiated.

Where comparison with human-translated Greek is relevant, the contrast does not concern grammatical adequacy or institutional acceptability, but the degree of mediation. E-Translation allows English-derived syntactic configurations, nominal structures and discourse patterns to pass through with minimal restructuring, resulting in pronounced surface-level convergence at the levels of syntax, phraseology and textual organisation.

Taken together, these findings position e-Translation as a comparatively transparent site of translation-induced contact. Through repetition, consistency and template-driven selection, the system facilitates the circulation and stabilisation of English-aligned institutional patterns within Greek EU discourse, creating conditions under which convergence is not merely incidental but structurally reinforced.

4.5 Machine-translated Greek via Google Translate: source-oriented transfer and procedural convergence

This section analyses the Greek output produced by Google Translate on a set of EU press releases and news articles relating to an institutional policy genre (news articles on climate policy, energy infrastructure, clean transition initiatives and digital regulation etc). Unlike the European Commission's e-Translation system, which is embedded in a controlled institutional environment, Google Translate operates as a general-purpose neural machine translation engine optimised for broad domain coverage. The analysis examines how this design orientation shapes the system's mediation of institutional discourse and its alignment with English source-text norms.

Across the examined corpus, Google Translate displays a consistently source-oriented translation profile, characterised by close structural adherence to the English Source Texts and limited syntactic or discourse-level reconfiguration.

While the Greek output is grammatically acceptable and semantically transparent, it remains strongly anchored in English discourse organisation, with translation effects remaining clearly visible.

An additional feature of Google Translate relevant to convergence concerns its provision of alternative lexical options. In certain cases, the system offers multiple Greek renderings for a given English item (e.g. “implementation” → *υλοποίηση / εφαρμογή*), allowing the user to select among competing equivalents. This optionality introduces a limited degree of human intervention at the lexical level, partially interrupting fully automated transfer. However, such choice remains constrained to isolated lexical substitutions and does not extend to syntactic restructuring or discourse-level organisation, which remain strongly aligned with the English source.

4.5.1 Agency: abstraction and process-driven subjects

At the level of agency, Google Translate systematically reproduces the English preference for abstract, process-driven subjects, foregrounding policies, plans or initiatives rather than human or institutional actors. This pattern mirrors English governance discourse and results in consistent agency suppression in the Greek output.

- (1) **ST (English original):** The new high-speed rail action plan aims to cut journey times and make rail a more attractive alternative to short-haul flights.

TT (Google Translate Greek): Το νέο σχέδιο δράσης για τους σιδηροδρόμους υψηλής ταχύτητας στοχεύει στη μείωση του χρόνου ταξιδιού και στην καθιέρωση μιας πιο ελκυστικής εναλλακτικής λύσης σε σχέση με τις πτήσεις μικρών αποστάσεων.

Back translation: ‘The new action plan for high-speed rail aims to reduce travel time and to establish a more attractive alternative to short-haul flights.’

Here, the abstract policy instrument “the action plan” is preserved as grammatical subject ‘*το σχέδιο δράσης στοχεύει*’, directly replicating the English construction. No attempt is made to redistribute agency toward institutional actors (e.g. “the Commission”), resulting in a depersonalised, object-centred representation of action that aligns closely with English policy rhetoric. Also, purposive verb

constructions in the English source text are systematically re-encoded in the Google Translate output, as nominalised complements in Greek. Specifically, the verb pattern *aims to + verb* is rendered as *στοχεύει στη* + nominalization ‘*aims + noun*’. This shift replaces verbal action with abstract process encoding, increasing nominal density. A similar pattern appears across multiple texts:

(2) **ST (Original English):** The package aims to ease compliance with simplification efforts estimated to save up to €5 billion in administrative costs by 2029.

TT (Google Translate Greek): Το πακέτο στοχεύει στη διευκόλυνση της συμμόρφωσης με τις προσπάθειες απλούστευσης που εκτιμάται ότι θα εξοικονομήσουν έως και 5 δισεκατομμύρια ευρώ σε διοικητικό κόστος έως το 2029.

Back translation: ‘The package aims to facilitate compliance with simplification efforts, which are estimated to save up to €5 billion in administrative costs by 2029.’

Again, the abstract noun “package” ‘*πακέτο*’ functions as the agentive subject, preserving the English process-driven framing. This results in high nominal density, with agency and action encoded through successive abstract nouns rather than through verbal predication or explicit institutional actors. As a result, the accumulation of abstract nominal elements increases processing load and reduces readability, producing dense and cognitively demanding constructions.

4.5.2 Modality: uniform futurity and projection

Modal framing in the Google Translate output is dominated by future-oriented constructions realised through “*θα*” (will), frequently combined with evaluative or result-oriented predicates. These constructions correspond closely to English modal futures such as “will”, producing a uniform, projection-driven discourse.

(3) **ST (Original English):** This will help lower energy prices and support affordable living for all Europeans.

TT (Google Translate Greek): Αυτό θα βοηθήσει στη μείωση των τιμών ενέργειας και θα υποστηρίξει μια προσιτή διαβίωση για όλους τους Ευρωπαίους.

Back translation: ‘This will help reduce energy prices and support affordable living for all Europeans,’

The double future *θα βοηθήσει, θα υποστηρίξει* directly mirrors the English will-based projection, with no pragmatic recalibration or institutional hedging. Across the corpus, similar constructions recur systematically, reinforcing a discourse of anticipated outcomes rather than negotiated or conditional action.

4.5.3 Syntactic organisation: limited restructuring

At the syntactic level, Google Translate exhibits minimal restructuring. Clause sequencing, coordination and informational packaging closely follow the English source text, particularly in list-based policy descriptions and extended explanatory passages.

(4) **ST (English original):** The campaign was aimed at driving public and private investment in supporting the clean energy transition in Africa, expand access to electricity and promote sustainable economic growth.

TT (Google Translate Greek): Η εκστρατεία είχε ως στόχο την τόνωση των δημόσιων και ιδιωτικών επενδύσεων για την υποστήριξη της μετάβασης στην καθαρή ενέργεια στην Αφρική, την επέκταση της πρόσβασης στην ηλεκτρική ενέργεια και την προώθηση της βιώσιμης οικονομικής ανάπτυξης.

Back translation: ‘The campaign aimed to stimulate public and private investment to support the transition to clean energy in Africa, expand access to electricity, and promote sustainable economic growth’.

The English infinitival coordination is transferred through parallel nominalisations in Greek, preserving linear structure and informational density rather than redistributing content into more flexible Greek institutional patterns.

4.5.4 Nominal density and calqued institutional phrases

Nominal density further reinforces the source-oriented profile of Google Translate. Compact English nominal chains are frequently transferred through structurally faithful Greek equivalents, maintaining modifier order and informational compression. Table 2 shows indicative examples:

Table 3 presents nominal chains from the Google Translate dataset

English original	Google Translate (Greek)
European Business Wallets	<i>Ευρωπαϊκά Επιχειρηματικά Πορτοφόλια</i>
Data Union Strategy	<i>Στρατηγική Ένωσης Δεδομένων</i>
Clean energy infrastructure	<i>Υποδομές καθαρής ενέργειας</i>

These renderings are fully intelligible but reflect close structural calquing, resulting in dense nominal groupings that align more closely with English informational packaging than with more distributed Greek institutional phrasing. This may be due to the fact that such complex noun phrases were first coined within English policy discourse, as it has already been mentioned.

4.5.5 Evaluation: copular framing and informational tone

Evaluation in the Google Translate output is lexically explicit but structurally constrained, realised through copular constructions that mirror English evaluative frames. Copular evaluation allows positive assessment to be conveyed in a structurally economical and informationally neutral manner. The reproduction of patterns such as “is well positioned” in Greek reflects convergence toward English evaluative framing, whereby stance is encoded through stable copular predicates rather than explicit authorial judgment.

(5) **ST (Original English):** Europe is well positioned to become a global leader in sustainable bio-based technologies, materials, products and expertise.

TT (Google Translate Greek): Η Ευρώπη βρίσκεται σε πλεονεκτική θέση για να γίνει παγκόσμιος ηγέτης στις βιώσιμες βιοτεχνολογίες, υλικά, προϊόντα και εμπειρογνωμοσύνη.

Back translation: ‘Europe is well positioned to become a global leader in sustainable biotechnologies, materials, products and expertise’.

4.5.6 Interim assessment

The evidence demonstrates that Google Translate produces a translation profile defined by literal transfer in conservative restructuring which favours nominal structures and strong surface alignment with English source texts. While this strategy ensures clarity and semantic fidelity, it systematically preserves English-informed discourse patterns, particularly with respect to agency abstraction, modal futurity and nominal density.

Unlike e-Translation, which institutionalises convergence through genre-specific formulaicity, Google Translate functions primarily as a general-purpose conduit for English policy discourse. It maintains source-language organisation with minimal filtering, thereby facilitating the circulation of English governance structures into Greek without active adaptation to autonomous Greek institutional conventions.

4.6 Machine-translated Greek (DeepL): fluency-driven restructuring and creative convergence

This section examines the Greek output produced by DeepL from the same English EU press releases and institutional news texts analysed in the previous sections. Unlike generic machine translation systems, DeepL is widely used in professional and corporate translation environments and is frequently integrated into translation workflows as a productivity-oriented tool. In this context, DeepL not only produces fully automated output but also allows users to intervene at the lexical level by selecting among alternative translation suggestions for individual items. Finally, its free version offers limited access through monthly character limits in contrast to Google Translate.

The focus of this section lies on DeepL's fluency-oriented translation behaviour and its discursive consequences for Greek institutional communication. DeepL exhibits a distinctive translational profile characterised by advanced target-language fluency, syntactic alignment to the Source Text and limited stylistic smoothing. Rather than simplifying or levelling stylistic features, DeepL

frequently reshapes clauses, nominal groups and enumerative structures in order to produce Greek output that reads as cohesive, idiomatic and rhetorically polished.

Importantly, the availability of lexical alternatives does not reinstate full translational mediation. User choice remains confined to isolated lexical substitutions, while syntactic organisation, modality and information packaging are determined by the system. As a result, translation effects are less visible at the surface level, even as deeper patterns of convergence with English institutional discourse are maintained. Core discourse features such as abstract agency, future-oriented projection and policy-accounting logic are preserved, yet rearticulated through linguistically smooth and reader-friendly Greek structures. DeepL thus occupies an intermediate position between Google Translate's conservative literalism and e-Translation's intensified institutional discourse, masking translational mediation while maintaining deeper alignment with English institutional discourse.

4.6.1 Agency: abstract institutional actors and fluency-driven masking

At the level of agency, the Greek output produced by DeepL preserves the abstract, institution-centred subject structures characteristic of English EU governance discourse, while simultaneously reducing their perceptual prominence through fluent syntactic integration. Policy initiatives, strategies, campaigns and institutional packages continue to function as grammatical subjects, yet they are embedded within smoothly flowing clauses that minimise the sense of external imposition typically associated with machine-translated administrative texts.

Compared to Google Translate, which often renders such agency patterns with greater surface visibility, DeepL masks abstraction through stylistic naturalisation rather than through structural divergence. Agency remains displaced from concrete human or political actors, but this displacement is rendered less salient through cohesive clause structure, balanced coordination and idiomatic sequencing. As a result, the translated text reads as internally coherent Greek prose, even though the underlying governance logic remains unchanged.

- (1) **ST (Original English):** A year-long campaign to mobilise investments in renewable energy in Africa has secured €15.5 billion to power a clean future across the continent.

TT (DeepL Greek): Μια εκστρατεία διάρκειας ενός έτους για τη συγκέντρωση επενδύσεων σε ανανεώσιμες πηγές ενέργειας στην Αφρική εξασφάλισε 15,5 δισεκατομμύρια ευρώ για την προώθηση ενός καθαρού μέλλοντος σε ολόκληρη την ήπειρο.

