

Text Analysis with ChatGPT: Mamluk Period an Example from the Year 815 (1412-1413)

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Abstract: Reflecting the recent increasing interest in digital applications in social sciences, this article examines the political and social upheavals of the year 815 (1412-1413) during the Mamluk period (648-923/1250-1517), as described by two prominent historians: al-Maqrizī (d. 845/1442) in *Kitāb al-sulūk li-maʿrifat duwal al-mulūk* and al-ʿAynī (d. 855/1451) in *Iqd al-jūman fī taʾriḫ ahl al-zamān*. The article's unique contribution lies in transforming the unpublished manuscript of al-ʿAynī's work from 815 (1412-1413) into a digital format using the eScriptorium transcription application. This digitized text is then compared with al-Maqrizī's work using two distinct ChatGPT models (o1 and 4o). In conclusion, the study demonstrates that AI-supported text analysis and digital transcription applications can enhance speed, accuracy, and interpretative possibilities in historiography.

Keywords: Islamic History, Textual Analysis, Artificial Intelligence, ChatGPT, eScriptorium, al-Maqrizī, al-ʿAynī.

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ChatGPT İle Metin Analizi: Memlûkler Dönemi 815 (1412-1413) Yılı Örneği

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Öz: Son zamanlarda sosyal bilimlerde dijital uygulamalara artan ilginin bir tezahürü olan bu makale, Memlûkler döneminde (648-923/1250-1517) 815 (1412-1413) yılındaki siyasi ve sosyal çalkantıları, iki önemli tarihçi olan Makrîzî'nin (ö. 845/1442) es-Sülûk li-ma'rifeti düveli'l-mülûk ve Aynî'nin (ö. 855/1451) İkdü'l-cümân fi târîhi ehli'z-zamân adlı eserlerine dayanarak incelemektedir. Makalenin özgün değeri, henüz neşredilmemiş olan Aynî'nin 815 (1412-1413) yılına dair yazma metninin eScriptorium adlı dijital transkripsiyon uygulamasıyla metin hâline dönüştürülmesi ve sonrasında ChatGPT'nin iki farklı modeli (o1 ve 4o) aracılığıyla bu metnin Makrîzî'nin eseriyle mukayesesinden kaynaklanmaktadır. Sonuç olarak çalışma, yapay zekâ destekli metin analizi ve dijital transkripsiyon uygulamalarının tarih yazıcılığında hız, doğruluk ve yorumlama imkânını artırabileceğini göstermektedir.

Anahtar Kelimeler: İslam Tarihi, Metin Analizi, Yapay Zeka, ChatGPT, eScriptorium, Makrîzî, Aynî.

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Etik Kurul İzni	Bu çalışma, etik kurul izni gerektirmeyen nitelikte olup kullanılan veriler literatür taraması/yayınlanmış kaynaklar üzerinden elde edilmiştir. Çalışmanın hazırlanma sürecinde bilimsel ve etik ilkelere uyulduğu ve yararlanılan tüm çalışmaların kaynakçada belirtildiği beyan olunur.
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Introduction

With the increasing prevalence of digitalization, new opportunities and challenges are emerging. Indeed, significant opportunities are being gained in various areas such as access to information, analysis of information, data mining, and presentation of data through digital applications. This study seeks to answer the question: What contributions can digital programs and artificial intelligence algorithms make to historiography in the field of data analysis? In order to seek an answer to this question, the sample has been limited to two aspects. The first of these is the time limitation. In the study, the preference for the year 815 (1412-1413) was influenced by the fact that the Mamluk¹ (648-923/1250-1517) throne saw three sultans that year, which caused certain instabilities. Indeed, in that year, there were three sultans: al-Malik al-Nasir Faraj (808-815/1405-1412), who ascended the throne while being the caliph; al-Musta'in-Billah (815/1412), who became the caliph; and Shaykh (808-824/1405-1421), who ascended the throne with the title al-Malik al-Muayyad while being an amir. Again, in this year, the emergence of Nawruz (d. 817/1414) and Shaykh as two powerful amirs, their occasional alliances, and sometimes their power struggles are observed.²

The second limitation of the study has been on historical texts. Among the numerous historians of the Mamluk period, those contemporary to the year 815 and the two leading historians of the era, al-Maqrizī (d. 845/1442) and al-'Aynī (d. 855/1451), have been chosen. The work "*Kitāb al-sulūk li-ma'rifat duwal al-mulūk*" which is an indispensable source for the Mamluk period, by the founder of the Egyptian historiography school, al-Maqrizī, has been selected as a sample for the events of the year 815.³ The second sample is from al-'Aynī, one of the prominent Turkish historians of the Mamluk period. The part of his work titled "*Iqd al-jūman fī ta'rikh ahl al-zamān*" which contributed to his fame, covering the year 815, has not yet been published.⁴ This situation is among the factors influencing the preference for al-'Aynī in order to use a digital application for text transcription. Again, the rivalry between al-Maqrizī and al-'Aynī was among the reasons for the preference.⁵

Two applications were used in the study. The first of these is eScriptorium.⁶ eScriptorium, an OpenITI project developed by the Aga Khan University's Muslim Civilizations Research Institute in London and the Roshan Institute of Persian Studies at the University of Maryland, is a Digital Text Production system that digitizes printed and manuscript texts based on text analysis using machine learning techniques. The system generally performs automatic transcription of texts using OCR.⁷

¹ See. Ahmet Sağlam, "Memlûk" Sözcüğü: Basit Anlamından Askeri ve Siyasi Terim Anlamına", *Stratejik ve Sosyal Araştırmalar Dergisi* 7/2 (2023), 341-356.

