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A Linguistic Challenge to ChatGPT: Use of AI in Detection, Text Generation and Translation of False Friends in Turkish-English

DR. ÖĞR. ÜYESİ **EVREN BARUT***

Abstract

This study aims to analyze AI-supported text generation and translation technology, focusing on the linguistic challenge of false friends. False friends can cause semantic difficulties in both language learning and translation. The study examined the capabilities of AI tools in handling false friends as a linguistic challenge, using GPT-4o as the AI model. The analysis consisted of two phases. In the first phase, GPT-4o processed false friends in the English-Turkish language pair and generated a text without relying on any predefined dataset. In the second phase, Nihal Yetkin's (2011) study on 100 false friends in Turkish and English within the field of diplomacy was used as a dataset. Using this thematic data, GPT-4o was tasked with generating a text with a limited dataset. Both AI-generated texts were then translated using GPT-4o. The study evaluated GPT-4o's linguistic creativity and data processing skills in addressing the complexities of false friends. The findings discussed how GPT-4o recognized false friends and used them contextually in text generation. The primary objective in both phases was to assess GPT-4o's ability to use false friends in appropriate contexts and its performance in translating these words into the target language. The analysis of findings provided insights into the effectiveness of AI-powered translation in handling linguistic challenges. Ultimately, this study assessed GPT-4o's success in identifying and processing Turkish-English false friends in text generation and translation.

Keywords: Translation Studies, False Friends, Linguistics, Semantics, OpenAI, GPT-4o, AI-Generated Text, AI-Powered Translation.

Chatgpt'ye Dilbilimsel Bir Meydan Okuma: Türkçe-İngilizcede Yalancı Eşdeğerlerin Tespiti, Metin Üretimi, Çevirisinde Yapay Zekâ Kullanımı

Özet

Bu çalışma, yapay zekâ destekli metin oluşturma ve çeviri teknolojisini analiz etmeyi ve dilbilimsel bir meydan okuma olarak yalancı eşdeğerlere odaklanmayı amaçlamaktadır. Yalancı eşdeğerler, hem dil öğrenme hem de çeviride anlamsal zorluklara neden olabilir. Çalışmada, yapay zekâ modeli olarak GPT-4o kullanılarak, yapay zekâ araçlarının yalancı eşdeğerleri dilbilimsel bir sorunsal olarak ele alma yetenekleri incelenmiştir. Analiz iki aşamadan oluşmuştur. İlk aşamada, GPT-4o İngilizce-Türkçe dil çiftindeki yalancı eşdeğerleri işlemiş ve önceden tanımlanmış herhangi

* Afyon Kocatepe University, Faculty of Sciences and Literature, Department of English Translation Studies
e-mail: ebarut@aku.edu.tr ORCID: 0000-0002-0915-9603
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bir veri setine dayanmadan bir metin oluşturmuştur. İkinci aşamada, Nihal Yetkin'in (2011) diplomasi alanında tespit ettiği Türkçe ve İngilizcedeki 100 yalancı eşdeğer üzerine çalışması veri seti olarak kullanılmıştır. GPT-4o'ya, yalancı eşdeğerlerin bulunduğu bu tematik ve sınırlı veri setini kullanarak bir metin oluşturma görevi verilmiştir. Ardından, yapay zekâ tarafından oluşturulan her iki metin de GPT-4o kullanılarak çevrilmiştir. Çalışmada, GPT-4o'nun yalancı eşdeğerlerin karmaşıklıklarını ele alırken gösterdiği dilsel yaratıcılığı ve veri işleme becerileri değerlendirilmiştir. Bulgular, GPT-4o'nun yalancı eşdeğerleri nasıl tespit ettiğini ve bunları metin oluştururken bağlamsal olarak nasıl kullandığını ortaya koymuştur. Her iki aşamada birincil amaç GPT-4o'nun yalancı eşdeğerleri uygun bağlamlarda kullanma becerisini belirlemek ve bu kelimeleri hedef dile çevirmedeki performansını değerlendirmek olmuştur. Bulguların analizi yapay zekâ destekli çevirinin dilbilimsel zorluklarla başa çıkmadaki etkinliğine dair fikirler sağlamıştır. Sonuç olarak bu çalışma GPT-4o'nun metin oluşturma ve çeviride Türkçe-İngilizce yalancı eşdeğerleri belirleme ve işlemedeki başarısını değerlendirmiştir.

Anahtar kelimeler: Çeviribilim, Yalancı Eşdeğer, Dilbilim, Anlambilim, OpenAI, GPT-4o, Yapay Zekâ Metin Üretimi, Yapay Zekâ Destekli Çeviri.

INTRODUCTION

Recent artificial intelligence (AI) developments, particularly in chatbots like ChatGPT, have started many discussions. People are talking about whether AI can replace what humans write. The latest developments in artificial intelligence significantly impact linguistics. Today, AI-generated texts have become so advanced that in some languages, entrepreneurs using AI are saving on human resources. The success of artificial intelligence in producing linguistic texts continues to be utilized across various sectors. This has led to much debate and some people even want new laws to control the use of AI chatbots. Many believe that AI can do the job of humans in writing and speaking tasks. But, there is not enough research comparing texts written by AI and humans in different styles. This research is essential to understand how well AI can copy humans' language use.

In the context of writing, Tony Berber Sardinha (2024) states that linguistic concepts become more challenging for AI, especially for generating a style or register as humans do. It is like a specific way humans use language in different situations. The way humans write depends on many situations. For AI to write well, it needs to understand these different styles. The success of AI in writing depends on how well it matches these styles and meets the situation's needs. This presents a significant challenge for AI, as it must adjust its writing to fit different contexts. Thanks to the recent developments, AI has improved considerably; however, there remains a slight difference between AI-generated text and human writing, particularly in word choice and grammar. These results show that AI still has a long way to go to write just like humans, especially in situations where understanding the deeper meaning and context is important (Berber Sardinha, 2024, p. 1).

ChatGPT's language use, its proficiency in several areas is evident. ChatGPT exhibits a near-human level of performance in many linguistic tasks, demonstrating its ability to conduct fluent dialogues and provide contextually congruent responses. Its linguistic output is grammatically accurate, indicating a strong grasp of language structure. However, this proficiency is juxtaposed

with notable limitations. ChatGPT struggles to manage conversational information, often breaching the Gricean maxim of quantity by providing over-informative responses. It also faces challenges in computing text-based inferences, particularly when context is key to understanding. Furthermore, ChatGPT shows a limited ability to process physical metaphors and interpret humor, where human communication relies heavily on contextual and meta-representational understanding (Barattieri di San Pietro, Frau, Mangiaterra, & Bambini, 2023, p. 9-11). ChatGPT's language capabilities are impressive, especially in grammatical correctness and basic dialogue fluency. However, its pragmatic limitations in handling complex conversational dynamics and contextual nuances highlight the gap between current AI language models and the multifaceted nature of human communication.

The importance of AI-powered translation technologies lies in their ability to bridge linguistic divides and enhance global communication. These technologies are tools for converting text from one language to another and help understand and preserve different languages' nuances and cultural contexts. This is especially crucial in an interconnected world where cross-cultural exchanges are frequent. AI translation tools must tackle the complexity of language, such as idioms, local expressions, and words with multiple meanings, to provide accurate and contextually appropriate translations. Developing these technologies is key to fostering better international understanding and collaboration. Neural Machine Translation (NMT) represents a significant advancement in machine translation, significantly improving translation quality and in some cases approaching human-level performance. For instance, Google's NMT has notably reduced translation errors compared to its earlier phrase-based model. This advancement in NMT has led to discussions about its potential impact on the translation profession. Integrating AI-powered NMT in translation and foreign language education presents opportunities and challenges, necessitating changes in translation teaching to adapt to this AI-influenced era (Li, 2023, p. 3039). This study highlights AI's challenges in handling culturally sensitive and linguistically complex translations, particularly with 'false friends.' These words, which are tricky for both humans and AI, require understanding context and culture, making them a key test of AI's translation skills. Grasping 'false friends' is crucial for improving translation accuracy, emphasizing the need for deeper insights into their role in translation.

Pedro Jose Chamizo Domínguez (2006) thoroughly examined the 'false friends' phenomenon. According to his study, these are words that, while appearing similar across languages, have different meanings. It's emphasized that a deep understanding of these words is vital for accurate translation. "False friends" refers to words that look or sound similar in different languages but have different meanings. These words may appear the same due to their spelling or pronunciation, but their meanings do not match across languages. The term "false friends" is commonly used for this phenomenon, but other names like faux amis or false equivalents exist. It is important to distinguish between false friends and false cognates, as all false cognates are false friends, but not all false friends are false cognates. False friends are categorized into two types: chance false friends and semantic false friends (Chamizo-Domínguez, 2006, p. 427). The distinction between chance and semantic false friends is highlighted, pointing out the intricacies of navigating these linguistic subtleties. The study underlines the key role of 'false friends' in linguistics and language translation, showcasing the

complexity of language and the importance of cultural context in understanding and interpreting these words. This study will analyze AI's capability and limitations of identifying false friends in the text generation and translation process.