Back translation: ‘A one-year campaign to mobilise investments in renewable energy in Africa secured €15.5 billion to promote a clean future across the continent’.

Here, DeepL preserves the English abstraction by maintaining *εκστρατεία* ‘campaign’ as the grammatical subject and assigning it agentive force through the verb *εξασφάλισε* ‘secured’. As in the English source, institutional decision-makers remain backgrounded and responsibility is encoded through an abstract nominal subject rather than through explicit human agents.

At the same time, DeepL replaces the English present perfect (*has secured*) with a past simple construction *εξασφάλισε* a choice that enhances narrative naturalness in Greek but subtly shifts the temporal framing of the policy outcome. The English present perfect functions as a discourse-level signalling device rather than a simple temporal marker, foregrounding the current relevance and institutional salience of the achievement. By contrast, the Greek past tense preserves propositional meaning but attenuates this signalling function, reframing the outcome as a completed event and thereby reducing its ongoing policy salience.

The lexical choices “mobilise” *συγκέντρωση* and “power a clean future” *προώθηση ενός καθαρού μέλλοντος*, reflect a shift toward lexically elevated phrasing. The translated text aligns with conventional Greek institutional register and reads as an entirely unmarked administrative press release.

4.6.2 Modality: projection, plausibility and softened futurity

Modality in the DeepL output exhibits greater internal variation and stylistic flexibility than that observed in both e-Translation and Google Translate, while remaining predominantly future-oriented and projection-driven. Future constructions realised through “will” (*θα*) remain central, yet they are distributed

across syntactically diverse frames that foreground plausibility, directionality and anticipated outcomes rather than procedural obligation or institutional scheduling.

DeepL favours formulations that integrate futurity into smoother narrative structures. Modal projection is thus reframed as strategic orientation rather than administrative forecasting. This contributes to a discourse that reads as aspirational and forward-looking, rather than programmatic or technically prescriptive.

(2) ST (Original English): The initiative will help lower energy prices and support affordable living for households across Europe.

TT (DeepL Greek): Η πρωτοβουλία αυτή θα συμβάλλει στη μείωση των τιμών της ενέργειας και στη στήριξη της προσιτής διαβίωσης για τα νοικοκυριά σε ολόκληρη την Ευρώπη.

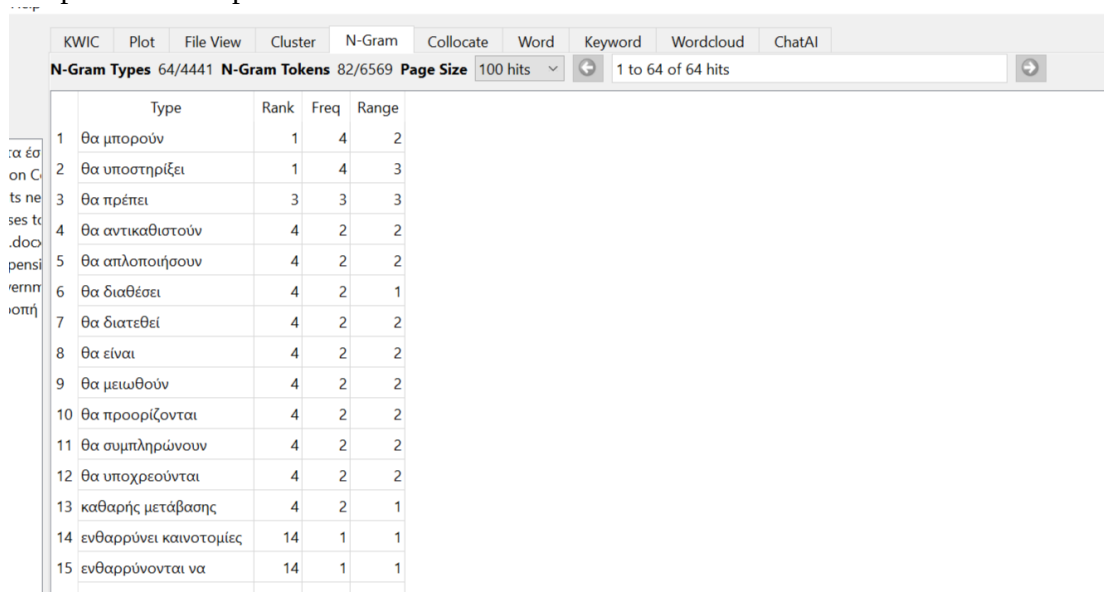
Back translation: ‘This initiative will contribute to the reduction of energy prices and to the support of affordable living for households across Europe.’

Here, DeepL reproduces the English future projection through *θα συμβάλλει* ‘will contribute’, maintaining outcome-oriented framing while avoiding word for word translation. The verb choice (*συμβάλλει*- ‘contribute’) reflects a shift toward a more institutionally conventional register. While “*help*” may display direct assistance and the agent, *συμβάλλω* ‘contribute’, foregrounds indirect impact and collective causation, thereby attenuating evaluative force. This choice aligns with established patterns in Greek policy discourse, where outcomes are framed as systemic contributions rather than as explicit acts of assistance. Such lexical modulation further illustrates translation-mediated convergence toward English-dominant institutional framing adapted to Greek stylistic norms.

Across the corpus, similar modal choices recur with high consistency. Futurity is expressed through verbs of contribution, support and facilitation (e.g. *θα επιτρέψει* ‘will allow’, *θα ενισχύσει*- ‘will strengthen’ etc.), reinforcing a discourse of anticipated impact rather than negotiated responsibility. While this strategy enhances readability and rhetorical cohesion, it also sustains convergence with English institutional modality by preserving projection as the dominant mode of policy articulation.

DeepL therefore does not re-anchor modality in Greek institutional norms that may allow for more explicit agent responsibility or obligation marking. Instead, it re-articulates English future-oriented governance logic through fluent Greek structures, producing a form of modal convergence that is stylistically naturalised rather than overtly calqued.

Figure 5 shows N-gram distribution of future-oriented verb constructions in the DeepL Greek corpus:



	Type	Rank	Freq	Range
1	θα μπορούν	1	4	2
2	θα υποστηρίξει	1	4	3
3	θα πρέπει	3	3	3
4	θα αντικαθιστούν	4	2	2
5	θα απλοποιήσουν	4	2	2
6	θα διαθέσει	4	2	1
7	θα διατεθεί	4	2	2
8	θα είναι	4	2	2
9	θα μειωθούν	4	2	2
10	θα προορίζονται	4	2	2
11	θα συμπληρώνουν	4	2	2
12	θα υποχρεούνται	4	2	2
13	καθαράς μετάβασης	4	2	1
14	ενθαρρύνει καινοτομίες	14	1	1
15	ενθαρρύνονται να	14	1	1

4.6.3 Syntactic fidelity and nominalising constructional shifts

At the syntactic level, DeepL largely preserves the clausal organisation of the English source texts, aligning closely with both Google Translate and e-Translation. Clause sequencing, coordination patterns and overall sentence structure remain stable, indicating high syntactic fidelity rather than systematic restructuring. Differences between source and target texts therefore do not primarily concern syntactic reorganisation, but rather lexico-grammatical re-encoding within the same syntactic frame.

A recurrent pattern in the DeepL output, also observed in Google Translate, involves the transformation of English verbal projections into Greek nominalised constructions. English infinitival structures expressing intention or purpose are frequently rendered through nominal complements governed by semantically equivalent predicates in Greek. This shift does not alter the underlying clause hierarchy or informational structure, but redistributes grammatical weight from

verbal processes to abstract nominal entities, increasing nominal density and abstraction.

(3) **ST (Original English):** The programme aims to strengthen innovation, improve competitiveness, support SMEs and promote sustainable economic growth across the Union.

TT (DeepL Greek): Το πρόγραμμα αποσκοπεί στην ενίσχυση της καινοτομίας, στη βελτίωση της ανταγωνιστικότητας, στη στήριξη των ΜΜΕ και στην προώθηση της βιώσιμης οικονομικής ανάπτυξης σε ολόκληρη την Ένωση.

Back translation: ‘The programme aims at the strengthening of innovation, the improvement of competitiveness, the support of SMEs and the promotion of sustainable economic growth across the Union’.

Here, DeepL retains the English goal-enumeration structure and overall syntactic organisation, while re-encoding verbal infinitives (e.g. “aims to strengthen”, “improve”, “support”, “promote”) as a series of nominalised complements governed by a single predicate (*αποσκοπεί στην*). This construction preserves the intentional semantics of the English source while shifting emphasis toward abstract outcomes rather than dynamic processes.

Crucially, this nominalisation strategy does not constitute syntactic restructuring, but rather a constructional preference that increases abstraction and aligns with established patterns in Greek institutional discourse.

DeepL thus demonstrates syntactic convergence with the English source text that is masked by fluent lexico-grammatical adaptation. Rather than reconfiguring sentence structure, it re-articulates English policy syntax through nominalising resources, producing Greek output that reads as cohesive and idiomatic while preserving underlying English institutional patterns.

4.6.4 Lexical choice, generalisation and terminological dilution

At the lexical level, DeepL displays a consistent tendency toward generalisation and semantic smoothing, prioritising fluency and accessibility over strict preservation of EU-specific terminological density. In contrast to e-Translation, which strongly stabilises institutional terminology and Google Translate, which

often calques English administrative collocations, DeepL frequently opts for lexically broader or less tightly bound equivalents that integrate more naturally into Greek prose.

This strategy enhances readability and stylistic coherence but comes at the cost of terminological precision and genre marking. Highly specific English policy collocations are often rendered through semantically transparent yet less institutionally anchored Greek expressions. As a result, the translated text appears less overtly bureaucratic and less recognisably “EU-administrative,” even though the underlying policy logic remains unchanged.

(4) **ST (Original English):** The strategy will strengthen the EU’s regulatory framework for sustainable finance.

TT (DeepL Greek): Η στρατηγική θα ενισχύσει το κανονιστικό πλαίσιο της ΕΕ για τη βιώσιμη χρηματοδότηση.

Back translation: ‘The strategy will strengthen the regulatory framework of the EU for sustainable financing.’

While the translation is terminologically accurate, DeepL selects a neutral, broadly accessible rendering (*κανονιστικό πλαίσιο*) that smooths over the highly codified and legally charged nature of the English expression *regulatory framework*. Unlike human-translated Greek, where such terminology is often embedded within more explicitly legal or procedural phrasing, DeepL prioritises semantic clarity and lexical economy.

Across the corpus, similar patterns recur: complex administrative collocations are rendered through simplified noun phrases that preserve referential meaning but weaken institutional specificity. This contributes to a text that reads as polished and idiomatic, yet subtly less anchored in the conventional lexico-discursive density of Greek institutional discourse.

In this respect, DeepL’s lexical behaviour exemplifies creative convergence: English institutional vocabulary is not transferred mechanically but is re-expressed through fluent Greek lexical choices that mask translational mediation while maintaining alignment with English policy conceptualisation.

4.6.5 Evaluation, stance and tonal modulation

Evaluation in the DeepL output is characterised by attenuated stance-taking and tonal moderation, rather than by overt evaluative markers or rigid institutional templates. Unlike e-Translation, which frequently relies on stabilised copular frames such as *είναι αναγκαίο* ‘it is essential’ and Google Translate, which often reproduces English evaluative predicates in a more literal manner, DeepL tends to encode evaluation through modals and clause-internal structuring.

Evaluative meaning is thus distributed across verbal projection, modality and future-oriented framing, producing a tone that appears measured, explanatory and rhetorically restrained. This strategy reduces the perceptual salience of institutional judgement, allowing policy orientation to be communicated without explicit directive force or intensified assessment. The following example is indicative:

(5) **ST (Original English):** The EU will move forward towards a more circular and decarbonised economy and can decrease dependence on fossil imports.