² See. Ali Aktan, "Mısır'da Abbâsî Halifeleri", *Belleten* 55/214 (1991), 613-652; Esra Çıplak, *el-Melik en-Nâsır Ferec b. Berkuk Devri Memlûk Sultanlığı (791-815/1389-1412)* (Ankara: Gazi Üniversitesi Sosyal Bilimler Enstitüsü, Yüksek Lisans Tezi, 2005); Abdullah Mesut Ağır, "Memlûk Sultanlarının Gölgesi Altında Hilâfet Kurumu", *Gaziantep Üniversitesi Sosyal Bilimler Dergisi* 10(2) (2011), 637-651; Mustafa Banister, *The Abbasid Caliphate of Cairo (1261-1517): History and Tradition in the Mamluk Court* (Canada: University of Toronto, Doctoral Thesis, 2015); Kazım Uzun, "Saltanat Makamında Bir Halife: El-Musta'in Billah'ın Hilafeti (1406-1414) ve Memlûk Devleti Sultanlığı (1412)", *Tarih Araştırmaları Dergisi* 40/70 (2021), 190-205; Muneer Karram, *Al-Mu'ayyad Shaykh A Mamlûk's Road to Power and its Consolidation 1412-1421*, (Israel: University of Haifa, Doctoral Thesis, 2023).

³ al-Maqrizī, *Kitāb al-sulūk li-ma'rifat duwal al-mulūk*, 6/313-346. For al-Maqrizī See. Fatih Yahya Ayaz, *Memlûkler'de Tarih ve Tarihçiler* (Ankara: Türk Tarih Kurumu Yayınları, 2020), 80-81.

⁴ al-'Aynī, *Iqd al-jūman fī ta'rikh ahl al-zamān*, (İstanbul: Beyazıt Devlet Kütüphanesi, Veliyyüddin Efendi, 2396), 179a-191b. See. Ayaz, *Memlûkler'de Tarih ve Tarihçiler*, 54.

⁵ Anne F. Broadbridge, "Academic Rivalry and the Patronage System in Fifteenth-Century Egypt al-'Aynī, al-Maqrizī and Ibn Hajar al-'Asqalani", *Mamluk Studies Review* 3 (1999), 85-107.

⁶ <https://escriptorium.openiti.org/>

⁷ Tuba Nur Saraçoğlu, "Dijital Beşerî Bilimler Bağlamında İlahiyat/İslâmî İlimler", *İslam Tetkikleri Dergisi* 12/2 (2022), 863-870.

The second application is ChatGPT offered by OpenAI company. Although ChatGPT has different models, o1 and 4o models were used to compare texts.⁸ ChatGPT's o1 model is currently considered the best artificial intelligence model offered by OpenAI. Because the o1 model has a large language processing model for research, strategy generation and problem solving.⁹ The o3 and o3 mini models are planned to be released in 2025.

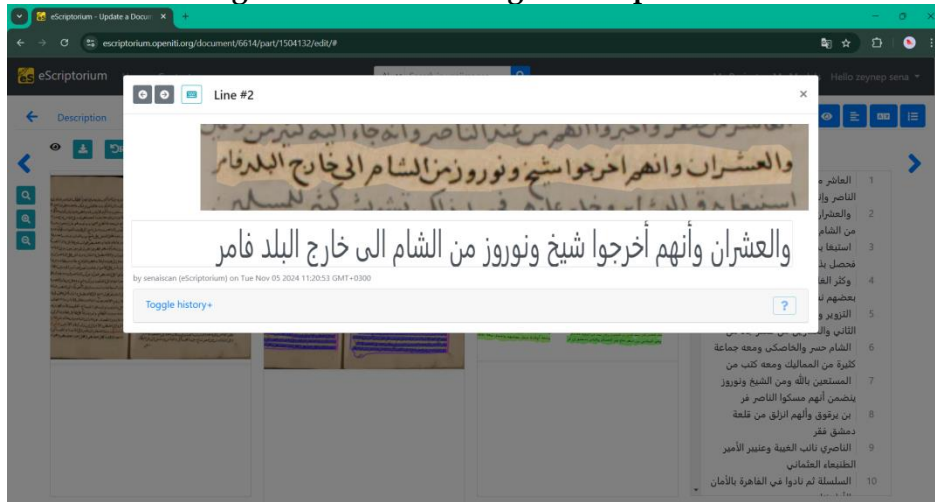
No study has been identified on the analysis of historical texts using artificial intelligence applications and the comparison of these analyses with those conveyed in historical texts. In this context, historians of the Mamluk period and the events of the year 815 were preferred as samples in the study. In the article, which consists of two sections, the method of the study is first addressed. Thus, the processes followed in the emergence of the article and the reasons for the preference and nature of the questions posed to the artificial intelligence application have been conveyed. Finally, these data were analyzed to reveal the role of artificial intelligence applications in historiography.