This study examines the capabilities of ChatGPT in the context of language processing with a specific focus placed on its handling of 'false friends'. The effectiveness of ChatGPT in recognizing and interpreting these words accurately is being thoroughly evaluated. This assessment aims to reveal the current strengths and areas for improvement in AI's approach to complex linguistic challenges, thereby contributing to a deeper understanding of AI's role in language translation and text generation. The challenges posed by linguistic nuances to AI systems are highlighted, underscoring the need for further advancements in this field. To achieve this goal, texts will be generated from certain false friends using ChatGPT as an AI tool within the scope of the study. With text generation experience, AI's capacity to use false friends appropriately will be observed. If necessary, linguistic corrections will be made in the produced texts. Regarding a final result in AI's text production, ChatGPT and Google translate translations will be compared to measure its translation skills in a text full of false friends. Thus, it will be possible to comment on the skills of ChatGPT, an AI-powered translation tool, and Google Translate, a translation tool with NMT infrastructure, in translating a text with false friends.

In this study, a number of research dealing with false friends in a linguistic context were reviewed. The insights gained from these studies are synthesized in the construction of the study. It emphasizes the origins of false friends, their classification, and the difficulties they pose for language learners and translators.

First of all, the following studies, which focus on the origins and semantics of false friends, served as inspiration for this research. Marjeta Vrbinc and Alenka Vrbinc (2014) examined phraseological false friends in English and Slovenian, considering idiomatic expressions with similar forms but different meanings, thus expanding the scope of false friends to include phraseological units. Some studies have been conducted on false friends with a computational approach. Developments in computational linguistics have enabled false friends to be defined and analyzed more precisely. Ana-Sabina Uban, Alina Cristea Ciobanu, and Liviu P. Dinu (2023) further developed this approach by measuring semantic dissimilarity among synonyms, providing valuable insights into the nuances of lexical similarity and diversity (Uban, Ciobani & Dinu 2023, p. 97-100).

False friends between English and Turkish have been the subject of several studies. Ozan Can Çağlar, Esra Ataman, and Bilal Kırkıcı (2021) analyze their processing through lexical translation tasks, revealing the cognitive challenges faced by students. Asım Çağrı Şenol (2020) evaluates the use of "false equivalence" to describe semantic changes across dialects in the Turkish linguistic field, and suggests a nuanced distinction between semantic change and false friends. Vügar Sultanzade (2010) explores the difficulties of translating Bahtiyar Vahapzade's works into Turkish, highlighting the role of false friends in literary translation.

There are also studies examining how AI tools such as ChatGPT and neural machine translation (NMT) contribute to understanding, describing, and addressing AI text generation and AI-assisted translation. Berber Sardinha's (2024) study highlights the differences between AI-generated and human-written texts through multidimensional analysis, highlighting that AI

struggles to mimic human-like nuances in language use. This limitation is important in the context of false friends, where subtle differences in semantics and usage are crucial for accurate language interpretation. While the study highlights the potential of AI in linguistic analysis, it also highlights the difficulties of achieving human-like precision, particularly in nuanced language phenomena such as false friends.

Niall Curry, Paul Baker, and Gavin Brookes (2024) evaluate the effectiveness of generative AI such as ChatGPT in stem-based discourse studies. Their findings show that while AI demonstrates proficiency in identifying linguistic patterns, it often fails in nuanced qualitative analyses, such as distinguishing context-specific lexical ambiguities. This shortcoming is particularly relevant to the study of false friends, where understanding cultural and contextual implications is crucial.

Marta Dynel (2023) investigates the metalinguistic and metadiscursive capabilities of ChatGPT in human-AI interactions, and notes that such tools can increase users' awareness of linguistic complexities. This increased awareness can be effective in identifying false friends as users interact with the AI to test and understand lexical similarities and differences. However, the study also finds that the AI's performance is heavily influenced by its training data, which may limit its ability to comprehensively address complex linguistic phenomena.

Jonas R. Kunst and Kinga Bierwiaczonek (2023) investigate the use of AI to translate surveys in cross-cultural research. Their findings reveal that the AI excels in language pairs with structural similarities but struggles with linguistic nuances, including false friends in unrelated languages. The study highlights the importance of human supervision to ensure semantic and pragmatic accuracy, especially when translating texts where false friends may distort intended meaning.

Li (2023) investigates the perceptions and use of NMT among translation students and highlights the increasing reliance on AI tools for translation tasks. While students view NMT as a valuable resource, they often post-edit AI-generated translations to remove errors, including those containing false friends. The study highlights the need to integrate NMT training into translation curricula to enhance students' ability to identify and correct such issues.

Chiara Barattieri di San Pietro et al. (2023) evaluate the pragmatic capabilities of ChatGPT, noting its limitations in handling nuanced linguistic inferences while noting its adequacy in generating contextual discourse (Barattieri di San Pietro, Frau, Mangiaterra, & Bambini, 2023). These findings are relevant to the study of false friends, as such lexical items often require a sophisticated understanding of context and pragmatics to effectively resolve ambiguities.

Stephen Rice et al. (2024) discuss the broader implications of using ChatGPT in research, including its potential to facilitate linguistic analysis and identify translation challenges such as false friends. While acknowledging its limitations, the study highlights the need for human expertise to validate and improve AI-generated outputs to ensure accuracy and reliability in applications involving complex linguistic phenomena.

1. THEORETICAL FRAMEWORK AND RESEARCH METHODOLOGY

The methodology of this research was inspired by several studies on false friends. One of these is the study by Ana-Sabina Uban and Liviu P. Dinu (2020), which deals with the detection of false friends in different language pairs with a computational method (Uban & Dinu, 2020, p. 3001). In the first phase of this study, unlike the method of Uban et al. (2019, 2020), an evaluation will be made directly on the concept of false friends in Turkish-English languages through the feedback of ChatGPT as an artificial intelligence tool. In the second phase, analysis will be conducted on ChatGPT's ability to generate text from the given false friends on a false friends database in Turkish-English language pair in order to benefit from the data processing skills of artificial intelligence. In this phase, the study by Nihal Yetkin (2011) will be used. Yetkin (2011) identified 100 false friends, especially encountered in diplomatic language between Turkish-English languages, and presented them to the attention of researchers in the appendix of the study (Yetkin, 2011, p. 214-221). Another inspiring study is the machine translation focused study conducted by Levent Uzun and Umut M. Salihoğlu (2009) by compiling more than 2400 cognates and false friends in the English-Turkish language pair. In the study, the selected words of English-Turkish cognates and false friends are translated and analyzed with machine translation tools. Uzun and Salihoğlu (2009), studied the contextual translation of their database. Translation process is done with machine translation based applications, but it is seen that human interference was frequently required for the outputs (Uzun & Salihoğlu, 2009, p. 558-560).

Considering the above studies, ChatGPT is utilized to examine the dynamics of false friends, especially focusing on the English-Turkish pair, within the theoretical framework addressed above. Uzun and Salihoğlu's (2009) study, which focuses on machine translation, provides a comprehensive analysis of English-Turkish false friends. However, Uban and Dinu (2020) examined false friends in multiple languages, including English and Romanian, using a computational method. Both studies provide a scalable, data-driven model to identify and classify false friends. Based on these studies, it was deemed necessary to conduct this study to understand and evaluate ChatGPT's capacity to detect false friends as a linguistic challenge as a tool for today's AI text generation and AI-powered translation. In order to reveal the linguistic potential of artificial intelligence, it is first requested to list the words that fall into the definition of false friends in English-Turkish languages without a database. Then, the false friends database presented by Yetkin (2011) in the context of diplomatic translation is given to ChatGPT, so that it can be checked whether there is a match between the false friends data. Of course, when applying this method, it is aimed to reach an optimum objective and efficient study result by starting from the context-specific results of the findings. In particular, it investigates whether it can handle the semantic and pragmatic nuances of partial false friends in specialized contexts such as diplomacy. Furthermore, the study will provide an opportunity to examine and compare the extent to which ChatGPT detects false friends based on semantic and contextual differences, both with and without dataset support. In this respect the study tries to find potential answer to given research questions below;

- Does ChatGPT detect and address false friends in English-Turkish language pairs?
- How effectively can ChatGPT perform contextually accurate translations of English-Turkish false friends from the provided database?

• Can ChatGPT identify the semantic and pragmatic nuances of partial false friends in English-Turkish translation, particularly in specialized contexts like diplomacy?

• How effectively does ChatGPT handle and resolve contextual ambiguities when translating sentences involving false friends?

ChatGPT, which has a subscription and free version, has a powerful data processing infrastructure based on 96 layers and 175 billion parameters. It has a programmatic infrastructure that is constantly improving itself with this interaction infrastructure based on human feedback in database processing and artificial learning (Barattieri di San Pietro, Frau, Mangiaterra, & Bambini, 2023, p. 340-342). This enormous infrastructure, which has a promising future in data processing, is used today to produce content in many areas. The AI-supported GPT model, which has become a tool that makes life easier in many ways, is still not perfect in terms of text generation and concept distinction, despite its promising capabilities. Even in the web and application interfaces in conversational GPT versions, the potential for errors in generated content is acknowledged, and users are encouraged to verify important information. This study examines how ChatGPT handles false friends in Turkish-English translation, assessing its ability to detect them and ensure contextual appropriateness. It also evaluates AI translation tools in culturally and contextually sensitive translation, identifying ChatGPT's strengths, weaknesses, and areas for improvement.