TT (DeepL Greek): “Η ΕΕ θα προχωρήσει προς μια πιο κυκλική και απαλλαγμένη από άνθρακα οικονομία και θα μπορεί να μειώσει την εξάρτησή της από τις εισαγωγές ορυκτών καυσίμων”.

Back translation: ‘The EU will move forward towards a more circular and decarbonised economy and will be able to reduce its dependence on fossil fuel imports.’

In this example, evaluative stance is conveyed through modal projection. The rendering of “can decrease” as *θα μπορεί να μειώσει* encodes possibility and future potential, thereby attenuating evaluative force and avoiding categorical claims. Evaluation is thus integrated into the predictive structure of the clause, contributing to a discourse that reads as explanatory rather than prescriptive. This pattern aligns with DeepL’s broader fluency-oriented and smoothing strategy, whereby institutional endorsement is present but pragmatically softened through modal constructions and structural choices.

DeepL engages in modal explicitation by resolving the ambiguity of the English modal “can”. While the source text leaves open whether “can decrease” expresses

general capacity, possibility or policy potential, the Greek rendering *θα μπορεί να μειώσει* explicitly anchors this capacity in future time and frames it as an anticipated outcome. Explicitation thus operates through the clarification of modal meaning.

Across the corpus, this pattern recurs systematically. Institutional approval, success or importance is signalled through restrained evaluative lexemes and integrated clause structures rather than through explicit judgement frames. While this contributes to stylistic naturalisation and reader accessibility, it also subtly reshapes the pragmatic force of EU institutional discourse by softening its directive or authoritative tone.

Compared with human-translated Greek, where evaluative stance may be more clearly marked through genre-conventional legal or administrative formulations, DeepL's approach reflects a prioritisation of narrative coherence and tonal neutrality. Evaluation is present, but it is absorbed into the flow of the text rather than foregrounded as an institutional act.

4.6.6 Interim synthesis: the DeepL profile

The analysis of the DeepL corpus reveals a fluency-driven and stylistically naturalised translation profile that differentiates it from e-Translation and to a lesser extent, from Google Translate at the level of perceptual readability rather than structural organisation. Across policy domains, DeepL consistently reduces the surface visibility of translation through fluent lexico-grammatical encoding, nominalising constructional preferences and cohesive clause integration. As a result, its Greek output reads smoothly, as polished, idiomatic and rhetorically balanced.

Despite this surface-level naturalisation, deep convergence with English institutional discourse remains intact. Abstract policy instruments, initiatives and campaigns continue to function as grammatical subjects, maintaining agent suppression and a depersonalised governance logic. Modality remains predominantly future-oriented and projection-driven, while evaluation is conveyed through moderated lexical choice and implicit stance rather than explicit institutional judgement.

DeepL therefore does not converge toward autonomous Greek institutional norms in a functional sense. Instead, it facilitates a form of creative convergence, in which English governance discourse is re-articulated through fluent Greek structures that mask translational mediation while preserving core discursive patterns. Compared with Google Translate's more visibly literal and simplified rendering and e-Translation's intensified formulaicity, DeepL occupies an intermediate position: it mitigates overt translation effects.

Overall, DeepL emerges as a powerful vector for the diffusion of English institutional discourse into Greek through stylistic naturalisation. This profile has significant implications for long-term contact-induced change, as it embeds English-aligned discourse patterns within Greek texts that increasingly appear original rather than translated.

4.7 Comparative synthesis: differentiated NMT voices and convergence pathways

This section synthesises the findings from the comparative analysis of e-Translation, Google Translate and DeepL in order to reassess how different neural machine translation (NMT) systems mediate English-Greek contact within EU institutional discourse. The comparison confirms that neural machine translation does not constitute a homogeneous linguistic phenomenon. Instead, each system exhibits a distinct translational voice, shaped by different optimisation priorities and training data.

Across all three systems, convergence toward English institutional discourse is systematically observed. However, convergence does not operate through a single, uniform mechanism. Rather, it unfolds through differentiated pathways that affect multiple linguistic levels, including modality, agency representation, syntactic encoding, evaluative stance and information packaging. These pathways reflect system-specific design logics rather than random variation.

e-Translation emerges as the most institutionally anchored system. Its output consistently aligns with established EU drafting conventions through stabilised terminology, expectation-based modality and genre-specific formulaicity. Convergence is channelled through institutional templates rather than surface

fluency, producing Greek that is naturalised within EU administrative discourse, though often marked in autonomous Greek usage.

Google Translate, by contrast, tends to prioritise close source mapping and semantic transparency. Its output frequently relies on literal renderings, simplified lexical choices and direct transfer of English clause structures when formally compatible with Greek. This results in high visibility of translation effects, including semantic calquing and reduced idiomatic density. Convergence is achieved primarily through surface alignment with English forms rather than through institutional or stylistic mediation.

DeepL occupies an intermediate position. While structurally aligned with the source text in a manner comparable to Google Translate, it consistently reduces the perceptual salience of translation through fluency-driven lexico-grammatical choices and idiomatic sequencing. Unlike e-Translation, DeepL is not specifically optimised for EU institutional discourse, yet it produces a cohesive Greek output that reads smoothly. Convergence is thus masked rather than eliminated.

A key point of convergence between Google Translate and DeepL concerns constructional preference. Both systems frequently re-encode English verbal projections through nominalised Greek constructions. Purpose and intention structures such as “aims to strengthen” are commonly rendered as *έχει στόχο την ενίσχυση* rather than finite verbal complements (*έχει στόχο να ενισχύσει*). This shared nominalising tendency does not alter syntactic architecture, but increases abstraction and nominal density, aligning Greek output with English policy-style discourse while enhancing surface fluency. The recurrence of this pattern suggests a training-driven preference for more informationally dense renderings.

System-specific differences become particularly visible in cases where contextual or institutional knowledge is required. In the English formulation “Commission and High Representative/Vice-President call for increased efforts...”, gender is not explicitly marked. Both e-Translation and Google Translate correctly render the established Greek institutional title in the feminine form (*Υπατη Εκπρόσωπος/Αντιπρόεδρος*), demonstrating sensitivity to EU-specific conventions and institutional metadata. DeepL, by contrast, defaults to masculine forms

(*Υπατος Εκπρόσωπος/Αντιπρόεδρος*), neutralising gender information that is pragmatically salient in the Greek institutional context. This choice cannot be attributed to literal transfer, but rather reflects a fluency-oriented strategy combined with limited access to institutional conventions, revealing a male-as-default bias. Such behaviour aligns with findings by Hovy et al. (2020), who demonstrate that NMT output may present latent stylistic biases making translations “sound” older or more male.

(1) **ST (Original English):** Commission and High Representative/Vice-President call for increased efforts to end all forms of sexual and gender-based violence.

TT1 (e-Translation): Η Επιτροπή και η Ύπατη Εκπρόσωπος/Αντιπρόεδρος ζητούν να ενταθούν οι προσπάθειες για τον τερματισμό όλων των μορφών σεξουαλικής και έμφυλης βίας.

TT2 (Google translate): Η Επιτροπή και η Ύπατη Εκπρόσωπος/Αντιπρόεδρος ζητούν αυξημένες προσπάθειες για τον τερματισμό όλων των μορφών σεξουαλικής και έμφυλης βίας.

TT3 (DeepL): Η Επιτροπή και ο Ύπατος Εκπρόσωπος/Αντιπρόεδρος καλούν για εντατικοποίηση των προσπαθειών για την εξάλειψη των μορφών σεξουαλικής και έμφυλης βίας.

Overall, the comparative evidence indicates that convergence in neural machine translation is systematic but feature-dependent rather than uniform. e-Translation channels convergence through institutional standardisation, Google Translate through literal and simplified source mapping, and DeepL through stylistic naturalisation. Neural machine translation thus functions not as a neutral conduit, but as a differentiated set of contact mechanisms that stabilise and disseminate English-aligned discourse patterns into Greek institutional language. In doing so, NMT systems act as structural amplifiers of contact-induced convergence, contributing to the emergence of distinct machine-mediated varieties of Greek institutional discourse.

Table 3 provides a comparative overview of the linguistic and discursive dimensions through which Google Translate, DeepL and e-Translation mediate English–Greek contact, illustrating how convergence is realised through distinct system-specific pathways

Dimension	Google Translate	DeepL	e-Translation
Syntactic alignment	Close clause-by-clause transfer	High syntactic fidelity with fluency-driven encoding	Template-based institutional structuring
Visibility of translation	High (calques, marked phrasing)	Low (idiomatic, smooth surface)	Low within EU genre
Nominalisation patterns	Direct transfer of English nominal density	Shared nominalising preference (verbal → nominal)	Stabilised, genre-specific nominal constructions
Agency representation	Abstract agency preserved verbatim	Abstract agency fluently re-articulated	Institutionally normalised agent suppression
Modality & futurity	Literal preservation of English modality	Rephrased projection, future-oriented	Formulaic expectation and obligation frames
Terminology handling	Simplified and inconsistent	Generalised and accessibility-oriented	Highly stable and standardised
Type of convergence	Surface-level structural convergence	Discursive (fluency-masked) convergence	Genre-internal institutional convergence
Overall NMT voice	Literal–simplifying	Fluent–naturalising	Institutionally normative

Chapter 5-Discussion

5.1 Interpreting the findings

The findings of this study suggest that translation and neural machine translation do not introduce structurally foreign elements into Greek. Rather, they systematically privilege English-aligned options that are already available within the linguistic system. Over time, the repeated selection of these options may contribute to the normalisation of abstract, nominal and depersonalised patterns in Greek institutional discourse.

This chapter discusses the empirical findings presented in Chapter 4 in relation to the theoretical framework outlined in Chapter 2. Instead of reiterating descriptive results, the discussion interprets the observed linguistic patterns as manifestations of translation-mediated and machine-mediated language contact within contemporary Greek institutional discourse. By situating the findings at the intersection of contact linguistics and translation studies, the chapter examines how different modes of mediation-human translation, institutional neural machine translation and generic neural machine translation, shape distinct pathways of convergence toward English-informed discourse norms.

The discussion proceeds from the premise that institutional language is not a neutral conduit of information, but a site where ideological, procedural and linguistic norms are negotiated and stabilised. The analysis of non-translated Greek institutional discourse established that Greek exhibits autonomous conventions with respect to agency representation, modality, evaluation and syntactic organisation. Against this baseline, the translated and machine-translated corpora display systematic shifts that cannot be explained solely by genre or institutional function. Instead, these shifts point to the cumulative effects of sustained contact with English institutional discourse, increasingly mediated through neural machine translation technologies.

Central to the argument developed in this chapter is the claim that neural machine translation does not generate novel linguistic patterns in Greek institutional

discourse. Rather, it stabilises, amplifies and differentiates existing English-informed tendencies, giving rise to distinct machine-mediated varieties of Greek. Convergence therefore emerges not as a uniform or technologically deterministic process, but as a differentiated outcome shaped by mediation, filtering and system-specific optimisation strategies.

5.2 Revisiting the research questions

This section revisits the research questions in their original order. The first research question examined the linguistic shifts that emerge in Greek neural machine translation output from English source texts, as identified through comparison with human-translated and non-translated Greek institutional discourse. The second research question addressed whether these shifts reflect systematic convergence toward English linguistic norms, thereby suggesting the operation of machine-mediated contact-induced change. Finally, the third research question considered the extent to which e-Translation, Google Translate and DeepL exhibit distinct translational voices or stylistic tendencies in their Greek output, despite their shared participation in broader patterns of convergence.