1. Method

In the present study, the manuscript pages of the historian al-‘Aynī's work, which is the subject of this study and contains unpublished parts, related to the year 815, were converted into digital text using eScriptorium. It should be noted that the system has yielded very successful results in text transcription. The results provided by the application have been checked to ensure there are no errors. It has been determined that it has difficulty reading some words or skips some words at the end of lines. These errors were corrected, and after completing the corrections, the data was exported and printed in text format. Then, it was transferred to Microsoft Word, and page numbers were added to the beginning of each page. Later, the year 815 of al-Maqrīzī's relevant work was also transferred to Microsoft Word. Then, it was switched to ChatGPT.

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Figure 1: Word Reading of eScriptorium



Due to the operational structure of ChatGPT's o1 model, the system interface does not accept files.¹⁰ The 4o model, on the other hand, accepts certain types of files.¹¹ In order to ensure an equal

⁸ <https://help.openai.com/en/articles/9824965-using-openai-o1-models-and-gpt-4o-models-on-chatgpt> (Access 5 January 2025.)

⁹ <https://openai.com/index/learning-to-reason-with-llms/>; <https://help.openai.com/en/articles/7864572-what-is-the-chatgpt-model-selector> (Access 5 January 2025.)

¹⁰ <https://help.openai.com/en/articles/10258472-does-o1-support-file-uploads> (Access 5 January 2025.)

¹¹ <https://help.openai.com/en/articles/7102672-how-can-i-access-gpt-4-gpt-4-turbo-gpt-4o-and-gpt-4o-mini> (Access 5 January 2025.)

comparison, the instructions were provided first, followed by the accounts of the two historians regarding the year 815, which were taken from Microsoft Word and presented in the chat interface in the same order as text. Before entering the system prompts that explain how the data will be processed and the desired outcomes, persona instructions were input into ChatGPT. Persona instruction is to assign a role to the artificial intelligence model. A special role has been assigned to ensure it responds in the desired manner.¹² Thus, it is aimed to analyze the desired texts and obtain the best results in comparison, increase efficiency, and prevent the hallucination problem, which is frequently observed in artificial intelligence models and is a major issue.¹³ It has been stated that the comparison for both models should be made only in accordance with the items given to them. In addition, the feature of the 4o model performing a different memory search or web search has been disabled. The o1 model does not perform memory and web searches by design.

While giving instructions, inverted sentences were avoided, and English grammar rules were followed. Avoiding complex, open-ended, and interpretative sentences, short, clear, and concise sentences have been preferred. The content of the instructions has been entered into the system chat interface from general to specific. The given instructions have been entered in paragraphs according to their content. Thus, it is aimed for the models to better understand the given instructions.¹⁴ The past or future tense structures have been avoided, and the present or simple present tense sentences have been preferred. In the instructions, instead of sentences like “you should do” or “will you do?”, sentences expressing certainty with direct imperative forms like “do” or “don’t do” have been used. In the comparison, the word “please” has been added to the sentences expressing general principles. The reason for this is that, although it is not an official statement, based on user experiences, the outcome when saying “please” to AI tools is better than when it is not said.¹⁵

The content of the primary comparison principles and instructions has been determined. Then, the content was classified from general to specific. In this classification, attention has been paid to certain matters to better emphasize the content and importance of the items. Indeed, in some cases, the word “please” has been added at the beginning of the items. Sometimes, an exclamation mark has been placed at the end of the sentence. In another group, certain words have been written in capital letters. Another point was to place a star and a dash at the beginning of the content items. Here, while comparison headings are presented with a hyphen, an asterisk has been placed at the beginning of the points to be considered in the comparison. Thus, the items have been made easier to understand.

When giving persona instructions, the most important point to consider was that every piece of information entered and not entered in the prompt section seriously affects the outcome. For example, if it were not mentioned that the AI knows English, it would assume that the only language it knows is Arabic and would provide outputs in Arabic. Here, if the entered persona is insufficient, it leads to the emergence of certain gaps, and these gaps are filled by the artificial

¹² See <https://platform.openai.com/docs/guides/prompt-engineering#tactic-ask-the-model-to-adopt-a-persona>, <https://platform.openai.com/docs/guides/prompt-engineering#tactic-use-inner-monologue-or-a-sequence-of-queries-to-hide-the-model-s-reasoning-process> (Access 5 January 2025.)

¹³ <https://help.openai.com/en/articles/8313428-does-chatgpt-tell-the-truth> (Access 5 January 2025.)