2. CHATGPT: AI-TEXT GENERATION AND AI-POWERED TRANSLATION TOOL

The use of online and AI-powered translation tools has grown significantly, offering successful results yet still requiring post-editing. ChatGPT, with its AI-driven text generation and translation capabilities, provides broad language support but struggles with certain linguistic challenges. As a key resource for content creators, AI continues to evolve, integrating into daily life while addressing translation complexities.

As an artificial intelligence tool, ChatGPT describes itself when asked, 'What is ChatGPT?'. According to ChatGPT's definition, it is developed by OpenAI and is an advanced language model utilizing the Generative Pre-trained Transformer (GPT) architecture to produce human-like text based on a given input. Trained on a vast corpus of internet text, it excels in various tasks, including answering questions, writing essays, crafting stories, engaging in dialogue, and translating languages. The model's effectiveness lies in predicting subsequent words in a sequence, generating coherent, contextually relevant text across multiple paragraphs. Its capabilities are enhanced with each version (e.g., GPT-3, GPT-3.5, GPT-4), thanks to improvements in training methods, data, and computational resources. ChatGPT's wide range of applications—from educational tools and customer service bots to programming assistance and creative content generation—underscores its utility as a powerful tool for natural language processing, capable of understanding and responding to complex contexts (OpenAI, 2024). As can be understood from the answer above, ChatGPT is a pre-developed GPT (Generative Pre-trained Transformer) architecture that can answer many questions for users like humans and benefits from advanced language modeling.

AI models face challenges in text generation and translation, particularly with ambiguity, cultural references, and structural differences between languages. Ensuring accuracy requires understanding context, as meaning shifts based on usage. Additionally, evolving languages,

including neologisms, slang, and dialects, further complicate translation. These issues, compounded by AI training data limitations, highlight ChatGPT's difficulties in handling language structures, cultural references, and context—challenges that become even more pronounced with false friends (OpenAI, 2024a; OpenAI, 2024d).

3. THE CONCEPT OF FALSE FRIENDS

False friends are linguistic concepts that appear similar in form in two languages but differ in meaning. False friends turn into word pairs that can sometimes create difficulties, especially in translation and interlingual communication. False friends are a challenging problem in bilingual lexicography, often encountered in foreign language teaching and translation activities. False friends are sources of error that result in misleading semantic results for foreign language learners, as words that are largely similar to each other but have different meanings (Vrbinc & Vrbinc, 2014, p. 73-74). False friends can be divided into two categories: absolute and partial. "Absolute False Friends" refer to two lexical items from different languages that have the same form in structure but different meanings. When two languages are completely unrelated, the possibility of confusion is not very realistic, as speakers do not expect a lexical or semantic relationship between the unrelated languages. In the case of "Partial False Friends", the situation is particularly complex for language learners (Gouws, Prinslo, & De Schryver, 2004, p. 799-800). Partial false friends are almost homophones. Words that are brought into the target language with the calque strategy in translation tend to have this tendency over time. Partial false friends share one meaning but have one or more semantic differences in terms of other meanings. It has a form that has two separate meanings associated with homophones, can lead to different meanings of the same expression in a language. Therefore, it stands out as false friends that are difficult to distinguish (Yetkin, 2011, p. 208-209).

It is considered that these lexical phenomena arise from linguistic differences that occur due to synonyms in the language evolving into different meanings over time during the historical development and interaction of the language. When comparing two languages, some false friends exhibit very different meanings (for example, English gift as "present" and German gift as "poison"), while others differ subtly or connotatively. This creates a greater risk of errors in translation. The concept of false friends is not always limited to closely related languages, and can sometimes be observed in language pairs that seem unrelated and unconnected. The reason for this can be explained as the historical background of interaction between languages and cultures (Shuttleworth & Cowie, 2014, p. 57-58). As Mario Wandruszka (1978) also stated, in some cases, frequent misinterpretation or misuse of a false friend in the target language may lead to the term eventually adopting the meaning of the source language, thus transforming the false friend into a "real friend" (Wandruszka, 1978, p. 217-220).

As a linguistic concept, false friends do not always occur between different languages, and intralingual false friends can also be encountered in different countries speaking the same language. To define it, intralingual false friends refer to words that are found in different variations of the same language but have different meanings, which can sometimes lead to confusion or even amusing misunderstandings. In the context of British and American English, such false friends are especially seen at the lexical level. For example, the word "pants" means panties in British English, while in

American English it means trousers. Similarly, in British English, the word suspenders refers to the suspenders used by women to hold up their socks, while in American English it is the name given to the suspenders traditionally used by men to hold up their trousers. When studies on intralingual false friends are examined, examples can be seen in other languages. These examples are usually encountered in dialects spoken in different regions of a language (Roca-Varela, 2010, p. 133).

4. ANALYSING THE CONCEPT OF FALSE FRIENDS WITH CHATGPT

The analysis consists of two stages. The first phase covers the processing of the concept of false friends by GPT-4o without any database and limitations. In the second phase, the diplomacy terms in Yetkin's (2011) study on the concept of false friends were used as a dataset. In both cases, the data processing processes with GPT-4o were examined as follows.

4.1. The first phase: The concept of false friends without dataset

The study examines how artificial intelligence can detect and recognize the linguistic concept of false friends. For this analysis, OpenAI's Large Language Model and ChatGPT, both powered by natural language processing (NLP) technology, were utilized. ChatGPT has two language processing versions: GPT-3.5 and GPT-4. In this study, GPT-4 Plus, which requires a premium subscription, was used for analyzing the concept of false friends. In this version, OpenAI promises fewer interruptions, fast access even during busy hours, and advanced model outputs. Since there is no data limitation in prompts with GPT-4 plus, the language processing capacity in the field of chat bots, content creation, and text generation on the concept of false friends was used more efficiently.

Firstly, definition of false friends was asked to GPT-4o as; “What is the concept of false friends in Linguistics?”. The question was created to challenge the AI's false friends feedback within contextual content. The answer is related to the definition of false friends, pointing out these term refers to false cognates in two languages that appear to be similar but differ in meaning. In the definition prompt GPT4o also explains the confusing similarity with etymological divergence and coincidental similarity and gives examples in pairs of different languages (OpenAI, 2024b). In the first phase, only the AI generated text flow is evaluated. The semantic conformity of the content with the concept and definition of false friends will be discussed in the findings section.

In order to perform the first stage of the study, which is the detection of false friends between Turkish and English with artificial intelligence, a detailed analysis was carried out with a new chat bot and the GPT-4o version with the command. Below, a summary of the commands and responses in the GPT-4o false friends prompt is presented in order. GPT-4o is given the following command; “create a list of 20 false friends between Turkish and English. For each pair, provide: The Turkish word and its English false equivalent, the correct meaning of the Turkish word in English, an example sentence in Turkish using the Turkish word, followed by its English translation, ensure cultural and contextual accuracy." (OpenAI, 2024c).

In response to the first command, GPT-4o produced 20 false friends in English and Turkish. After GPT-4o produced 20 false friends, it was requested that false friends be classified as absolute false friends and partial false friends according to the definitions quoted from Abu Snoubar et. al. (2024), which includes detailed information about the classification of the concept of false friends as

absolute and partial (Abu-Snoubar, Abumahfouz, Shboul, Aldowkat, & Rahahleh, 2024, p. 1139-1140).

Following the last command, interestingly first error occurred; GPT-4o classified the 11 false friends as absolute false friends and 10 as partial false friends counting the total number into 21. This was a result of listing the word "salon" as partial false friends twice comparing with English words "salon- beauty parlor or gallery" and "saloon- bar or public house".

Then, the number of false friends was requested to increase to 50. GPT-4o expanded the list of false friends to 50 by classifying them into 25 absolute and 25 partial. AI was generating a text form and it was creating a summary table with false friends, however the respond was suspended while forming the summary table and after command of "go on" the list was successful The given false friends were asked to reorder in alphabetical order and it was successfully done.

After that, GPT-4o was asked to increase the number of false friends list up to 100, but in alphabetical order. Although the instruction was clear enough, GPT-4o AI generated prompt was well responded, it only created 60 false friends finishing the alphabetical order in "T". GPT-4o needed a pushing command "go on please!" to complete list with other 40 false friends. It continued the list from "T to Z" with 13 more false friends (from 61 to 73) and finished the prompt restarting the alphabetical order from "A to Z" with 26 more false friends (from 74 to 100) to reach the number of 100. In total of 100 false friends, this time it classified 83 absolute and 17 partial false friends. As is given above, the number of partial false friends were 25 while listing 50 false friends. When compared to previous respond, 8 partial false friends were missing in numbers. But the respond was divided into 2 parts while creating the list of 100 false friends, so another command was given to GPT-4o to list all 100 false friends in alphabetical order in one respond. However, this time, GPT-4o failed to list 100 and provided 98 false friends. After asking "99? – 100?" it continued to list these and completed the list of 100 false friends in 2 respond again. To have the 100 false friends list in one respond, another command was given to GPT-4o to create the list as a classification table in one respond. GPT-4o initially generated a list of 100 false friends by classifying them into 75 pairs of absolute false friends and 25 pairs of partial false friends. However, the response was unreliable, as the total count of false friends was actually 96 instead of 100. When asked to generate the missing four pairs, the model only provided three additional ones. Upon reviewing the final response, it was noticed that one of the Turkish words "*tatlı*"(*sweet*) had been repeated. This indicated that, in the final count, the model added one last false friend to ensure there were exactly 100 unique entries.