The findings presented in Chapter 4 provide a clear and empirically grounded response to these questions. Convergence toward English-informed discourse patterns is observable across all translated corpora, including human-translated texts, institutional NMT output and generic NMT output. This convergence manifests across multiple linguistic domains, including agency representation, modality, nominalisation, evaluative framing and discourse organisation. However, convergence is neither absolute nor homogeneous.

Human-translated Greek exhibits a form of selective and filtered convergence. Although human translators operate under strong institutional and genre constraints, they actively mediate English input through restructuring, terminological conventionalisation and register-sensitive adaptation. As a result, English-informed patterns are incorporated into Greek institutional discourse in a regulated and stabilised manner, rather than through transparent surface transfer.

Neural machine translation, by contrast, introduces a qualitatively different dynamic. The analysis demonstrates that NMT systems reduce or bypass interpretive mediation, allowing English-derived structures to circulate more directly and with greater regularity. Importantly, this does not result in a single, uniform “machine translation style.” Instead, different systems give rise to differentiated convergence profiles, shaped by their design priorities, training environments and communicative orientation. The research questions are therefore answered not through a binary opposition between human and machine translation, but through a more nuanced typology of convergence pathways operating within machine-mediated environments.

5.3 Neural machine translation as a site of contact-induced change

The findings of this study support a reconceptualization of neural machine translation as a central site of contemporary language contact. Classical models of contact-induced change emphasise prolonged exposure, repeated usage and structural accommodation as the primary mechanisms through which external influence becomes entrenched in a linguistic system. In the present context, neural machine translation fulfils these conditions in an intensified and technologically mediated form.

Rather than introducing structurally novel elements into Greek, neural machine translation systematically reinforces patterns already associated with English institutional discourse. These include abstraction of agency, a preference for nominal over verbal encoding, programmatic futurity and evaluative generalisation. What distinguishes NMT-mediated contact from earlier forms of translation-induced influence is therefore not the nature of the transferred patterns, but the scale, speed and consistency with which they are reproduced.

Institutional systems such as e-Translation further amplify this effect by embedding machine translation within a highly standardised communicative regime. In this environment, convergence operates primarily at the level of genre-internal norms, producing Greek texts that are naturalised within EU institutional practice while remaining structurally aligned with English governance discourse.

Generic systems such as Google Translate and DeepL extend this influence beyond institutional boundaries, exposing wider audiences to machine-mediated varieties of Greek that normalise English-informed discourse patterns through accessibility and repetition.

In addition to structural and discursive convergence, the data also point to a more limited form of terminological convergence in Greek institutional discourse. Recurrent English policy terms such as *net zero emissions*, *clean transition* and *circular economy* are consistently reproduced through Greek equivalents, often with little lexical variation across translation modes.

While this study does not focus on terminology as an independent analytical dimension, the stabilisation of such expressions contributes to the broader convergence profile observed in machine-translated Greek. Terminological consistency reinforces English-informed conceptual framing and interacts with structural patterns such as nominalisation and abstraction, further consolidating policy discourse alignment across languages.

From a contact-linguistic perspective, neural machine translation thus functions as a mechanism of indirect contact, where influence is transmitted not through bilingual speakers or face-to-face interaction, but through sustained exposure to algorithmically generated linguistic output. The convergence observed in the data reflects accommodation without negotiation: patterns are adopted not because they are evaluated as optimal by human agents, but because they are repeatedly presented as default linguistic solutions. This shift has significant implications for how contact-induced change is conceptualised in digitally mediated environments.

Recent work on AI-associated language change suggests that repeated exposure to algorithmically generated output can contribute to gradual convergence in human language use. Anderson, Galpin and Juzek (2025) show that lexical patterns associated with large language models begin to surface in unscripted spoken English following widespread AI use, not through innovation but through frequency-driven reinforcement. This finding aligns with the present study, where neural machine translation does not introduce novel structures into Greek but amplifies English-aligned options already available in the system. Convergence

thus emerges as a distributional effect of algorithmic repetition rather than as direct technological intervention.

5.4 Mediation, filtering and acceleration in machine-mediated translation

The findings of Chapter 4 demonstrate that differences between human translation and neural machine translation are not primarily differences of linguistic competence or output quality, but differences in the mechanisms of mediation through which English discourse norms are transmitted into Greek institutional language. What distinguishes the translation modes examined in this study is the extent to which English-informed structures are filtered, reshaped or allowed to circulate with minimal intervention.

Human translation operates as a mediated and filtered contact environment. Although human-translated Greek clearly reflects sustained exposure to English EU discourse, this exposure is not transmitted transparently. Translators intervene systematically at multiple linguistic levels, restructuring syntax, stabilising terminology through institutional conventions and recalibrating modality and evaluation in line with Greek administrative norms. Convergence is therefore present but regulated: English discourse organisation influences Greek output only after being re-encoded through professional judgement and genre awareness. In contact-linguistic terms, this corresponds to a filtered form of convergence, where contact-induced change is constrained by mediation rather than driven by direct transfer.

By contrast, institutional neural machine translation, as exemplified by e-Translation, exhibits a markedly reduced degree of interpretive mediation. The system reproduces English-derived structures with high consistency and regularity, not because these structures are evaluated as optimal for Greek, but because they constitute default solutions within an algorithmic process which is optimised for institutional uniformity. Filtering is limited not by grammatical inadequacy, but by the absence of context-sensitive decision-making. As a result, English-informed patterns of nominal density, agency abstraction and programmatic futurity circulate more directly and more frequently. This behaviour

aligns with what contact linguistics describes as convergence through diffusion and repetition rather than innovation (Thomason, 2001).

Generic neural machine translation systems intensify this dynamic further, albeit through different strategies. Google Translate and DeepL both reduce the interpretive layer characteristic of human translation, yet they diverge in how convergence is realised. Google Translate preserves English discourse organisation through conservative, source-oriented transfer, allowing English syntactic and pragmatic patterns to remain highly visible. DeepL, by contrast, reduces surface-level translational markers through fluency-driven restructuring. However, this increased naturalness does not correspond to a reduction in convergence. Instead, it facilitates the circulation of English-informed discourse patterns in a less perceptible form. In both cases, the absence of sustained interpretive mediation results in faster and more regular transmission of English-aligned structures into Greek.

These patterns indicate that neural machine translation introduces a process of acceleration in translation-mediated contact. Convergence does not become qualitatively different in kind, but quantitatively different in scale and speed. Patterns that emerge gradually and selectively through human translation are reproduced systematically and at scale through NMT, increasing their frequency, visibility and potential for entrenchment. From this perspective, the tendencies toward simplification and reduced variation observed in NMT output can be understood not as isolated translation universals, but as contact-driven effects amplified by algorithmic repetition (Laviosa, 2003).

From an interpretive perspective, the crucial shift identified in the data is not from mediation to non-mediation, but from human-regulated mediation to algorithmically routinised transmission. Neural machine translation reduces opportunities for contextual negotiation and register-sensitive adjustment, allowing English discourse norms to circulate with minimal resistance. In doing so, it reshapes the mechanism of contact itself. Language contact in this context no longer depends primarily on bilingual agents or professional translators, but on sustained exposure to machine-generated linguistic output.

5.5 Differentiated NMT voices and translational regimes

The findings of this study demonstrate that neural machine translation cannot be treated as a homogeneous linguistic phenomenon. Rather than producing a single “machine-translated” variety of Greek, different NMT systems give rise to distinct translational regimes, each characterised by specific modes of convergence and discourse-level effects shaped by divergent optimisation priorities.

Google Translate emerges as a regime of conservative surface transfer. Its output preserves English clause sequencing, abstract institutional subjects and future-oriented modality, resulting in convergence that is overt and readily traceable through visible structural correspondence. While semantically faithful, these renderings remain stylistically marked, reflecting limited accommodation to Greek institutional norms.

DeepL represents a contrasting regime defined by fluency-driven restructuring. Although surface-level translational markers are reduced and the output appears more idiomatic, deeper English-informed discourse patterns—such as agency abstraction, evaluative generalisation and goal-oriented futurity—remain intact. Convergence in this regime is therefore less visible but potentially more intrusive, operating beneath the surface through re-articulation rather than direct transfer.

e-Translation occupies a third, institutionally embedded regime, optimised for EU press and policy genres. Here, convergence operates through the reproduction of EU drafting conventions, producing Greek texts that are naturalised within institutional practice even when they diverge from broader Greek administrative norms. English influence is thus mediated primarily through genre rather than through surface structure or stylistic smoothing.

The coexistence of these regimes indicates that convergence under neural machine translation is system-specific rather than an inherent property of NMT as a technology. Machine-mediated Greek does not converge toward a single end-state but fragments into differentiated varieties shaped by distinct translational pathways. This diversification complicates monolithic accounts of “machine translation effects” and underscores the need to analyse convergence in relation to specific translational regimes rather than technology in the abstract.

5.6 Implications for Greek institutional discourse

The differentiated convergence patterns identified in this study have significant implications for the evolution of Greek institutional discourse. The findings suggest that neural machine translation is not merely a technical aid for cross-linguistic communication, but a structuring force that reshapes how institutional authority, accountability and policy action are linguistically represented in Greek.

A first implication concerns agency and institutional voice. Across all machine-translated corpora, agency is consistently abstracted and displaced from human or political actors to measures, frameworks and processes. While such abstraction is not entirely absent from human-translated or institutional Greek, its systematic reinforcement through neural machine translation alters the balance between action and attribution. Over time, repeated exposure to machine-mediated discourse risks normalising a form of institutional Greek in which responsibility is diffused and decision-making is linguistically obscured. This shift has consequences for transparency and democratic accountability, as institutional action becomes framed as procedural inevitability rather than as the outcome of identifiable choices.

A second implication relates to modality and temporal framing. The dominance of programmatic futurity and expectation-based constructions in machine-translated output promotes a discourse of projection rather than commitment. Policies are presented as anticipated trajectories and strategic intentions, rather than as actions anchored to concrete agents and timelines. While this mode of expression aligns closely with English governance discourse, its entrenchment in Greek institutional language represents a departure from rhetorically anchored modality traditionally associated with parliamentary and administrative communication. Neural machine translation thus contributes to a gradual reorientation of institutional temporality, favouring managed progression over explicit stance-taking.

The findings also point to implications for register differentiation within Greek institutional language. e-Translation normalises English-informed discourse patterns within an authoritative EU register, while Google Translate and DeepL disseminate alternative machine-mediated varieties beyond institutional

boundaries. This multiplicity of machine-generated voices risks blurring distinctions between institutional Greek and externally mediated policy discourse. As machine-translated texts circulate alongside human-authored institutional texts, they may increasingly function as implicit stylistic models, influencing drafting practices even outside translation contexts.

Furthermore, the fluency-driven convergence observed in systems such as DeepL raises questions about perceptibility and linguistic awareness. When English-informed discourse patterns are transmitted through highly naturalised Greek, convergence becomes less visible and therefore less contestable. Linguistic change operates beneath the threshold of conscious evaluation, making it more difficult for institutions and language professionals to recognise and critically assess the long-term implications of such shifts. In this sense, fluency does not mitigate convergence, but renders it more durable.

These implications suggest that neural machine translation contributes to a subtle but consequential transformation of Greek institutional discourse. The issue is not the emergence of ungrammatical or deficient language, but the gradual reconfiguration of discursive norms governing agency, modality and institutional authority. As neural machine translation becomes increasingly embedded in institutional workflows and public communication, its role in shaping the linguistic ecology of Greek governance discourse warrants sustained critical attention.

5.7 Limitations and scope

The scope and limitations of the present study have been addressed in detail in Chapter 3 and are therefore only briefly reiterated here. The analysis focuses on a specific institutional genre, namely EU press-release discourse and on a single language pair (English-Greek). While this controlled design allows for precise identification of convergence patterns, it limits the generalisation of the findings in other genres, domains or language combinations.