¹⁴ <https://platform.openai.com/docs/guides/prompt-engineering#strategy-write-clear-instructions>; <https://help.openai.com/en/articles/10032626-prompt-engineering-best-practices-for-chatgpt>; <https://help.openai.com/en/articles/8437071-data-analysis-with-chatgpt> (Access 5 January 2025.)

¹⁵ <https://www.forbes.com/sites/lanceoliot/2024/05/18/hard-evidence-that-please-and-thank-you-in-prompt-engineering-counts-when-using-generative-ai/> (Access 5 January 2025.)

intelligence through its own construction. For this reason, persona instructions, although they may seem insignificant, are of vital importance in terms of efficiency. The instructions entered into both models are as follows:

You are an Islamic historian. You are a researcher of Islamic history and Mamluk period at a university. You are a native speaker of Arabic and English. You make very accurate and flawless translations in these languages. You can read and understand medieval Islamic historical works and modern Islamic history texts in Arabic and English. You are an expert in Mamluk history. You have high-level knowledge in historical texts from the year 815. You can analyze them and make comparisons between two different texts. You are working on an academic article comparing two historical texts. Making comparisons is your expertise. You are master at comparing texts and arguments. You can see the similarities and differences between two texts, and you present these using an academic style. You are an impartial researcher, but you do not hesitate to comment. In 815 (1412/1413), the Mamluk throne saw three different sultans: Faraj, al-Musta'in-Billah and al-Mu'ayyad Shaykh. al-Maqrizī and al-'Aynī, two historians from the Mamluk period, lived during this period. There are historical texts written by these two historians about the events of 815. These texts is written in Arabic. I will send you what the historians of the Mamluk period al-Maqrizī and al-'Aynī wrote about the events of the years 815. Your purpose is to analyze and ONLY COMPARE on the content of two historical texts belonging to al-'Aynī and al-Maqrizī. You make analyzes two historical texts. You make comparisons regarding the content of these two texts by ONLY ADHERING to the texts. You make comparison with academic language, method and writing style. You make a comparison of the contents of these two texts accurately and objectively. The results it gives are in an academic style. The comparison you will make must be at an academic level. The results of the comparison you will make will be included in an academic article. Therefore, the comparison must be COMPREHENSIVE and rich in content.

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*Compare the al-Maqrizī file and al-'Aynī's file according to the instructions given to you.

*The results should be English.

*Base the comparison entirely on the texts provided. Stick to the texts.

* Please make sure the compare is balanced, addressing both the similarities and differences between the two historians.

*Please be sure of the results you will provide. Make your comparisons at the highest level.

* Make your comparison only based on the texts and headings that I gave you.

*Do not include any other subject in the comparison!

*Please compare al-Maqrizī's text and al-'Aynī's text, according to the following headings!

* Examine and compare the content of the texts of al-'Aynī and al-Maqrizī, which describe the events of the year 815, under the following comparative headings.

-Description of events and level of detail in event of 815

-Impartiality and objectivity

-Writing method

-Emphasis on social and economic aspects elements

-Detailing of political events

-The role and impact of Amir Nawruz in the events of 815

-The role of religious figures and ulama class in events of 815

-The administrative method and personal characteristics of Faraj in event of 815

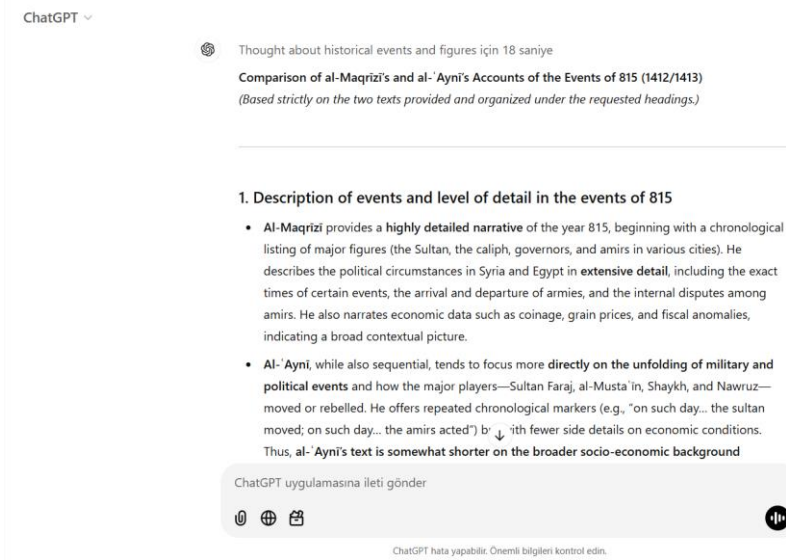
-The administrative method and personal characteristics of al-Musta'in-Billah in event of 815

- The position of al-Mu'ayyad Shaykh during the period of al-Musta'in-Billah in event of 815
- The struggle for power in the Mamluk administration in event of 815