It is also noticed that there are some strange choices among the so-called false friends produced by GPT-4o. When the 100 so-called false friends detected by GPT-4o in Appendix 1 are examined in detail, it is determined that 28 of them are found to be suitable for the definition of false friends, 60 of them are not suitable for the definition of false friends, and 12 of them cannot be determined to be suitable for the definition of false friends (Not applicable/N-A). For details, please see Appendix 1. This situation shows that the AI is not very successful in making word choices that are appropriate for the concept in line with its concept recognition, definition and text generation skills. For the full list, see Appendix 1.

To test GPT-4o's AI text generation capabilities, it was asked to select randomly 50 false friends from 100 false friends it created. In this context, the following false friends were randomly selected

by GPT-4o from its own database. Please see table 1 for the 50 false friends that GPT-4o randomly selected to generate a text.

Aile vs. Aisle	Film vs. Film	Rüya vs. Rue
Araba vs. Arab	Gömlek vs. Gloom	Salon vs. Salon
Banka vs. Bench,Bank	Güzel vs. Guzzle	Salon vs. Saloon
Başarılı vs. Bashful	Hal vs. Hall	Servis vs. Service
Bilet vs. Bullet	Hayal vs. Hail	Silah vs. Seal
Bilgi vs. Bilge	Hayat vs. Hay	Şoför vs. Chauffeur
Bilim vs. Bill	İnce vs. Incense	Tabak vs. Tab
Bölüm vs. Bloom	İnsan vs. Insane	Tatlı vs. Tattle
Can vs. Can	Kanal vs. Canal	Tekne vs. Tech
Cihaz vs. Jazz	Kara vs. Car	Toz vs. Toss
Cins vs. Jeans	Karnaval vs. Carving	Uzun vs. Zone
Çöp vs. Chop	Kedi vs. Kid	Yalnız vs. Yawn
Defter vs. Defter	Kolonya vs. Colony	Yara vs. Yard
Durak vs. Drake	Liman vs. Lemon	Yaz vs. Yes
Ekspres vs. Express	Makyaj vs.Make	Zeka vs. Zebra
Fabrika vs. Fabric	Oyun vs. Own	Zemin vs. Zoom
Fener vs. Fender	Resim vs. Resume	

Table 1. GPT-4o's random selection of 50 Turkish-English false friends from AI-generated dataset

Among the 50 false friends in Table 1, which were randomly selected to test text generation skills of AI, there are also some words that do not fully meet this challenging linguistic concept. Some of these include; "Başarılı vs. Bashful", "Bilet vs. Bullet", "Bilim vs. Bill", "Cihaz vs. Jazz", "Durak vs. Drake", "Gömlek vs. Gloom", "Kara vs. Car", "Rüya vs. Rue", "Yaz vs. Yes" "Zekâ vs. Zebra". When Appendix 1 "List of 100 false friends produced by GPT-4o" is examined, it is seen that there are other words in the list that do not fit the definition of false friends. Based on these examples, it is evident that when GPT-4o is given the definition of false friends, it sometimes selects words that do not qualify as false friends in Turkish-English while generating text. However, it also correctly identifies words that meet the criteria for false friends (OpenAI, 2024c)..

In every input, things were getting complicated in AI text generation. Unfortunately, AI generated responds of GPT-4o were incomplete, inconsistent, unstable, uncertain, misleading, contradictory, inappropriate (OpenAI, 2024c). Finally, for the list of 100 false friends produced by GPT-4o, please see Appendix-1. Since the link to the "Linguistic Challenge of False Friends" prompt performed with GPT-4o is openly available in Appendix 1 and the bibliography, the main findings regarding the feedback from GPT-4o's false friends prompt as an artificial intelligence tool are presented below in the analysis section.

4.2. The second phase: The concept of false friends with a dataset

In the continuation of the analysis, 100 partial false friends collected from diplomatic texts were used as a dataset in Yetkin's (2011) study. Yetkin (2011) examined 32 different diplomatic texts in Turkish and English language pair, and identified 100 false friends in these texts, especially based on the translation strategy of calque and loanword words that were transferred to Turkish (Yetkin, 2011). In the second phase of the study, experiments will be conducted on the ability of artificial intelligence to produce Turkish and English texts with false friends randomly selected from this dataset using Yetkin's dataset. The texts produced by GPT-4o as an artificial intelligence tool is

translated into Turkish-English languages. In this way, if AI is provided with a dataset with concept definitions and meanings in both languages, it will be possible to analyze AI-generated text and AI-powered translation capabilities. In the section below, you can see GPT-4o's reactions to processing false friends in the given dataset and using this data to create AI-assisted text and AI-assisted translation, respectively.

Since the current dataset will be used, a new prompt will be opened on GPT-4o to create a clear and unambiguous command for data processing and text generation. To this end, the following command has been prepared so that the command randomly selects at least half of the 100 false friends listed, focuses on the dataset to be added to the command prompt, produces a result that is relevant to the dataset, produces text with a consistent context randomly selected from the dataset when generating text, and is aware of the clear and distinct difference between meanings while doing so:

> "Analyze the provided dataset of Turkish-English false friends in diplomacy; then randomly select 50 false friends from the given dataset, and generate a coherent paragraph or text integrating them naturally. Ensure the context makes the distinction between the Turkish and English meanings of the words clear and unambiguous. Highlight the challenge of false friends to better understand these terms within the paragraph." (OpenAI, 2024d)

Although it is explicitly stated in the command, GPT-4o responded to the command with a text titled "Paragraph Highlighting False Friends in Diplomacy (Using 50 Randomly Selected Words)", which selected only 12 false friends from the dataset and explained how this concept would affect diplomatic texts. The selected false friends are; "Agenda, Active, Aggressive, Actor, Advocate, Conference, Alliance, Posture, Economic, Engagement, Neutral, Transparency". The word "conference" is not among these selections in the false friends dataset. However, GPT-4o realized that it misunderstood the command and responded, "I realize now that fewer than 50 may have been directly integrated. If you'd like, I can revise the paragraph to explicitly include 50, or adjust the approach based on your preferences! Let me know how to proceed." Based on this, the dataset was added to the prompt again, and GPT-4o was asked to review the dataset and produce text by randomly selecting 50 false friends from it. GPT-4o revised the paragraph by selecting 50 false friends from the list. Despite the failure of text generation GPT-4o was able to select the false friends randomly from the given dataset. GPT-4o formed a paragraph explaining how the misuse and mistranslation of false friends affects the diplomatic texts (OpenAI, 2024d). Below is given the false friends, that are randomly selected in AI-generated text by GPT-4o. Please see table 2;

Accord (akord)	Character (karakter)	Concert (konser)	Tone (ton)	Engagement (angajman)
Active (aktif)	Direction (direksiyon)	Baggage (bagaj)	Practical (pratik)	Consultation (konsültasyon)
Actor (aktör)	Neutral (nötr)	Defense (defans)	Formation (formasyon)	Complex (kompleks)
Agenda (ajanda)	Transparency (transparan)	Major (majör)	Function (fonksiyon)	League (lig)
Address (adres)	Position (pozisyon)	Instrument (enstrüman)	Expertise (ekspertiz)	Portion (porsiyon)
Advocate (avukat)	Goal (gol)	Passage (pasaj)	Figure (figür)	Pattern (patron)
Alliance (alyans)	Status (statü)	Site (site)	Final (final)	Penalty (penaltı)
Barrier (bariyer)	Civil (sivil)	Service (servis)	Force (fors)	Domain (domain)
Balance (balans)	Conditioned (kondisyonlu)	Speaker (spiker)	Economic (ekonomik)	Record (rekor)
Capacity (kapasite)	Shift (şift)	Moral (moral)	Energetic (enerjik)	Dramatic (dramatik)

Table 2. GPT-4o randomly selection of 50 Turkish-English false friends from Yetkin's (2011) dataset

5. FINDINGS and DISCUSSION

5.1. AI- text generation

In order to analyze the experience of AI text generation and AI-powered translation regarding the concept of False friends, which is encountered as a linguistic challenge, GPT-4o's false friends prompt outputs were studied in the previous sections. Using the false friends lists generated by GPT-4o itself given in Table 1 and the randomly selected false friends lists from Yetkin's (2011) study given in Table 2, two separate texts appropriate to the context were produced in GPT-4o. In order to analyze the AI text generation and AI-powered translation experience regarding the concept of false friends, which is encountered as a linguistic challenge, GPT-4o's false friends prompt outputs were studied in the previous sections. Using the false friends lists created by GPT-4o in Table 1 and randomly selected from Yetkin's (2011) study in Table 2, GPT-4o produced 2 separate texts appropriate to the context.