In addition, the study prioritises qualitative depth and discourse-level interpretation over large-scale quantitative generalisation. The findings should therefore be understood as analytically grounded rather than statistically exhaustive. These limitations do not undermine the conclusions reached, but instead delineate the boundaries within which the discussion of neural machine translation as a site of contact-induced change is situated.

Lastly, a methodological limitation concerns the selection of derivational and inflectional morphemes used in the AntConc analysis. The study focuses on a set of high-frequency and functionally salient suffixes. While these are representative of common patterns in institutional discourse, they do not exhaust the full range of morphological variation. As a result, less frequent or context-specific formations may not be fully captured.

Chapter 6-Conclusion

6.1 Overview and restatement of the research focus

This thesis set out to investigate how English-Greek translation and in particular neural machine translation, mediates language contact within contemporary Greek institutional discourse. Focusing on genre-controlled corpora of institutional press communication, the study examined whether recurrent linguistic patterns observed in translated Greek reflect inherent features of institutional genre or the cumulative effects of translation-induced influence from English.

By comparing non-translated Greek institutional texts with human-translated EU texts and machine-translated output produced by e-Translation, Google Translate and DeepL, the study aimed to identify systematic differences attributed to mode of production. Translation was not approached as a matter of quality assessment or error detection. Instead, it was conceptualised as a mechanism through which discourse norms circulate, stabilise and potentially reshape linguistic practice over time.

Within this framework, the thesis examined neural machine translation as a technologically mediated environment of language contact. It addressed not only whether convergence toward English-informed discourse norms occurs in Greek institutional language, but also how such convergence is filtered, accelerated or differentiated across human and machine translation systems. The overarching aim was to contribute to a more nuanced understanding of translation-induced language change in institutional contexts increasingly shaped by large-scale, algorithmic mediation.

6.2 Summary of key findings

The findings of this study demonstrate clear and systematic differences between non-translated, human-translated and machine-translated Greek institutional discourse. Analysis of the non-translated Greek corpus established a robust baseline, showing that autonomous Greek institutional communication favours

explicit agency, rhetorically anchored modality, dialogic density and verb-centred syntactic organisation. These features confirm that abstraction, impersonalisation and programmatic futurity are not intrinsic properties of Greek institutional language.

Human-translated Greek EU texts exhibit selective convergence toward English-informed discourse norms. While abstraction, nominalisation and institutional formulaicity are present, these tendencies are mediated through register-sensitive restructuring, terminological conventionalisation and professional judgement. Convergence in the human-translated corpus is therefore filtered and regulated, reflecting sustained contact with English while adhering to established Greek administrative and legal conventions.

Neural machine translation, by contrast, reduces the degree of interpretive mediation. e-Translation produces a highly stabilised institutional variety of Greek characterised by terminological normalisation, syntactic alignment and modal uniformity consistent with EU drafting conventions. Google Translate exhibits conservative, source-oriented transfer, preserving English clause structure and discourse organisation with minimal restructuring. DeepL, while producing more fluent and idiomatic Greek, restructures surface forms in ways that mask deeper convergence, preserving abstraction of agency, evaluative generalisation and future-oriented projection.

These findings support the central claim of the thesis, that neural machine translation does not introduce new linguistic patterns into Greek institutional discourse; it stabilises, amplifies and differentiates existing English-informed tendencies, giving rise to distinct machine-mediated varieties of Greek. Convergence is therefore system-specific rather than uniform, emerging through differentiated translational regimes shaped by design priorities and communicative orientation.

Overall, the results confirm that neural machine translation constitutes a powerful mechanism for the circulation and entrenchment of English-informed discourse patterns in Greek. Rather than replacing human translation, it reshapes the conditions under which translation-induced contact operates, accelerating

convergence through scale, repetition and reduced filtering, while simultaneously diversifying its linguistic manifestations across systems.

6.3 Theoretical contribution

This thesis makes a distinct theoretical contribution to the intersection of contact linguistics, translation studies and research on neural machine translation by reconceptualising machine-mediated translation as a central mechanism of contemporary language contact. Rather than treating translation as a secondary site of influence, the study positions neural machine translation as a primary channel through which discourse norms circulate, stabilise and acquire structural salience within institutional language.

Within contact linguistics, the findings extend accounts of translation-induced change by showing that neural machine translation alters the *conditions* of contact rather than its linguistic substance. English-informed patterns observed in Greek institutional discourse are not novel outcomes of NMT, but are intensified through repetition, scale and reduced interpretive filtering, increasing their potential for entrenchment.

From a translation studies perspective, the thesis contributes to a discourse-oriented understanding of translation as a site of norm transmission rather than quality assessment. Human translation emerges as a buffered contact environment in which convergence is selectively regulated, while neural machine translation functions as a less mediated conduit through which existing norms are reproduced with greater regularity.

Finally, the study challenges the assumption that NMT output constitutes a unified linguistic variety. Instead, it demonstrates that different systems generate differentiated machine-mediated discourse regimes shaped by optimisation priorities such as source fidelity, fluency or institutional consistency. The theoretical contribution thus lies in reframing neural machine translation as an agent of stabilisation and differentiation within language contact, rather than as a source of linguistic innovation.

6.4 Methodological contribution

In addition to its theoretical insights, this thesis makes a methodological contribution by demonstrating the analytical value of combining genre-controlled corpus design with discourse-oriented interpretation in the study of translation-mediated language contact. By holding communicative function, institutional context and genre constant, the study isolates mode of production as the primary variable, allowing observed differences to be attributed to translation and machine translation rather than contextual variation.

The study integrates quantitative corpus tools with qualitative linguistic analysis in a complementary manner. Corpus-based evidence from AntConc identifies systematic regularities across corpora, while close qualitative analysis situates these patterns within their discursive and institutional contexts, avoiding purely descriptive or self-contained corpus interpretations.

A further contribution lies in the triangulation of non-translated Greek, human-translated Greek and multiple NMT systems within a single framework. This design enables convergence effects to be identified as contact-induced rather than genre-inherent, while also revealing system-specific translational regimes. By treating neural machine translation as a recurring discursive environment rather than a set of isolated outputs, the study offers a process-oriented framework for future research on machine-mediated language contact.

6.5 Broader implications

The findings of this thesis have broader implications for institutional communication, translation practice and the use of neural machine translation in policy-oriented environments. As machine-translated texts increasingly circulate alongside human-authored institutional discourse, they contribute to shaping implicit norms of style, modality and agency beyond the immediate context of translation, with potential consequences for the evolution of Greek under conditions of sustained, technology-mediated contact.

For institutional communication, the systematic abstraction of agency and preference for programmatic futurity observed in machine-mediated Greek raise

questions about transparency and accountability. While such patterns are functionally effective within administrative discourse, their reinforcement through neural machine translation may gradually normalise a style of institutional language that distances decision-making from identifiable actors. Awareness of these tendencies is therefore essential for institutions seeking to balance efficiency with clarity of responsibility.

In terms of translation practice, the findings highlight the need to reconsider the role of human mediation in machine-assisted workflows. Rather than focusing exclusively on post-editing for correctness or fluency, institutional translation practices may benefit from greater attention to discourse-level effects, including agency representation, evaluative framing and register alignment. Neural machine translation should thus be understood not only as a productivity tool, but as a discursive force with long-term linguistic implications.

6.6 Directions for future research

The present study opens several avenues for future research. One promising direction involves extending the analysis beyond institutional genres to forms of everyday digital discourse, such as online news commentary, social media posts or user-generated web content. Examining whether and how neural machine translation influences linguistic patterns in less regulated communicative environments would help determine whether convergence toward English-informed norms remains confined to institutional settings or diffuses into more informal domains of language use.

A further important direction concerns the temporal dimension of language contact. Future research could adopt a diachronic perspective by comparing contemporary Greek institutional and media texts with comparable Greek corpora produced prior to the widespread adoption of neural machine translation and large-scale English-dominated digital communication. Such longitudinal analysis would make it possible to assess whether discourse features identified in the present study represent recent developments or reflect longer-standing tendencies within Greek

institutional discourse that may have been intensified through machine-mediated contact.

In addition, future research could explore the role of AI-driven large language models in mediating language contact, assessing whether their generative capacities introduce convergence dynamics distinct from those observed in neural machine translation systems primarily oriented toward translation. Finally, further work could examine the role of human post-editing as an intermediate mode of mediation, assessing whether and how it reintroduces filtering mechanisms that mitigate, reshape or selectively reinforce convergence in machine-assisted translation environments.

Closing statement

This thesis has argued that neural machine translation constitutes a transformative force in contemporary language contact, not by introducing new linguistic structures into Greek institutional discourse, but by reshaping the conditions under which existing patterns circulate and stabilise. Through systematic comparison of non-translated, human-translated and machine-translated Greek, the study has shown that convergence toward English-informed discourse norms is mediated, accelerated and diversified through translation technologies operating at scale. Neural machine translation does not act as a neutral conduit of meaning, but as a discursive environment in which abstraction, modality and institutional voice are repeatedly reproduced and normalised. By foregrounding mechanisms of mediation rather than issues of quality or correctness, the thesis contributes to a broader understanding of how digital translation technologies reconfigure language contact in institutional settings. In doing so, it highlights the need to view neural machine translation not merely as a technical resource, but as a central actor in the ongoing evolution of institutional language in a multilingual and technologically mediated world.

Appendices

Appendix 1 - STs and TTs corpora (Google Drive)

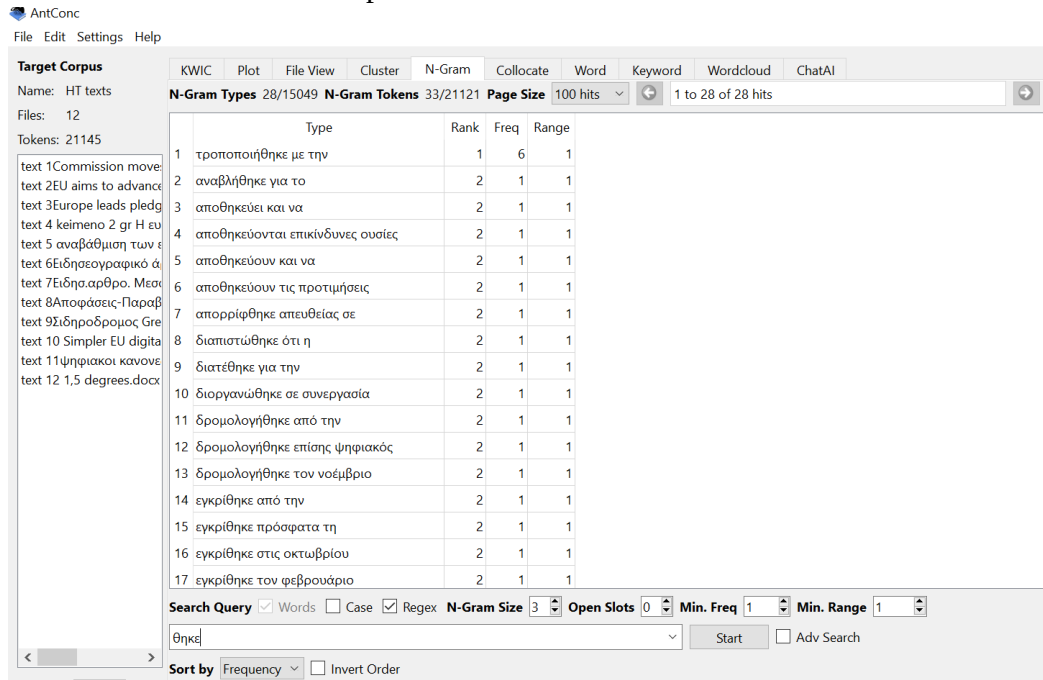
The full set of source texts (ST) and corresponding target texts (TT) analysed in this study is provided in a Google Drive folder. Due to the volume of the data, the corpora are not reproduced in full within the body of the thesis. The materials are made available for transparency and can be accessed via the following link:

https://drive.google.com/drive/folders/1a3KSgZMdNYqpOSnvPzMV7Dq-jvjISb7K?usp=drive_link

Appendix 2- AntConc Output Samples by Corpus and Translation Mode

1.1 Human translated Greek corpus

Figure A2.1.1 illustrates N-gram output with passive verb forms (-θηκε) in the human-translated Greek corpus.