2. Data Analysis

Despite providing same instructions to both models, some differences were identified in the data outputs presented by the two models. First and foremost, the data results of the two models are varied significantly in terms of the word count. Although the word count was not specified in the instructions, the 4o model produced a text comprising 776 words, whereas the o1 model provided a text with 1889 words. Another notable difference was the observed in the handling of headings. The o1 model adhered to the headings as outlined in the instructions. In contrast, the 4o model capitalized the first letter of every word in the headings, except for conjunctions. Also, one of the differences between the two models is, in the phrase “in the events of 815,” which was included in the headings in the instructions. The o1 model adhere to this phrase, while the 4o model omitted it entirely from the headings.¹⁶ The fourth heading was presented in the instructions as “Emphasis on Social and Economic Aspects Elements.” While the o1 presented this heading as “Emphasis on Social and Economic Elements,” the 4o model presented it to “Emphasis on Social and Economic Aspects.” Hence, both models altered the phrasing of this heading to some extent. The seventh heading is “The role of religious figures and the ulema class in the events of 815” and is interpreted differently by each model. The o1 transcribed this title as “The role of religious figures and the ‘ulamā’ class in the events of 815” using transcription marks for the word ‘ulamā’. On the other hand, the 4o model capitalized the first letter of each word in the heading and presented it as “The Role of Religious Figures and Ulama Class.”

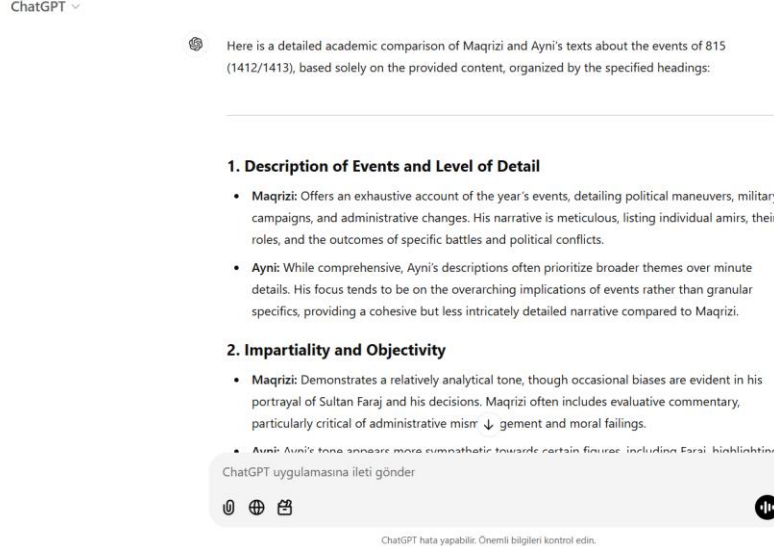
Figure 2: Examples of o1 Model's Answers¹⁷



¹⁶ See. 1., 6., 7., 8., 9., 10. and 11. headings.

¹⁷ For o1 model's answers: <https://chatgpt.com/share/67769a21-c864-800c-b842-7fa10c8b3f6b1> 1 January 2025

Figure 3: Examples of 4o Model's Answers¹⁸



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In its introductory statement before presenting the responses, the o1 model specifies the basis and duration of its analysis. Its phrase, “Thought about historical events and figures,” indicates the focal points emphasized in the instructions. Subsequently, it provides a bold font heading: “Comparison of al-Maqrizī’s and al-‘Aynī’s Accounts of the Events of 815 (1412/1413)”. Beneath this heading, the phrase “Based strictly on the two texts provided and organized under the requested headings” is given in parentheses. This sentence proves that the adherence with the instruction stated in the persona instruction as “your comparison only based on the texts and headings that I gave you.” This is particularly significant for determine the efficiency of the results obtained and observing whether the given instructions function correctly. Likewise, o1’s word choices are clearer than o4’s. It is understood that the words written in bold are the keywords in the text provided by the model. Even through if only these keywords are considered, it seems possible to get an idea about the evaluation of the two historians on the relevant topic.

Unlike the o1 model, the 4o model does not indicate how many seconds it takes to process a given dataset due to its the working mechanism. There are also stylistic differences between the two models. The 4o model adopts a familiar chatbot-style approach, beginning its response with “Here is a detailed...”. o1, on the other hand, uses a more clearer writing style, probably due to the Chain of Thought in its working system. In the introductory sentence, the 4o model employs expressions such as “detailed academic comparison” and “specified headings,” which differ from the language used by o1. However, despite this difference, it is understood that 4o also acted in accordance with the persona instructions attributed to it. Although both models convey similar introductory statements, an overall comparison reveals that the 4o model performs weaker than the o1 model.

While answered the 11 headings, the o1 model provides Arabic examples in the two headings, whereas the 4o model does not include any Arabic examples. One of the Arabic examples provided by o1 appears in the response to the third heading: “...في يوم كذا”. However, this phrase is inaccurately translated into English as “in such a month,” whereas the correct translation should be “in such a day.” Conversely, in the response to the fourth heading, the terms “هجرة”

¹⁸ For 4o model’s answers: <https://chatgpt.com/share/6770178b-f468-800c-870d-1e71c734253f> 1 January 2025

“أفرنتي” and “ناصرى” are correctly translated into English by o1. However, in al-Maqrizī’s text, the Arabic of these three words is preceded by the suffix *al-*, which o1 omits.