GPT-4o was asked to produce text appropriate to the context using 50 false friends with the datasets given in Table 1 and Table 2 in two separate prompts. Although explicit commands were used to select a suitable thematic topic and produce text for the false friends it found in Table 1, it produced a text (with 424 words in total) in which it used only 14 out of the 50 false friends (OpenAI, 2024c). For Table 2, it was instructed to use these terms in a text related to diplomatic issues. In line with these instructions, GPT-4o produced the text given in the link after 2 attempts. However, GPT-4o did not follow the clear instructions well and generated a text (with 379 words in total) in which it used 26 false friends out of 50 (OpenAI, 2024d). The texts generated with AI are made available to readers through links from the reference OpenAI (2024c, 2024d) by sharing GPT-4o outputs. Both texts generated by GPT-4o, can be found in Appendix 2 and Appendix 3.

5.2. AI-powered translation

In accordance with the instructions, a command was entered to translate the texts created with false friends content by GPT-4o as an AI tool. The command requested that the false friends used in the translated texts be shown in bold. As can be understood from the results obtained from these instructions, GPT-4o again displayed an unexpected and unusual AI-powered translation performance while translating the two texts into Turkish. In addition, the table examines whether the word in the text generated by GPT-4o complies with the definition of false friends and indicates "yes" and "no". However, if there is a word that complies with the definition of false friends, the translation methods and strategies applied are indicated as semantic, literal, calque, loanwords. If it is not false friends, the translation strategy that cannot be applied in this context is indicated with the phrase "not applicable (N/A)".

The false friend translations generated by AI-powered translation in the Turkish versions of the texts are presented in Table 3. These texts were created using the false friends dataset, which was self-generated by GPT-4o.

Used in GPT-4o generated text	False Friends Yes/No	Used in GPT-4o powered translation	Translation Strategy
Resim (picture)	No	Rezim (resim)	Not Applicable (N/A)
Liman (port)	No	Liman (liman)	N/A
Salon (living room)	Yes	Salon (güzellik salonu)	Calque/loanword
Simit (bagel)	No	Simit (simit)	N/A
Koltuk (armchair)	No	Koltuk (koltuk)	N/A
Karnaval (carnival)	No	Karnaval (karnaval)	N/A
Fener (lantern)	No	Fener (fener)	N/A
Resume (CV)	No	Özgeçmiş (resume)	N/A
Tatlı (dessert)	No	Tatlı (tatlı)	N/A
Kumar (gambling)	No	Kumar (kumar)	N/A
Doktor (Ph.D. holder/medical doctor)	Yes	Doktor (doktor)	Calque/loanword
Viraj (curve)	No	Viraj (viraj)	N/A
Virus (infectious agent)	No	Virus (virus)	N/A

Table 3. So-called false friends used in GPT-4o generated text and GPT-4o powered translation

As can be understood from the so-called false friends selections seen in Table 3, some words in the text generated by GPT-4o are quite far from the concept of false friends. When the words given in Table 3, including "*resim, liman, simit, koltuk, karnaval, fener, resume, tatlı, kumar, viraj, virus*", it can be said that these words cannot be classified within the scope of the concept of false friends (OpenAI, 2024c). As can be understood from the words given in Table 3, the concept of false friends is out of the question in both AI generated text and AI-powered translation.

Using the diplomatic false friends dataset from Yetkin's (2011) study, the text generated by GPT-4o was translated into Turkish with GPT-4o. The false friends seen in the AI powered translation output are given in Table 4.

Used in GPT-4o generated text	False Friends Yes/No	Used in GPT-4o powered translation text	Translation Strategy
Accord (akord)	Yes	Anlaşma (accord)	Semantic/literal
Alliance (alyans)	Yes	İttifak (alliances)	Semantic/literal
Agenda (ajanda)	Yes	Gündem (agenda)	Semantic/literal
Balance (balans)	Yes	Denge (balance)	Semantic/literal
Actor (aktör)	Yes	Aktör (actor)	Calque/loanword
Active (aktif)	Yes	Aktif (active)	Calque/loanword
Baggage (bagaj)	Yes	Yük (bagaj)	Semantic/literal
Capacity (kapasite)	Yes	Kapasite (capacity)	Calque/loanword
Transparent (transparan)	Yes	Şeffaf (transparent)	Semantic/literal
Barrier (bariyer)	Yes	Engel (barrier)	Semantic/literal
Position (pozisyon)	Yes	Pozisyon (position)	Calque/loanword
Neutral (nötr)	Yes	Tarafsız (neutral)	Semantic/literal
Dramatic (dramatik)	Yes	Dramatik (dramatic)*	Calque/loanword
Consultation (konsültasyon)	Yes	İstişare (consultation)	Semantic/literal
Penaltie (penaltı)	Yes	Ceza (penalty)	Semantic/literal
Portion (porsiyon)	Yes	Eşit pay (portion)	Semantic/literal
Shift (şift)	Yes	Değişim (shift)	Semantic/literal
Practical (pratik)	Yes	Pratik (practical)	Calque/loanword
Site (site)	Yes	Alan (site)	Semantic/literal
Figure (figür)	Yes	Figür (figure)	Calque/loanword
Formation (formasyon)	Yes	Oluşum (formasyon)	Semantic/literal
Exercise (egzersiz)	Yes	Tatbikat (exercise)	Semantic/literal
Final (final)	Yes	Son (final)	Semantic/literal
Expertise (ekspertiz)	Yes	Uzmanlık (expertise)	Semantic/literal
Function (fonksiyon)	Yes	İşlev (function)	Semantic/literal
Energetic (enerjik)	Yes	Dinamik (energetic)	Semantic/literal

Table 4. Selected from Yetkin's (2011) Diplomatic false friends and used in GPT-4o generated text and GPT-4o powered translation

The false friends dataset taken from Yetkin's (2011) study enabled GPT-4o to produce quite meaningful results while generating AI generated text. When the false friends selected by GPT-4o while generating text were examined in the context of the text, they were used in accordance with the definition of the concept. As a result of AI-powered translation, it is observed that these false friends have Turkish equivalents that are suitable for semantic and literal translation methods in the translation made by GPT-4o. While AI-powered translation found the equivalents of false friends, it borrowed foreign words into Turkish in some words in accordance with the calque/loanword translation strategy. When the translation is examined, only the word "dramatic" was translated as "dramatic" with the calque strategy, which is suitable for the nature of false friends. If the translation was made with semantic translation instead, it could have been translated in a way that is suitable for the meaning of "sudden", "suddenly occurring" in the context of the text, and the meaning would have been conveyed appropriately (OpenAI, 2024d). However, this situation actually highlights the importance of post editing in AI-powered translation.

CONCLUSION

ChatGPT, developed by OpenAI, an artificial intelligence research and deployment company, is a conversational tool based on the GPT model. Since its launch as a web interface, users from all over the world have been interacting with this application. One of the main advantages of AI-powered conversational tools is that they can accept natural language instructions as input, bypassing the need to learn a programming language. This study aims to describe the performance of GPT-4o in generating content on its own and in generating content when presented with a given dataset. In order to test GPT-4o's concept recognition, text generation and translation capabilities in both conditions, the performance of GPT was analyzed by considering the linguistic challenge of false friends.

This study aimed to evaluate GPT-4o's ability to combine text generation and translation, and specifically focused on dealing with the linguistic challenges of false friends in the Turkish-English language pair. False friends, which are words that look similar in two languages but have different functions, pose a significant challenge both in language use and in translation. The study examined GPT-4o's ability to recognize this term and its operation on content that can be generated based on a defined dataset and without a dataset. As a result, GPT-4o had false friends that could be generated in Turkish-English following the definition of the definition, but most of the words retrieved were pseudo-words that were constructed through translation and lacked literal meaning. This highlights a fundamental limitation of AI-generated content: the reliability of the results produced can be questioned, especially when concepts are not explicitly defined or controlled. While GPT-4o performed better when given a specific data setting, it still struggled to follow instructions exactly. For example, it often failed to produce the required number of false friends or to generate contextually appropriate texts, and instead produced incomplete or indifferent responses.

The conversational prompt focused on the definition GPT provided on its own regarding the concept of false friends. Additionally, the 100 false friends that GPT listed, claiming they belong to

this concept in Turkish-English, were also examined. The current study of GPT-4o is presented in the source as the study data (OpenAI, 2024c). As it is known, the reliability of the answers given by AI should be questioned by the user. This statement was confirmed once again with the list of 100 false friends given by GPT-4o in the Turkish-English-Turkish language pair. The list of false friends in Appendix 1 consists of words that GPT-4o generated to match the concept in the Turkish-English language pair. These words were identified based on a database scan related to the concept. However, as can be understood from the list in Appendix 1, the vast majority of these words are created from pseudo-words made up through transliteration. The reason why they are expressed as pseudo-words is that some of them do not really have a meaning. As can be seen from the first phase of the analysis, GPT-4o produced so-called false friends in accordance with the absolute and partial false friend definition given to it.

Another problem encountered in AI-supported GPT-4o in text generation is that insufficient data occurs in the responses when following the explicit instructions given in the commands in conversational prompts. For example, a request was made to produce a text in the appropriate context with 50 false friends in the instruction. In the dataset and dataset-free phases, GPT-4o produced texts with 26 and 14 false friends out of 50 false friends. This situation also shows that GPT-4o does not always produce appropriate responses to the instructions. GPT-4o responds to commands, but these responses can sometimes be incomplete, ambiguous, incorrect, wrong, and sometimes even manipulated.