Although passive verb forms are attested in the human-translated corpus, their overall frequency and distribution remain limited. N-gram analysis indicates that passive constructions occur sporadically and lack the range and repetition required to function as a dominant structuring device. This indicates that passive voice does not constitute a defining feature of human-mediated Greek institutional discourse.

1.2 e-Translation Greek Output

Figure A2.1.2 presents the KWIC concordance of nominalized *-τητα* forms in the e-Translation Greek output.

File Edit Settings Help

Target Corpus		KWIC	Plot	File View	Cluster	N-Gram	Collocate	Word	Keyword	Wordcloud	ChatAI
Name: e Translation Gr	Total Hits: 143 Page Size 100 hits	1 to 100 of 143 hits									
Files: 21											
Tokens: 19584											
text 5improved langu text 6Publication of a text 7social protection text 8Together for res text 9Δελτίο Τύπου 2 text 10 επενδύσεις, dc text 11. Η ΕΕ σημειών text 12. η TikTok και r text 13Η Επιτροπή χε text 14 Ημερήσια Μέ											
Reference Corpus											
Name: HT Greek											
Files: 12											
Tokens: 21145											
text 1Commission me text 2EU aims to adva text 3Europe leads pl text 4 keimeno 2 gr I text 5 αναβάθμιση τυ text 6Ειδησεογραφικ text 7Ειδησ.αρθρο. M text 8Αποφάσεις-Πα text 9Σιδηροδρομος text 10 Simpler EU di											
Progress 100%											

	File	Left Context	Hit	Right Context
1	text3 ...	λεια των πόρων ενισχύει την	ανταγωνιστικότητα	και την ανθεκτικότητα της ΕΕ
2	text ...	λεια των πόρων ενισχύει την	ανταγωνιστικότητα	και την ανθεκτικότητα της ΕΕ
3	text.1. 5,2...	βιομηχανία, ενισχύοντας την	ανταγωνιστικότητα	και την ανθεκτικότητα της ευ
4	text ...	τη στρατηγική για την Ένωση	Ετοιμότητας	και την Ευρωπαϊκή Ένωση Υγι
5	text 18. ...	μέσω του σχεδιασμού για τη	βιωσιμότητα	και την ένταξη. Προσέλκυση κ
6	text ...	ην επέκταση της αγοράς, την	ανταγωνιστικότητα	και την ανθεκτικότητα.
7	text3 ...	ην επέκταση της αγοράς, την	ανταγωνιστικότητα	και την ανθεκτικότητα.
8	text ...	των πολιτών και ενισχύει την	ετοιμότητα	και την αντίδραση της ΕΕ στις
9	text ...	προβολής ψευδοοικολογικής	ταυτότητας	και την ενίσχυση της εμπιστο
10	text 11. H...	ενεργειακή ανεξαρτησία, την	ανταγωνιστικότητα	και την κλιματική ουδετερότ
11	text.1. 5,2...	ήκευση ενέργειας, τις αντλίες	θερμότητας	και την παραγωγή υδρογόνου
12	text 14. ...	ίσταμένη της μονάδας για τη	διαλειτουργικότητα	και την ψηφιακή διακυβέρνη
13	text3 ...	της πράσινης ανάπτυξης, της	ανταγωνιστικότητας	και της ανθεκτικότητας σε όλ
14	text ...	της πράσινης ανάπτυξης, της	ανταγωνιστικότητας	και της ανθεκτικότητας σε όλ

Search Query ☒ Words ☐ Case ☒ Regex Results Set All hits Context Size 10 token(s)

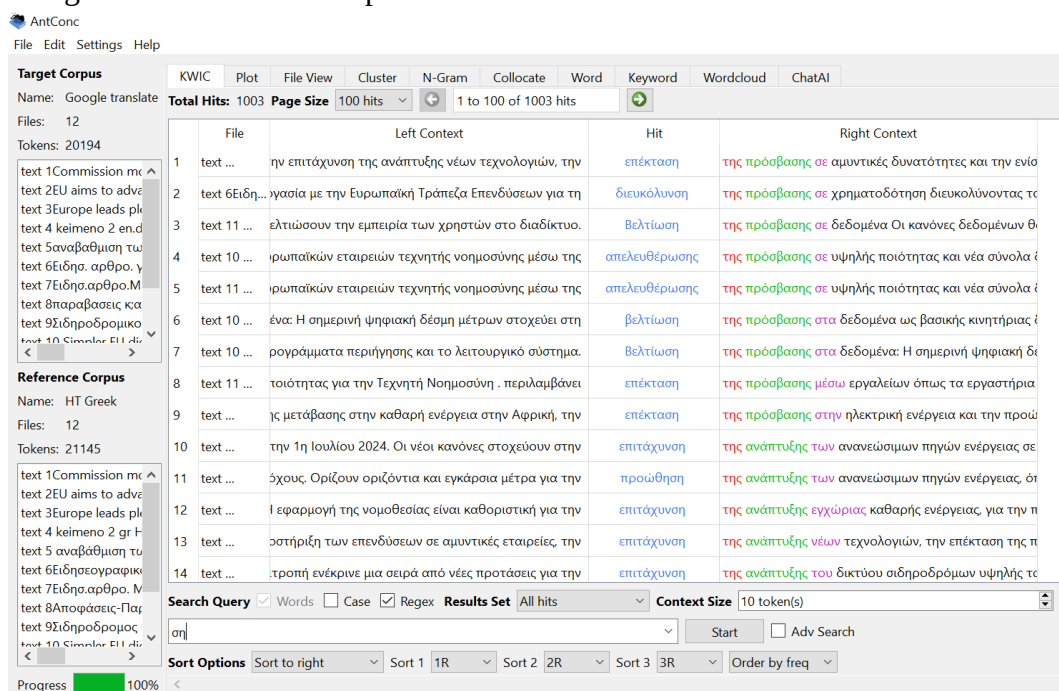
τητα Start ☐ Adv Search

Sort Options Sort to right Sort 1 1R Sort 2 2R Sort 3 3R Order by freq

The KWIC output illustrates the recurrent use of abstract nominalisations ending in *-τητα* (e.g. *ανταγωνιστικότητα*, *ανθεκτικότητα*, *βιωσιμότητα*) in the e-Translation Greek corpus. These forms frequently appear in coordinated constructions, contributing to a highly abstract and evaluative institutional style. The pattern reflects a preference for nominal density over clausal or agentive formulations.

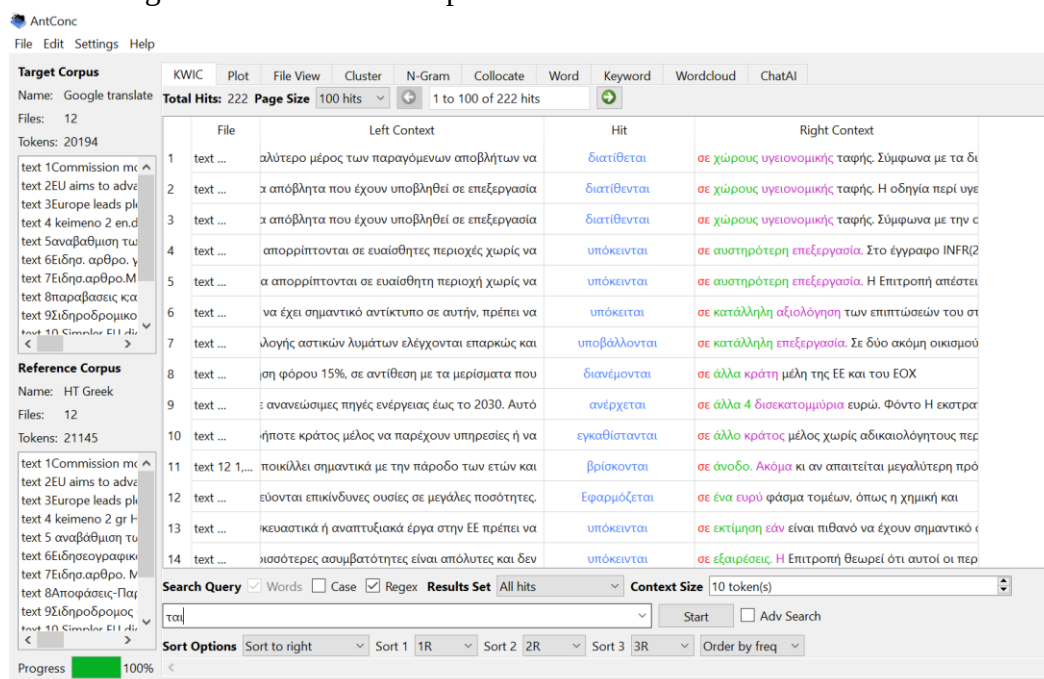
1.3 Google Translate output

Figure A2.1.3 presents the KWIC concordance of abstract nominalisations in the Google Translate Greek corpus



This figure presents a KWIC concordance of abstract nominalisations in the Greek output of Google Translate, focusing on high-frequency nouns derived from verbal processes (e.g. *επιτάχυνση*, *επέκταση*, *βελτίωση*, *προώθηση*). The concordance reveals a strong tendency towards action-oriented nominal phrasing, frequently embedded in formulaic policy constructions such as *της πρόσβασης σε* and *της ανάπτυξης*. These patterns reflect a systematic preference for abstract, goal-oriented representations of processes, contributing to agent suppression and reinforcing an institutional, programmatic discourse style characteristic of machine-mediated translation.

Figure A2.1.3.1 illustrates the KWIC concordance of passive verb constructions in the Google Translate Greek corpus



This figure presents a KWIC concordance of passive verb forms in the Greek output of Google Translate, illustrating frequent use of impersonal and agent-suppressing constructions (e.g. *διατίθενται*, *υπόκεινται*, *υποβάλλονται*, *ελέγχονται*, *εφαρμόζεται*). The patterns reveal a systematic preference for passive voice in regulatory and procedural contexts, where actions are foregrounded while responsible agents remain implicit or omitted. This contributes to a depersonalised and institutionally aligned discourse style, reinforcing abstraction and distancing typical of machine-mediated Greek institutional translation.