In terms of content evaluation, o1 notes that al-Maqrizī provides more precise dates for events and offers information on economic life in addition to political and military history. On the other hand, 4o only notes that al-Maqrizī provides detailed information on political and military history. The o1 model indicate that al-‘Aynī presents political and military developments in chronological order and focusing on key actors involved in these events. It was determined that examples provided in English and enclosed in parentheses. Additionally, it notes that al-‘Aynī offers fewer details on economic conditions. Except for the eighth heading, o1 provides a general evaluation at the end of each response, and did not neglect to compare al-‘Aynī with al-Maqrizī. It should be noted that unlike the 4o model, o1 incorporates examples and derives conclusions from this examples while giving information about al-Aynī. Therefore, it can be stated that the model in question making its arguments more persuasive and has more persuasive power. The 4o model on the other hand, finds al-‘Aynī’s text comprehensive, but emphasizes that it prioritizes main themes over secondary details. 4o considers that al-‘Aynī is more coherent and less complex in detail than Maqrizī. Both models analyze the first heading more comprehensively than the other headings. Furthermore, although o1 narrated the first heading in longer sentences than the other headings, the content of his narrative is not different from the content of the other headings The 4o model, however, provides better responses in terms of both scope and content for this heading compared to others. This situation likely stems from differences in the algorithms of the two models.

al-Maqrizī provides more comprehensive and detailed accounts compared to al-‘Aynī, as illustrated by several examples. For instance, al-Maqrizī elaborates on the circumstances surrounding Sultan Faraj’s death and character, presenting greater detail than al-‘Aynī.¹⁹ Similarly, al-Maqrizī offers more extensive information than al-‘Aynī regarding appointments during the month of Safar.²⁰ One notable example, is the war at Lajjūn involving Amir Nawruz and Shaykh against Sultan Faraj, al-Maqrizī gives a more detailed the Sultan’s route from Cairo to Lajjūn, a level of specificity absent in al-‘Aynī’s account. Again, unlike al-‘Aynī, al-Maqrizī argues that Faraj did not want to go to Lajjūn and that he made this wrong decision as a result of the guidance of some of his men, whom he names as his “demons”.²¹ In another example, al-Maqrizī narrates that on 19 Dhu’l-Qa’dah the *prayer* in the name of the Caliph in Haramayn was discontinued and *prayer* in the name of the Sultan Shaykh began. He reports that the *prayer* in the name of the Caliph in Haramayn lasted for approximately five months.²² However, there is entirely no information on this important issue in al-‘Aynī’s narrative.

It is also possible to give an example that agrees with 4o’s account. al-Maqrizī reports that on Dhu’l-Qa’dah 4, the Amir Nawruz summoned the chief qāḍī and jurists of Damascus and asked them what was the provision on the Amir Shaykh’s imprisonment of the Caliph and seizure of the throne, but did not receive any answer from them.²³ However, al-‘Aynī does not have any narration on this subject. Therefore, as o4 suggests, al-‘Aynī must not have felt the need to narrate matters that did not have an impact on the events.

¹⁹ al-Maqrizī, *al-Sulūk*, 6/324-326; al-‘Aynī, *Iqd al-jūman* (Veliyyüddin Efendi, 2396), 184a.

²⁰ Cf. See. al-Maqrizī, *al-Sulūk*, 6/321-328; al-‘Aynī, *Iqd al-jūman* (Veliyyüddin Efendi, 2396), 182b-184a.

²¹ al-Maqrizī, *al-Sulūk*, 6/315; al-‘Aynī, *Iqd al-jūman* (Veliyyüddin Efendi, 2396), 179b.

²² al-Maqrizī, *al-Sulūk*, 6/344.

²³ al-Maqrizī, *al-Sulūk*, 6/343.

Under the second heading, o1 has stated with a number of examples that al-Maqrizī was in descriptive tone, and he gave a long coverage to Faraj's failures and judged Faraj, albeit implicitly. o1, stated that al-Maqrizī did not hesitate to express the legal and moral accusations against Faraj, thus reflecting how the important figures of the period evaluated Faraj's actions. What o1 does here is not an interpretation but an inference reflecting the historian's point of view. This is important as it shows the importance and impact of that the persona instructions we provide to the model. al-Maqrizī summarized the troubles of Faraj's reign after his death, implying that he was a unsuccessful sultan.²⁴ al-ʿAynī, offering a new perspective and provides a chronological account of events, categorizing factions in 815 AH into supporters of Faraj, Amir Shaykh and Nawruz, and supporters of the Caliph. al-ʿAynī empathizes with the rebellious amirs,²⁵ as to why they abandoned Faraj, points out grievances with Faraj's, misrule mistakes and flaws. The 4o model explains al-Maqrizī's tone as relatively analytical, indicates his biases against Faraj's governance were evident, and that he generally make judgmental commentary. Also explains that it emphasizes concerning Faraj's particularly administrative and moral failures. It found al-ʿAynī's tone more sympathetic to some people, including Faraj. According to 4o, al-ʿAynī pointed not only to the flaws but also to the current difficulties. o4 States that al-ʿAynī tends to avoid definitive judgments, focusing on the characteristics of the chaotic environment and presenting a more balanced perspective. Therefore, it is observed that occasionally contrasts and sometimes different perspectives emerge between the models under this heading. Indeed, the two models 77 understand al-Maqrizī's approach to events differently. While o1 perceives al-Aynī as a historian who provides information enabling a critical assessment of events, the 4o model emphasizes a more balanced perspective. In this context, it becomes evident that o1 pays closer attention to the coherence of the subject matter and adopts a more persuasive stance. This heading demonstrates the interpretive abilities of both models, shows the differences in their levels of analysis. Furthermore, it underscores that variations in their system algorithms influence not only their word choices but also their level of perception of events.