In the second phase of the analysis, Yetkin's (2011) study was used. In the study, 100 partial false friends detected between Turkish and English using calque and loanword translation strategies scanned from 32 texts in the field of diplomacy were used as a dataset. In the second phase, it was observed that GPt-4o followed a method that was not disconnected from its concept and context in its data processing behaviors. In other words, instructions such as listing and randomly selecting false friends were made in accordance with the content of the dataset. Although the dataset containing definitions and words related to the concept of false friends was already provided, it was observed that GPT could not respond appropriately to some commands even though the commands were not prepared clearly and explicitly while creating AI generated text. For example, when AI was asked to create text with 50 false friends from the dataset while doing text generation, it was observed that it selected 26 false friends from the list instead of 50. As can be understood from this, AI cannot create appropriate responses to commands even though data is already provided in text generation while giving a response. The reason for this may be that the texts produced become disconnected from the context as the length of the answers increases.

In terms of AI-powered translation, a different situation was encountered in both phases of the analysis. Especially in the first phase, GPT-4o translation performance fell victim to fabricated false friends and out-of-context text. As can be understood from Table 3, the so-called false friends used in AI-powered translation caused the text to be out of context and obvious errors to occur in the translation. In the second phase, AI-supported text generation and AI-powered translation outputs are relatively more successful than the results obtained in the first phase. First of all, a context-dependent coherent diplomatic text was produced in text generation. As seen in Table 4, in the AI-powered translation results, the data taken from the dataset was used as false friends and

these data were used in the translation almost without any ambiguity in their meanings caused by the concept of false friends. As a result, in a general evaluation, ChatGPT has difficulty producing efficient outputs when the definitions and concepts are left to a fate determined by ChatGPT while processing data. However, if the control over ChatGPT is limited to the dataset, it can achieve more efficient results in the content generation and translation.

To sum up, in the AI-assisted translation phase, GPT-4o's performance was less effective when relying on false friends, leading to out-of-context translations and errors. However, with a controlled dataset, the results were improved, showing more accurate translations that preserved the context and prevented confusion. In summary, the study shows that GPT-4o's potential, support for content generation and translation, is largely dependent on the clarity of instructions and the quality of the dataset provided. Without sufficient packaging or data control, GPT-4o struggles to produce accurate outputs. Therefore, improvements should focus on combining AI models to address more complex language challenges and provide better, contextual recognition results. In this way, the ability of AI to follow explicit instructions and provide more reliable outputs in the absence of a dataset will be valuable for the advancement of AI-assisted language.

REFERENCES

Abu-Snoubar, Tamador Kh.; Abumahfouz, Adnan M.; Shboul, Yasser I.; Aldowkat, Issam M.; Rahahleh, Ahmad Z. (2024). A Linguistic Investigation Into False Friends in Arabic and English: The Students of Al-Balqa Applied University as a Model. *Journal of Language Teaching and Research, 15*(4), s. 1137-1143. doi:10.17507/jltr.1504.11

Barattieri di San Pietro, Chiara; Frau, Federico; Mangiaterra, Veronica; Bambini, Valentina; (2023). The pragmatic profile of ChatGPT: Assessing the communicative skills of a conversational agent. *Sistemi intelligenti*(2), s. 379-400. doi:10.1422/108136

Berber Sardinha, Tony (2024). AI-generated vs human-authored texts: A multidimensional comparison. *Applied Corpus Linguistics, 4*(1). doi:10.1016/j.acorp.2023.100083

Chamizo-Domínguez, Pedro Jose (2006). False Friends. K. Brown (Dü.) içinde, *Encyclopedia of Language & Linguistics* (s. 426-429). doi:10.1016/B0-08-044854-2/00998-6

Curry, Niall; Baker, Paul; Brookes, Gavin (2024). Generative AI for corpus approaches to discourse studies: A critical evaluation of ChatGPT. *Applied Corpus Linguistics, 4*(1), s. 1-9. doi:10.1016/j.acorp.2023.100082

Çağlar, Ozan Can; Ataman, Esra; Kırkıcı, Bilal (2021). The Processing of English-Turkish (False) Cognates: Evidence from a Backward Lexical Translation Task. *Cankaya University Journal of Humanities and Social Sciences, 15*(2), s. 293-310. doi:10.47777/cankujhss.1047495

Dynel, Marta (2023). Lessons in linguistics with ChatGPT: Metapragmatics,metacommunication, metadiscourse and metalanguage in human-AI interactions. *Language & Communication, 93*, s. 107-124. doi:10.1016/j.langcom.2023.09.002

Gouws, Rufus H.; Prinslo, Danie J.; De Schryver, Gilles-Maurice (2004). Friends will be Friends – True or False. Lexicographic Approaches to the Treatment of False Friends. *Eleventh EURALEX International Congress* (s. 797-806). Lorient: EURALEX.

Kunst, Jonas R.; Bierwiaczonek, Kinga (2023). Utilizing AI questionnaire translations in cross-cultural and intercultural research: Insights and recommendations. *International Journal of Intercultural Relations, 97*, s. 1-11. doi:10.1016/j.ijintrel.2023.101888

Li, Fengqi (2023). A Survey of Translation Learners' Uses and Perceptions of Neural Machine Translation. *Theory and Practice in Language Studies, 13*(11), s. 3039-3048. doi:10.17507/tpls.1311.34

OpenAI. (2024). *What is ChatGPT?* 02 06, 2024 tarihinde www.chatgpt.openai.com: https://chat.openai.com/share/2cc86b60-fb45-4a82-853c-59ad036fb81e adresinden alındı

OpenAI. (2024a). *Linguistic Challenges: Ambiguity, Syntax.* 02 10, 2024 tarihinde www.chat.openai.com: https://chat.openai.com/share/5e598ccb-6742-463a-a078-c10798074c77 adresinden alındı

OpenAI. (2024b). *The Concept of False Friends in Linguistics*. 18 11, 2024 tarihinde www.chatgpt.openai.com: https://chatgpt.com/share/6750a6e5-1a78-8001-a40f-5e419e121bd0 adresinden alındı

OpenAI. (2024c). *Linguistic Challenge of False Friends*. 20 11, 2024 tarihinde www.chatgpt.com: https://chatgpt.com/share/675087a4-7558-8001-bfc5-0ff82890279b adresinden alındı

OpenAI. (2024d). *Turkish-English Diplomatic False Friends*. 18 11, 2024 tarihinde www.chatgpt.com: https://chatgpt.com/share/6752f810-2188-8001-b16d-497c07cc715d adresinden alındı

Rice, Stephen; Crouse, Sean R.; Winter, Scott R.; Rice, Connor (2024). The advantages and limitations of using ChatGPT to enhance technological research. *Technology in Society, 76*, s. 1-7. doi:10.1016/j.techsoc.2023.102426

Roca-Varela, Ma Luisa (2010). Intralingual false friends: British English and American English. C. Cummins, C.-H. Elder, T. Godard, M. Macleod, E. Schmidt, & G. Walkden (Dü.), *CamLing 2010: Proceedings of the Sixth Cambridge Postgraduate Conference in Language* içinde (s. 132-138). Cambridge: Cambridge Institute of Language Research.

Shuttleworth, Mark; Cowie, Moira (2014). *Dictionary of Translation Studies.* London and Newyork: Routledge Taylor&Francis Group.

Sultanzade, Vügar (2010). Yalancı Eşdeğerlerin Azizliği: Bahtiyar Vahapzade'nin Eserlerinin Türkiye Türkçesine Aktarımı Üzerine. *Erdem, 57*(165), s. 165-172

Şenol, Asım Çağrı (2020). Yalancı Eş Değerlik veya Anlam Değişmesi Kavramları Üzerine Bir Değerlendirme. *Journal of Turkish World Studies, 20*(2), s. 409-427. doi:10.32449/egetdid.815623

Uban, Ana-Sabina; Dinu, Liviu P. (2020). Automatically Building a Multilingual Lexicon of False Friends With No Supervision. *12th Conference on Language Resources and Evaluation (LREC)* (s. 3001-3007). Marseille: European Language Resources Association (ELRA).

Uban, Ana-Sabina; Ciobani, Alina; Dinu, Liviu P. (2023). A Computational Approach to Measuring the Semantic Divergence of Cognates. A. Gelbukh (Dü.), *Computational Linguistics and Intelligent Text Processing* içinde (s. 96-108). Mexico City: CICLing 2009. doi:10.1007/978-3-031-24340-0_8

Uzun, Levent; Salihoğlu, Umut M. (2009). English-Turkish Cognates And False Cognates: Compiling A Corpusand Testing How They Are Translated By Computer Programs. *Poznań Studies in Contemporary Linguistics, 45*(4), s. 555-579. doi:10.2478/v10010-009-0031-5

Vrbinc, Marjeta; Vrbinc, Alenka (2014). Friends or Foes? Phraseological False Friends in English and Slovene. *AAA: Arbeiten aus Anglistik und Amerikanistik, 39*(1), s. 71-87.