1.4 DeepL output

Figure A2.1.4 illustrates KWIC concordance of abstract nominalisations in DeepL-generated Greek texts

AntConc

File Edit Settings Help

Target Corpus

Name: deepL

Files: 21

Tokens: 18802

text3 Commission pre
text 2. 10ης κοινοπραξ
text 4. Commission pr
text 5 Improved langu
text 6 Publication of a
text 7 social protection
text 8 Together for res
text 9 Δελτίο Τύπου 2
text 10 επενδύσεις, dc
text 11 Η ΕΕ συνεχίζει

Reference Corpus

Name: HT Greek

Files: 12

Tokens: 21145

text 1 Commission mc
text 2 EU aims to adva
text 3 Europe leads pl
text 4 keimeno 2 gr I
text 5 αναβάθμιση τυ
text 6 Ειδησεογραφικ
text 7 Ειδησ.αρθρο. Μ
text 8 Αποφάσεις-Πα
text 9 Σιδηροδρομος
text 10 Σιδηροδρομ

KWIC Plot File View Cluster N-Gram Collocate Word Keyword Wordcloud ChatAI

Total Hits: 989 Page Size 100 hits 1 to 100 of 989 hits

	File	Left Context	Hit	Right Context
1	text ...	με τη στρατηγική και το σχέδιο	δράσης	της ΕΕ για τα ναρκωτικά Τι εγκρ
2	text ...	νέα στρατηγική και ένα σχέδιο	δράσης	της ΕΕ για την καταπολέμηση τη
3	text 21 ...	οήθειας στα θύματα. Το Σχέδιο	δράσης	της ΕΕ για τα ανθρώπινα δικαιώ
4	text 11. H...	αι ανεξαρτησία, μειώνοντας την	εξάρτηση	της ΕΕ από τα εισαγόμενα ορυκ
5	text 11. H...	θα μειώσει ακόμη περισσότερο	τηνεξάρτηση	της ΕΕ από τις εισαγωγές ορυκ
6	text3 ...	η υφιστάμενη και η μελλοντική	χρηματοδότηση	της ΕΕ θα διατεθεί σε βιολογικές
7	text ...	η υφιστάμενη και η μελλοντική	χρηματοδότηση	της ΕΕ θα διατεθεί σε βιολογικές
8	text ...	ενισχύει την ετοιμότητα και την	ανταπόκριση	της ΕΕ στις τρέχουσες και μελλο
9	text ...	Καθορίζουν μια ολοκληρωμένη	απάντηση	της ΕΕ στις προκλήσεις για την ο
10	text ...	μακροπρόθεσμο πλαίσιο για τη	δράση	της ΕΕ στον τομέα της πολιτικής
11	text 17. O...	αι σταθερή υποστήριξη για την	αντίδραση	της ΕΕ στον πόλεμο στην Ουκρα
12	text ...	συναχθεί το συμπέρασμα ότι η	προσέγγιση	της ΕΕ όσον αφορά την ασφάλει
13	text ...	μό της ακαδημαϊκής ελευθερίας.	Προσέγγιση	της ΕΕ όσον αφορά την ασφάλει
14	text ...	μια φιλόδοξη και συντονισμένη	προσέγγιση	της ΕΕ με στόχο την προστασία

Search Query ☒ Words ☐ Case ☒ Regex Results Set All hits Context Size 10 token(s)

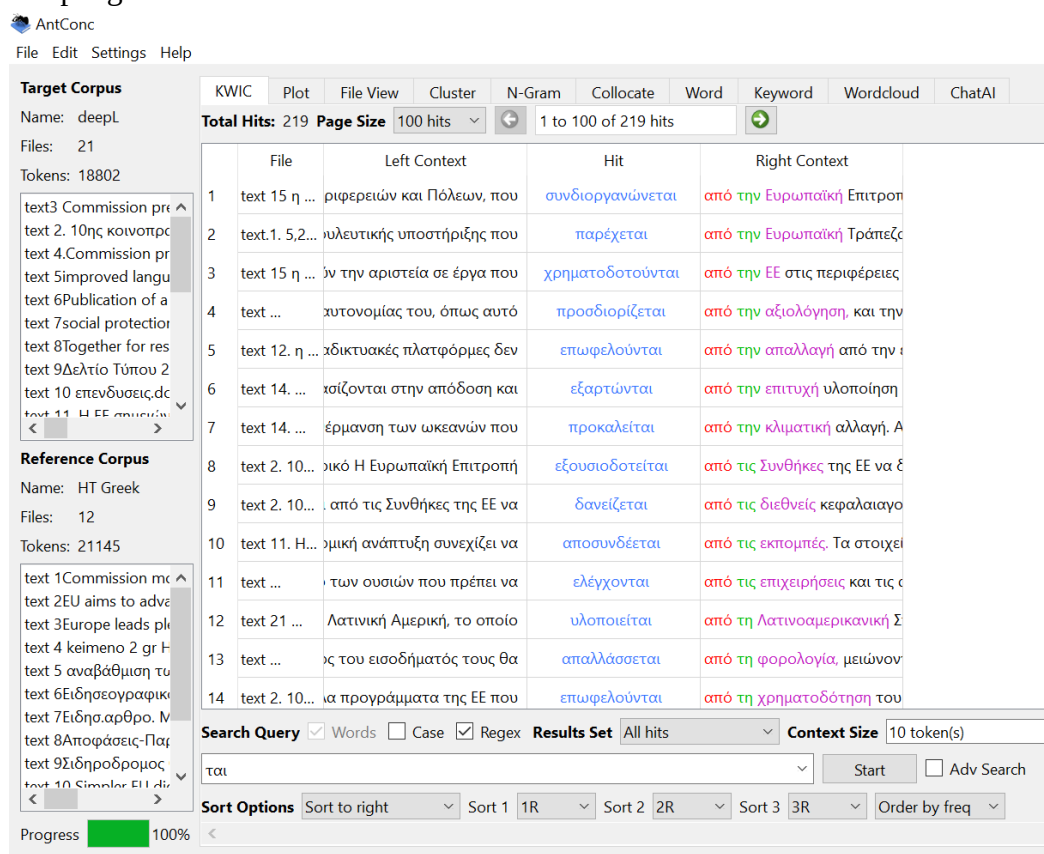
ση Start ☐ Adv Search

Sort Options Sort to right Sort 1 1R Sort 2 2R Sort 3 3R Order by freq

Progress 100%

The KWIC concordance highlights the systematic use of abstract nominalisations in the DeepL-generated Greek corpus, including items such as *δράση*, *χρηματοδότηση*, *ανταπόκριση*, *προσέγγιση* and *εξάρτηση*. These forms frequently co-occur with institutional actors and policy-oriented contexts, reinforcing an abstract representation of action.

Figure A2.1.4.1 illustrates the KWIC concordance of passive verb forms in DeepL-generated Greek texts



Compared to the human-translated corpus, passive forms in DeepL output appear more, suggesting a stronger alignment with English source-text structures and a tendency towards grammatical convergence and agency abstraction in machine-mediated institutional discourse.

Appendix 3- AntConc Samples by non-translated (original) Greek texts.

1.5 Non-translated Greek texts

Figure A3.1.5 illustrates the use of active voice in the Greek language

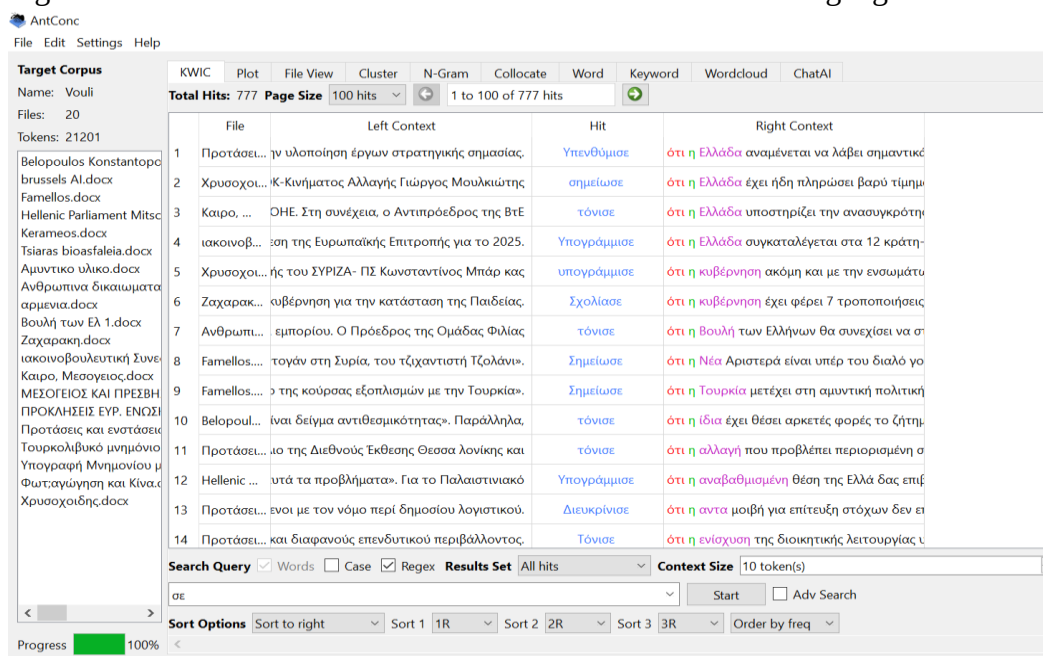
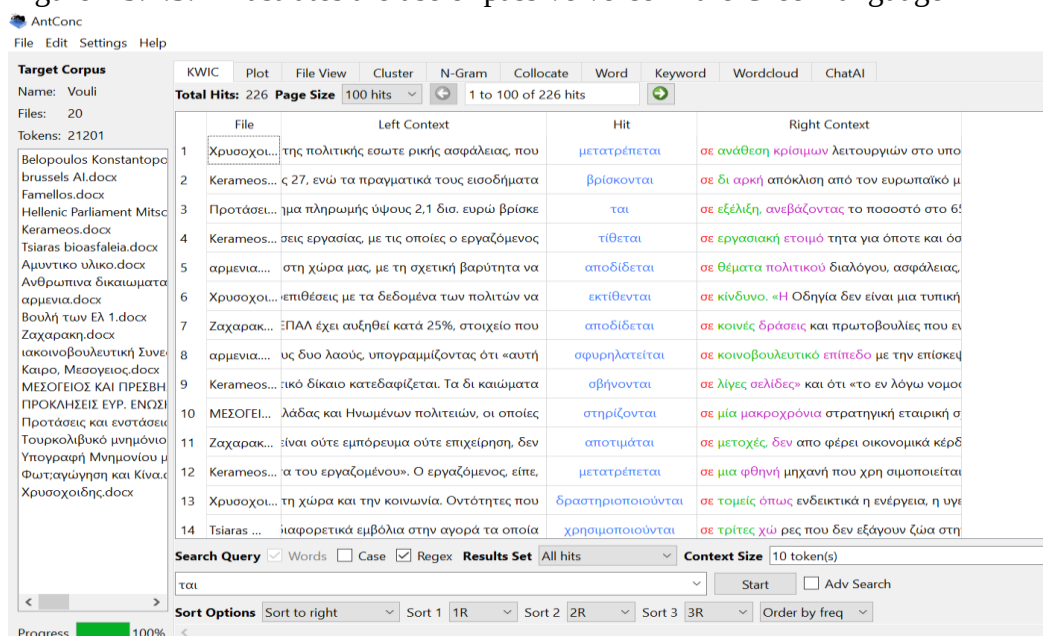


Figure A3.1.5.1 illustrates the use of passive voice in the Greek language



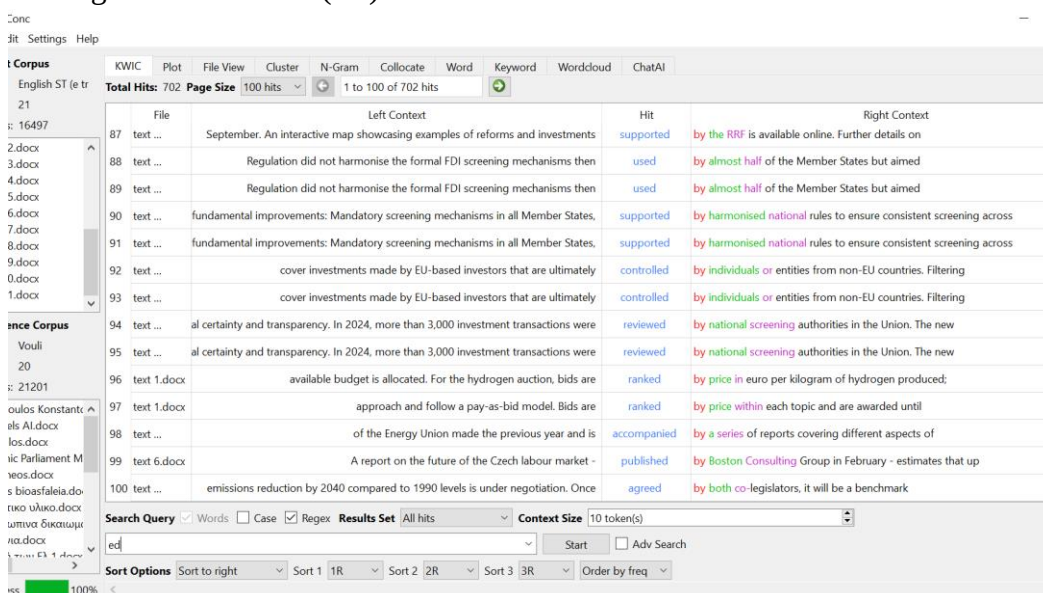
Active verbal predication is prevalent in Greek institutional discourse. Although the overall frequency of passive constructions appears broadly comparable across

the English source texts and the Greek corpora, a qualitative divergence emerges at the level of agency. In Greek, passive clauses are typically accompanied by an explicit or readily inferable agent, often realised through institutional subjects that remain salient within the discourse. In contrast, English passive constructions more readily facilitate agent suppression, resulting in higher degrees of depersonalisation. This indicates that while passive voice is attested in both languages, its discourse function differs substantially, with Greek maintaining clearer traces of agency and responsibility.