Under the third heading, while the o1 model provides Arabic examples, the 4o model adopts an interpretative and inferential analysis. The o1 model describes al-Maqrizī's work as resembling a chronicle, whereas the 4o model states unequivocally that al-Maqrizī adopts a chronological and highly structured approach. While o1 offers insights into the writing styles of al-Maqrizī and al-ʿAynī, the 4o model does not address this aspect. It should be noted that the phrase "writing method" in the heading is perceived differently by the two models. Because while o1 model understood and considers it as both content and method of writing, 4o understood it only as terms of content. Additionally, in its general evaluation at the end of the heading, the o1 model confines itself to analyzing the content of the two historians' texts. The 4o model, on the other hand, emphasizes that al-Maqrizī's chronological narrative is characterized by clarity and depth, while al-ʿAynī's work is richer in contextual analysis rather than chronology. Therefore, the 4o model first emphasized a negative characteristic of al-ʿAynī and subsequently highlighted of his strengths.

Under the fourth heading, the o1 model strengthens its analysis by correctly uses Arabic examples. While discussing al-Maqrizī, it highlights that he approaches this topic with a detailed discussion, whereas al-ʿAynī merely touches upon it, emphasizing that al-Maqrizī provides more

²⁴ al-Maqrizī, *al-Sulūk*, 6/325-327.

²⁵ al-ʿAynī, *lqā al-jūman* (Veliyyüddin Efendi, 2396), 180a-180b.

extensive details on social and economic issues. The 4o model similarly asserts that al-Maqrīzī point to significant attention to these matters, while al-‘Aynī offers limited information. Thus, both models share the same conclusion. The o1 confirms the statements made in the first heading by stating that al-Maqrīzī gave more attention to socio-economic issues, while al-‘Aynī prioritized political and military developments. It must be said that both models understand the title correctly. However, it should be noted that the o1 model provides a more robust evaluation. When analyzing al-‘Aynī, the o1 model notes that he addresses social issues, even did not fail to providing examples to support its claims. In contrast, the 4o model does not include any analysis on this aspect. Therefore, it is seen that the o1 model can make inferences. A comparative review the texts of al-Maqrīzī and al-‘Aynī reveals that al-Maqrīzī offers more detailed accounts of social and economic matters, a point substantiated by the evaluations of the o1 model.

Under the fifth heading, o1 did not list the political events mentioned in the texts but instead focused on evaluating and comparing how al-Maqrīzī and al-‘Aynī understood and narrated these events. This approach indicates that o1 has grasped the role assigned in the persona instructions and adhered to them effectively. It demonstrates that o1 did not merely extract information and attempt to answer directly but processed the information and analyzed the narrative methods of the two historians from a historian’s perspective. o1 finds al-‘Aynī’s narrative comprehensive but notes that he presents the events with a narrative tone, addressing rebellions and conflicts from a military perspective. While both historians are described as meticulous in their accounts by o1, emphasizes that al-Maqrīzī gives greater importance to institutional details. 4o, argues that while al-Maqrīzī’s treatment of the power struggles among the Mamluk elites is comprehensive, al-‘Aynī who focuses more on political events, emphasizes these power struggles less than al-Maqrīzī, and that al-‘Aynī focuses on the consequences rather than the causes.

The first notable point under the sixth heading, about o1 is that presenting the city of Homs as Himṣ by using transcription symbols and providing its English equivalent “Homs” in parentheses. In contrast, the 4o model does not mention the city of Homs in its explanation. It can be stated that o1’s response aligns directly with the heading, while 4o provides a more superficial answer. Although 4o states that the Amir Nawruz was an important figure, it falls short in explaining the role and influence of this figure. In o1’s responses, Nawruz’s influence can be more clearly understood and supported with examples provided in parentheses. o1, after explaining the impact of Nowruz, gives a broader explanation than we asked him to in the sixth heading, indicating how the two historians in question give a place to it and how they depict it. This indicates that o1 not only analyzes the relevant texts based on the headings, but also expertly compares the historians’ narrative content and writing styles. This demonstrates that the persona instructions that were uploaded to it in the prompt were processed efficiently and accurately. For example, o1’s answer suggests that Nowruz and the Shaykh acted together. However in 4o, Nawruz’s cooperation with the Shaykh is not mentioned and it is mentioned in general terms that he formed alliances with other amirs. Both models pointed to Nawruz’s role in destabilizing the country. o1 indicates al-‘Aynī attributes a strategic role to Nawruz, noting that his presence shifted everything against the Sultan, supported by amirs who feared Faraj and opposed him and Nawruz’s cooperation with Shaykh is undermining Faraj’s authority. 4o, on the other hand, acknowledges al-‘Aynī’s recognition of Nawruz’s importance and mentions his strategic moves and role in shaping power dynamics but offers less content in comparison. Therefore, o1 has