Wandruszka, Mario (1978). Die falschen Freunde des Übersetzers. L. Grähs, G. Korlen, & B. Malmberg içinde, *Theory and Practice of Translation* (s. 213-234). Bern: Peterlang.

Yetkin, Nihal (2011). Partial false friends in English - Turkish translations: diplomatic texts. *Hacettepe University Journal of Faculty of Letters, 28*(1), s. 207-222.

Appendix 1. List of 100 random false friends generated by GPT-4o (Please see the full prompt from given link: https://chatgpt.com/share/675087a4-7558-8001-bfc5-0ff82890279b)

Turkish vs. English Word Pair	**Turkish Meaning**	**English Meaning**	**False Friends Type (GPT-4o decision)**	**False Friends for real (Yes/No/N-A)**
Aile vs. Aisle	Family	Passage	partial FF	N-A
Aktör vs. Actor	Key player	Performer in drama	absolute FF	Yes
Alkol vs. Alkali	Alcohol	Chemical base	partial FF	Yes
Anı vs. Any	Memory	Any instance	absolute FF	N-A
Araba vs. Arab	Car	Person from Arabian Peninsula	absolute FF	N-A
Banka vs. Bench	Bank	Seat	absolute FF	N-A
Basın vs. Basin	Press/media	Sink or bowl	absolute FF	Yes
Başarılı vs. Bashful	Successful	Shy	partial FF	No
Beyin vs. Bayou	Brain	Swamp	absolute FF	No
Bilet vs. Bullet	Ticket	Projectile	absolute FF	N-A
Bilgi vs. Bilge	Knowledge	Ship compartment	absolute FF	Yes
Bilim vs. Bill	Science	Invoice or banknote	absolute FF	No
Bölüm vs. Bloom	Section	Flower	absolute FF	No
Can vs. Can	Soul/life	Ability or container	partial FF	N-A
Cevap vs. Chap	Answer	A man/boy	absolute FF	No
Cihaz vs. Jazz	Device	Music genre	absolute FF	No
Cins vs. Jeans	Kind/type	Trousers	absolute FF	No
Çay vs. Cay	Tea	Back out	partial FF	Yes
Çöp vs. Chop	Garbage	Cut	absolute FF	No

Defter vs. Defter	Notebook	Worse	absolute FF	No
Diz vs. Disk	Knee	Flat object	partial FF	No
Doktor vs. Doctor	Ph.D. Holder/ medical doctor	Medical doctor	partial FF	Yes
Durak vs. Drake	Bus stop	Male duck	absolute FF	No
Eğitim vs. Editing	Education	Revising text	absolute FF	No
Ekmek vs. Eke	Bread	To supplement	absolute FF	No
Ekspres vs. Express	Fast or express train	Quick/convey	partial FF	Yes
Fabrika vs. Fabric	Factory	Textile material	absolute FF	Yes
Fener vs. Fender	Lantern	Car part	absolute FF	N-A
Film vs. Film	Movie	Transparent coating	partial FF	Yes
Gemi vs. Gem	Ship	Jewel	absolute FF	Yes
Gömlek vs. Gloom	Shirt	Darkness	absolute FF	No
Güzel vs. Guzzle	Beautiful	Drink greedily	absolute FF	No
Hakim vs. Hack	Judge	Cut or unauthorized access	absolute FF	No
Hal vs. Hall	Condition/state	Corridor	partial FF	Yes
Hayal vs. Hail	Dream	Frozen rain	absolute FF	No
Hayat vs. Hay	Life	Dried grass	absolute FF	No
Hediye vs. Heady	Gift	Intoxicating	absolute FF	Yes
Işık vs. Ish	Light	Approximate suffix	absolute FF	No
İlaç vs. Ice	Medicine	Frozen water	absolute FF	No
İnce vs. Incense	Thin	Aromatic material	partial FF	N-A
İnsan vs. Insane	Human	Crazy	absolute FF	N-A
Kalem vs. Column	Pen	Text element	absolute FF	No
Kanal vs. Canal	TV channel or canal	Waterway	partial FF	Yes
Kapı vs. Cape	Door	Garment/landform	partial FF	No

Kara vs. Car	Black/land	Automobile	partial FF	No
Karnaval vs. Carving	Carnival	Sculpting	absolute FF	No
Kaza vs. Kazaa	Accident	File-sharing service	partial FF	No
Kedi vs. Kid	Cat	Child	absolute FF	No
Kiralık vs. Critical	For rent	Crucial	partial FF	No
Kolonya vs. Colony	Cologne	Settlement	absolute FF	Yes
Koltuk vs. Colt	Armchair	Young horse	absolute FF	No
Komik vs. Comic	Funny	Funny/graphic stories	partial FF	Yes
Kumar vs. Cucumber	Gambling	Vegetable	absolute FF	No
Liman vs. Lemon	Port	Citrus fruit	partial FF	Yes
Lise vs. Lease	High school	Rental agreement	absolute FF	Yes
Makyaj vs.Make	Makeup	Create/produce	absolute FF	No
Masa vs. Mass	Table	Church service	partial FF	No
Mevki vs. Meek	Position/status	Submissive	absolute FF	No
Meydan vs. Maiden	Square/plaza	Young woman	absolute FF	Yes
Not vs. Note	Grade	Written reminder	partial FF	Yes
Numara vs. Humor	Number	Comedy	absolute FF	No
Oyun vs. Own	Play/game	Possess	partial FF	No
Plaka vs. Plaque	License plate	Metal plate	absolute FF	Yes
Reçel vs. Recoil	Jam	To spring back suddenly	absolute FF	No
Renk vs. Rank	Color	Level/status	partial FF	Yes
Resim vs. Resume	Picture	Curriculum Vitae	absolute FF	N-A
Rüya vs. Rue	Dream	Regret	absolute FF	No
Saat vs. Sat	Clock/hour	Past tense of "sit"	absolute FF	No
Sahil vs. Sail	Coast	Boat material/activity	partial FF	No

Salon vs. Salon	Living room	Beauty parlor	partial FF	Yes
Salon vs. Saloon	Living room	Bar	partial FF	Yes
Sandal vs. Sandal	Rowboat	Footwear	partial FF	Yes
Servis vs. Service	Shuttle	Assistance	absolute FF	Yes
Silah vs. Seal	Weapon	Emblem/animal	absolute FF	No
Simit vs. Summit	Bagel	Peak	absolute FF	No
Şans vs. Chance	Luck	Opportunity	absolute FF	Yes
Şöför vs. Chauffeur	Driver	Private driver	absolute FF	Yes
Tabak vs. Tab	Plate	Small projection	absolute FF	No
Tarif vs. Tariff	Recipe	Tax	absolute FF	Yes
Tat vs. Tat	Taste	Light touch	absolute FF	N-A
Tatlı vs. Tattle	Dessert/sweet	Gossip	absolute FF	No
Tekne vs. Tech	Boat	Technology	absolute FF	No
Tepe vs. Tape	Hill/top	Adhesive strip	absolute FF	N-A
Toz vs. Toss	Dust	Throw lightly	absolute FF	No
Uç vs. Use	Tip/end	Employ something	absolute FF	No
Uzun vs. Zone	Long	Area	absolute FF	No
Verim vs. Very	Yield/productivity	Emphasis	absolute FF	No
Viraj vs. Virus	Curve/bend	Infectious agent	absolute FF	No
Yalnız vs. Yawn	Alone	Open mouth in tiredness	absolute FF	No
Yanlış vs. Yawnless	Wrong	Without yawning	absolute FF	No
Yara vs. Yard	Wound	Unit of measure or open space	absolute FF	No
Yaş vs. Ash	Age	Burnt residue	absolute FF	No
Yatak vs. Yacht	Bed	Luxury boat	absolute FF	No
Yaz vs. Yes	Write/summer	Affirmative answer	absolute FF	No
Yazı vs. Yazoo	Writing	Type of river	absolute FF	No
Zeka vs. Zebra	Intelligence	Striped animal	absolute FF	No

Zemin vs. Zoom	Ground	Magnify	absolute FF	No
Zengin vs. Zeal	Rich	Enthusiasm	absolute FF	No
Zihin vs. Zenith	Mind	Peak or highest point	absolute FF	No
Zor vs. Sour	Difficult	Acidic taste	absolute FF	No

Appendix 2. The text generated by GPT-4o with random false friends without a dataset (OpenAI, 2024c)

A Day in a Bilingual Tourist's Life

As a Turkish tourist visiting an English-speaking country, Ayşe was excited to explore the vibrant city. She began her day by checking the **rezim** (picture) she took the previous night and decided to visit the **liman** (port) to capture the sunrise. However, a local suggested she try a famous **salon** (beauty parlor), confusing her because in Turkish, “salon” refers to a living room. On her way, she stopped at a bakery and ordered a **simit** (bagel), thinking it was similar to what she had back home. The clerk misunderstood and suggested a "summit breakfast," leaving her perplexed. Ayşe then visited a historical building and noticed a sign for the **koltuk** (armchair) section. She smiled, realizing the word had nothing to do with furniture here—it referred to reserved seating. Later, she joined a walking tour where the guide described the **karnaval** (carnival) celebrations held in the area. While listening, she spotted a **fener** (lantern) hanging in a corner. The guide referred to it as a “fender,” which baffled her, as she knew this word as part of a car. As the tour continued, Ayşe came across a local artist painting a **resim** (picture). She complimented their work, thinking she was fluent in English, but they misunderstood her and started explaining their **resume** (CV) instead! Hungry again, Ayşe stopped at a food truck offering **tatlı** (desserts). The menu included items labeled "Tattle Treats," which amused her because in English, tattle means gossip. She ordered what seemed familiar, only to realize the dessert was far sweeter than she had anticipated. In the afternoon, Ayşe decided to visit the local **kumar** (gambling) district. She entered a small casino but soon felt uncomfortable and left after a brief look around. The next stop was a **doktor** (doctor's) office for a quick health check. She explained her symptoms in Turkish, but the receptionist handed her a Ph.D. graduate’s biography instead! Feeling adventurous, Ayşe joined a drive to the countryside with a guide. Along the way, the guide talked about how **viraj** (curves) on the road were dangerous. They also explained why they avoided the forest during certain hours, as it was believed to be haunted by “virus-like spirits,” which Ayşe understood as an infectious agent but was clearly a misunderstanding. As the evening approached, Ayşe reflected on her day. It had been filled with linguistic challenges, yet she couldn't help but laugh at the misunderstandings. These “**false friends**” had made her journey unique, teaching her the subtle yet significant differences between languages.