Appendix 4- AntConc sample by ST (original English texts)

1.6 English STs

Figure A4.1.6 presents the KWIC concordance of passive verb constructions in the English source texts (ST)



The KWIC concordance reveals a high concentration of passive verb constructions in the English source texts, particularly in forms combining past participles with explicit *by*-phrases. These patterns indicate systematic agent suppression and foregrounding of processes, regulations and outcomes over individual actors. The prevalence and regularity of passive constructions suggest that passivisation constitutes a core stylistic feature of English EU institutional discourse, providing an important baseline against which the Greek human and machine-generated outputs can be evaluated in terms of convergence, divergence, and agency representation.

Appendix 5a- Nominalizations across corpora

Table 5A presents the frequency of abstract nominalizations across corpora

Corpus	Noun-suffix hits	Total tokens	Hits per 1,000 tokens
Hellenic Parliament (NT Greek)	1554	19,328	80.40
EN ST (English Source)	2035	18,098	112.44
HT (Human Translation)	2020	21,145	95.52
e-Translation	1959	19,584	100.05
Google Translate	1981	20,194	98.09
DeepL	2082	20,572	101.19

Appendix 5b- Passive Constructions across corpora

Table 5B presents the frequency of passive constructions across corpora

Corpus	Tokens	Passive Hits	Passive per 1,000 tokens
English ST	18,098	824	45.53
Hellenic Parliament (NT Greek)	19,328	276	14.28
Human Translation (HT)	21,145	429	20.29
e-Translation	19,504	449	23.02
Google Translate	18,613	393	21.11
DeepL	18,802	418	22.24

References

- Aitchison, Jean. 1991. *Language change: Progress or decay?* (2nd edn). Cambridge: Cambridge University Press.
- Anastasiou, Dimitra. 2010. *Idiom treatment experiments in machine translation*. Newcastle upon Tyne: Cambridge Scholars Publishing.
- Anastasopoulos, Antonios. 2019. An analysis of source-side grammatical errors in neural machine translation. In *Proceedings of the 2019 ACL Workshop BlackboxNLP: Analyzing and Interpreting Neural Networks for NLP* (pp. 213–223). Stroudsburg, PA: Association for Computational Linguistics. <https://aclanthology.org/W19-4822/>
- Anderson, Bryce, Galpin, Riley and Juzek, Tom S. 2025. Model misalignment and language change: Traces of AI-associated language in unscripted spoken English. arXiv. <https://doi.org/10.48550/arXiv.2508.00238>
- Anthony, L. (2024). *AntConc* (Version 4.3.1) [Computer software]. <https://www.laurenceanthony.net/software/antconc/>
- Baker, Mona. 1993. “Corpus Linguistics and Translation Studies. Implications and Applications.” In Mona Baker, Gill Francis and Elena Tognini-Bonelli (eds.) *Text and Technology: In Honour of John Sinclair*. Amsterdam/Philadelphia: John Benjamins, 233–50
- Baker, Mona. 2011. *In other words: A coursebook on translation* (2nd edn). London/New York: Routledge.
- Briva-Iglesias, Vicent, Dogru, Gokhan and Cavalheiro Camargo, João Lucas. 2024. Large language models “ad referendum”: How good are they at machine translation in the legal domain? *MonTI. Monografías de Traducción e Interpretación*, 16 : 75–107. <https://doi.org/10.6035/monti.2024.16.02>
- Bybee, Joan. (2015). *Language change*. Cambridge: Cambridge University Press.

- Corpas Pastor, Gloria and Noriega-Santiáñez, Laura. 2024. Human versus neural machine translation creativity: A study on manipulated MWEs in literature. *Information*, 15(9), 530. <https://doi.org/10.3390/info15090530>
- Crystal, David. 2025. English as a lingua franca. Video, *YouTube*. <https://www.youtube.com/watch?v=ZGN21XVY4V8>
- Darquennes, Jeroen, Salmons, Joseph C. and Vandebussche, Wim (eds.). 2019. *Language Contact: An International Handbook* (Vol. 1). Berlin/Boston : De Gruyter Mouton.
- DeepL SE. 2026. *DeepL Translator* [Machine translation system]. <https://www.deepl.com>
- Doherty, Stephen. 2016. The impact of translation technologies on the process and product of translation. *International Journal of Communication*, 10, 947–969. https://www.researchgate.net/publication/284725157_The_impact_of_translation_technologies_on_the_process_and_product_of_translation
- European Commission. 2026. Press releases. *European Commission Press Corner*. <https://ec.europa.eu/commission/presscorner/home/en>
- Google. 2026. *Google Translate* [Machine translation system]. <https://translate.google.com>
- Hellenic Parliament. 2026. Press releases. *Hellenic Parliament Press Office*. <https://www.hellenicparliament.gr/Enimerosi/Grafeio-Typou/Deltia-Typou/>
- Hellenic Parliament. 2026. *Parliamentary Bulletin*, Issue 98. Athens: Hellenic Parliament. https://www.hellenicparliament.gr/userfiles/ebooks/periodiko_t098/14/index.html
- Hidalgo-Ternero, Carlos Manuel. 2021. Google Translate vs. DeepL: Analysing neural machine translation performance under the challenge of

phraseological variation. *MonTI. Monografías de Traducción e Interpretación*.

<https://doi.org/10.6035/MonTI.2020.ne6.5>

Hickey, Raymond (ed.). 2010. *The Handbook of Language Contact*. Oxford: Wiley-Blackwell.

Hilmisdóttir, Helga and Peterson, Elizabeth. 2023. Language contact and language change: Impact on the languages of the Nordic countries. In *English in the Nordic Countries*. London: Routledge, 1–20.

<https://www.taylorfrancis.com/chapters/oa-edit/10.4324/9781003272687-6/language-contact-language-change-helga-hilmisd%C3%B3ttir-elizabeth-peterson>

Hovy, Dirk, Bianchi, Federico and Fornaciari, Tommaso. 2020. You sound just like your father: Commercial machine translation systems include stylistic biases. In *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics*. Online: Association for Computational Linguistics, 1686–1690. <https://aclanthology.org/2020.acl-main.154.pdf>

House, Juliane. 1997. *Translation Quality Assessment: A Model Revisited*. Tübingen: Gunter Narr.

House, Juliane. 2014. English as a Lingua Franca and Translation. *The Interpreter and Translator Trainer* 7 : 279–98.

<https://doi.org/10.1080/13556509.2013.10798855>

Johanson, Lars. 2023. *Code Copying: The Strength of Languages in Take-Over and Carry-Over Roles*. Leiden/Boston: Brill

Laviosa, Sara. 2003. Corpus and simplification in translation. In *Translation Translation*. Leiden/Boston: Brill, 153–162.

https://doi.org/10.1163/9789004490093_010

- Malamatidou, Sofia. 2013. Passive voice and the language of translation: A comparable corpus-based study of Modern Greek popular science articles. *Meta* 58: 412–437. <https://www.erudit.org/en/journals/meta/2013-v58-n2-meta01313/1024181ar/>
- Malamatidou, Sofia. 2017. Why changes go unnoticed: The role of adaptation in translation-induced linguistic change. *Lingua*, 200, 22–32. <https://doi.org/10.1016/j.lingua.2017.08.001>
- Malamatidou, Sofia. 2017. *Corpus triangulation: Combining data and methods in corpus-based translation studies* (1st ed.). Routledge. <https://doi.org/10.4324/9781315669595>
- Murtisari, Elizabet Titik. (2016). Explication in translation studies: The journey of an elusive concept. *The International Journal of Translation & Interpreting Research*, 8(2), 64–81. <https://doi.org/10.12807/ti.108202.2016.a05>
- Papadopoulou, Rania. 2016. *The Phenomenon of Anglicisms: From Idiomatic MWEs to Morphosyntactic Structures* (Unpublished master's thesis). University of Patras, Department of Philology, Division of Linguistics.
- Papadopoulou, Rania and Xydopoulos, George J. 2016. The influence of English on Modern Greek: Exploring some morphosyntactic evidence. Paper presented at ESSE 13 Conference, Galway, Ireland.
- Papadopoulou, Rania and Xydopoulos, George J. 2021. English borrowings in Modern Greek: A corpus-based study. In *Proceedings of the 14th International Conference on Greek Linguistics*, 1002–1012. <https://pasithee.library.upatras.gr/icgl/article/view/3734/3777>
- Pulcini, Virginia, Furiassi, Cristiano and Rodríguez González, Félix. 2012. The lexical influence of English on European languages: From words to phraseology. In Virginia Pulcini, Cristiano Furiassi and Félix Rodríguez González (eds.), *The Anglicization of European Lexis*. Amsterdam/Philadelphia: John Benjamins, 1–24.

- Specia, Lucia, Raj, Dhvaj and Turchi, Marco. 2010. Machine translation evaluation versus quality estimation. *Machine Translation* 24: 39–50. <https://doi.org/10.1007/s10590-010-9077-2>
- Sosoni, Vilelmini. 2017. A hybrid translation theory for EU texts. *Vertimo studijos*, 5: 76–89. <https://doi.org/10.15388/VertStud.2012.5.10561>
- O'Shea, John, Sosoni, Vilelmini and Stasimioti, Maria. 2023. Translating law: A comparison of human and post-edited translations from Greek to English. *Journal of Language and Law*. <https://doi.org/10.2436/rld.i78.2022.3704>
- Thomason, Sarah. G. 2001. *Language contact: An introduction*. Edinburgh: Edinburgh University Press.
- Vanmassenhove, Eva, Shterionov, Dimitar and Way, Andy. 2019. *Lost in translation: Loss and decay of linguistic richness in machine translation*. arXiv. <https://doi.org/10.48550/arXiv.1906.12068>
- Venuti, Laurence. 2008. *The Translator's Invisibility: A History of Translation* (2nd edn). London/New York: Routledge.
- Winford, Donald. 2003. *An introduction to contact linguistics*. Oxford: Blackwell Publishing.
https://www.researchgate.net/publication/273003007_An_Introduction_to_Contact_Linguistics
- Winford, Donald. 2005. Contact-induced changes: Classification and processes. *Diachronica*, 22(2), 373–427. <https://doi.org/10.1075/dia.22.2.05win>
- Xydopoulos, George J. and Papadopoulou, Rania. 2018. Fashion anglicisms in Modern Greek: A preliminary investigation. *Revista de Lenguas para Fines Específicos*. <https://doi.org/10.20420/rlfe.2018.358>