Appendix 3. The text generated by GPT-4o with random false friends from Yetkin's (2011) dataset (OpenAI, 2024d)

Diplomatic Report on Regional Cooperation Efforts

The recent international **accord** aimed at fostering cooperation between nations has been widely lauded for its focus on strengthening **alliances** across the region. The **agenda** for the upcoming summit includes topics such as enhancing regional stability, improving trade **balance**, and addressing humanitarian concerns. Key **actors** in this initiative include representatives from both government and private sectors, with particular emphasis on the **active** participation of civil society. In preparation for the summit, a significant amount of **baggage** from historical conflicts was unpacked during preliminary discussions. The participating nations emphasized the importance of building **capacity** in governance and prioritizing **transparent** communication channels to rebuild trust. Addressing the pressing **barriers** to progress, delegates proposed establishing clear **positions** on contentious issues such as border disputes and resource allocation. The negotiations also highlighted the need for **neutral** mediators to resolve tensions and avoid further **dramatic** escalations. A joint **consultation** was scheduled to draft policies that would lead to measurable outcomes. However, a proposal to impose **penalties** for non-compliance sparked debate, with some delegates questioning the fairness of such measures. Economic development remains a cornerstone of the discussions. The focus is on creating sustainable growth opportunities while ensuring an equitable **portion** of benefits to all member states. Leaders agreed that a coordinated **shift** in trade policies could enhance regional cooperation. Several member states proposed **practical** solutions to address trade imbalances, including the establishment of an integrated logistics **site** for streamlined commerce. A subcommittee on cultural exchanges was formed to foster goodwill among the nations. This initiative includes showcasing local **figures** of historical significance and promoting **transparent** artistic collaborations. The **formation** of this subcommittee marks a significant step in strengthening people-to-people ties. In terms of defense collaboration, member states agreed on conducting joint military **exercises** to improve regional security. These initiatives are seen as a **final** opportunity to demonstrate collective commitment to peace. The leaders also endorsed the idea of leveraging each nation's **expertise** in disaster response as part of their broader **function** in regional stability. Despite some disagreements, the summit concluded on a positive note, with the majority of delegates expressing optimism about the outcomes. A detailed report will follow, summarizing the agreements reached and highlighting the key areas where **energetic** efforts are required to implement the proposed strategies.

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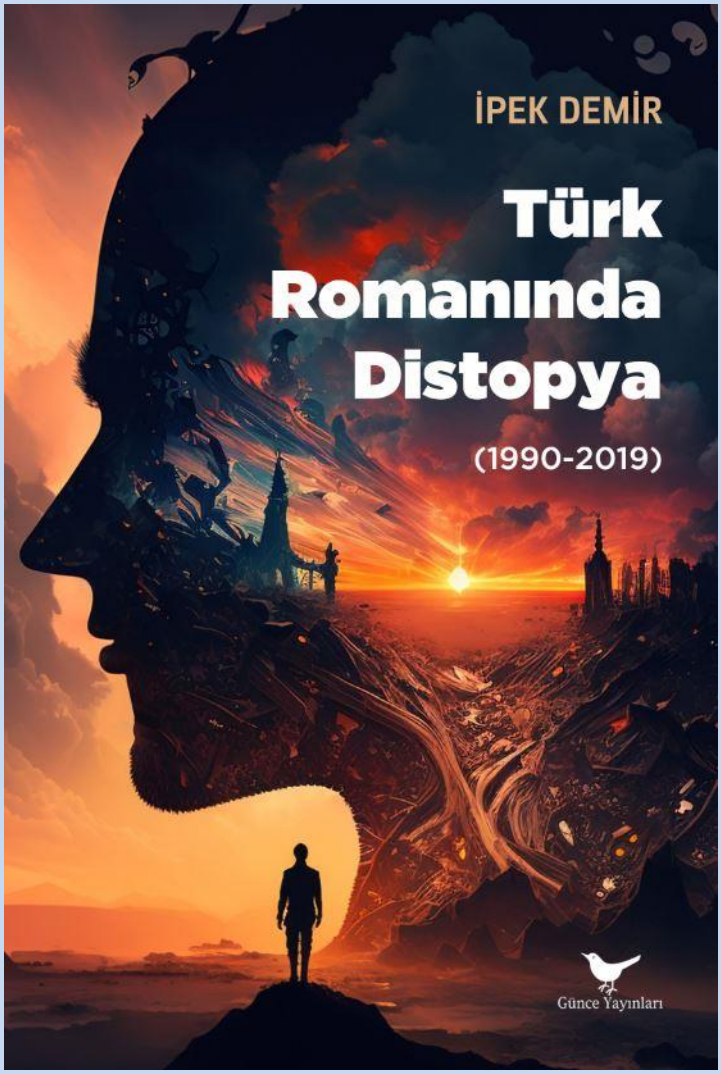
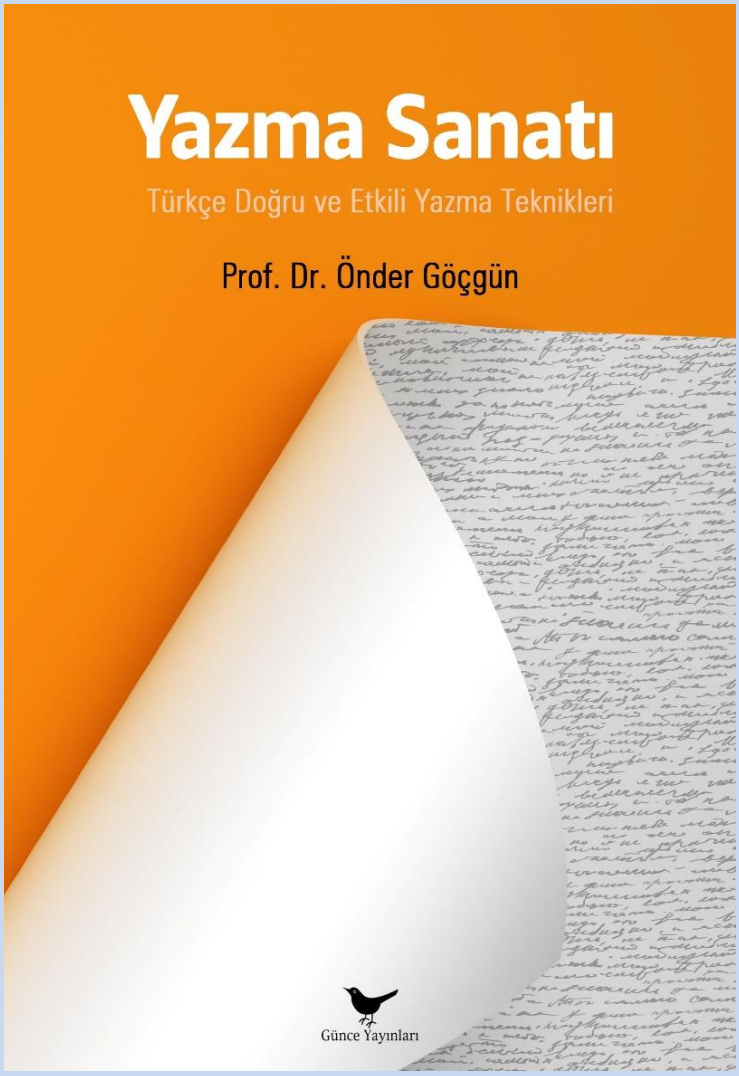
Melek İlayda Sarı
Türk Romanında Bilimkurgu
(1996-2019)
Günce Yayınları

Oktay Yivli
Öykü Nasıl Okunur
modern öykü ve yöntem
Günce Yayınları


İPEK DEMİR
Türk Romanında Distopya
(1990-2019)
Günce Yayınları


Yazma Sanatı
Türkçe Doğru ve Etkili Yazma Teknikleri
Prof. Dr. Önder Göçgün
Günce Yayınları