conducted more extensive analysis by producing more content compared to 4o. Both models use the term ‘motivations’ in describing Nawruz’s portrayal by al-‘Aynī. o1 prefer for ‘personal motivations,’ citing an example of Faraj’s marriage to a relative of Nawruz, though it does not clarify whether this marriage influenced Nawruz’s personal motivations or was a factor in his rebellion. However, this matter is not exclusive to al-‘Aynī but also mentioned in text by al-Maqrīzī. As a matter of fact, the Amir Muqbil al-Rumi, who was on Faraj’s side in these struggles, was killed. al-Maqrīzī informs in his narrative that immediately after his death, when Nawruz rebelled, Faraj annul to his marriage and married his wife to the Amir Muqbil. al-‘Aynī, on the other hand, says that Muqbil was killed by Nawruz and that the marriage was the reason for this.²⁶ Therefore, o1’s mention of this event as a personal motivation seems quite accurate. 4o, on the other hand, directly states that Nawruz had strategic motivations without mentioning this marriage. This highlights the superiority of o1 in providing a more detailed and nuanced analysis.

Under the seventh heading, o1 provides more examples in parentheses compared to other headings. o1 mentioned al-Maqrīzī’s focus not on the general attitude of the chief judge and the ‘ulamā’ during the events of 815 but rather on their stance in specific incidents. While explaining al-‘Aynī’s text, he emphasized the role of the ‘ulamā’ in the Caliph’s ascension to the throne. The information provided by o1, it does not offer a comprehensive opportunity to compare al-Maqrīzī’s and al-‘Aynī’s accounts of the role of the ‘ulamā’. Because examining the stance of the ‘ulamā’ during a specific Sultan’s reign through the narratives of both historians would provide a more precise basis for comparison. o1 mentions that al-Maqrīzī attributes the ‘ulamā’ as the determinative authority in the deposition of Sultan Faraj due to accusations of blasphemy. In contrast, 4o states that, al-Maqrīzī, indicates the ‘ulamā’ legitimized political actions and participated as figures in ceremonial events. 4o also added that the ‘ulamā’ served as mediators and advisors to rulers. o1, on the other hand, also highlights that al-‘Aynī refers to the role of the Hanafī chief qāḍī in the Caliph’s accession to the throne.²⁷ Although al-Maqrīzī addresses this issue as well, o1 remains silent on this point.²⁸ While al-‘Aynī explicitly points to Sultan Faraj’s blasphemy and heresy, al-Maqrīzī does not use such terminology. Instead, he recounts that when the chief secretary failed to persuade the Caliph to ascend the throne, thus he thought of a trick, and he resorted to fabricating accusations of blasphemy and writing letters detailing Sultan Faraj’s faults.²⁹ However, it is important to note that neither model address these details. 4o merely states that al-‘Aynī places greater emphasis on the role of the ‘ulamā’ in political events but recognizes that their broader influence on society and the political elite.

Under the eighth heading, o1 notes that al-Maqrīzī explicitly blames Sultan Faraj for his mismanagement, engaging in religiously impermissible actions and making inaccurate decisions,³⁰ which, according to al-Maqrīzī, led to instability. 4o similarly reports that al-Maqrīzī holds Sultan Faraj accountable for instability but describes him as indecisive and easily influenced. Although this aspect of al-Faraj was mentioned by al-Maqrīzī, while o1 interprets al-Maqrīzī’s view of Faraj’s shortcomings as stemming from his inattentiveness to governance,³¹ 4o focuses on his indecisiveness, indicating slight variations in their interpretations of the historian’s critique. o1

²⁶ See. al-Maqrīzī, *al-Sulūk*, 6/315; al-‘Aynī, *lqḍ al-jūman* (Veliyyüddin Efendi, 2396), 180b.

²⁷ See. al-‘Aynī, *lqḍ al-jūman* (Veliyyüddin Efendi, 2396), 182a.

²⁸ al-Maqrīzī, *al-Sulūk*, 6/325.

²⁹ al-Maqrīzī, *al-Sulūk*, 6/320.

³⁰ Cf. al-Maqrīzī, *al-Sulūk*, 6/315.

³¹ Cf. al-Maqrīzī, *al-Sulūk*, 6/315.

also mentions al-‘Aynī’s portrayal of Sultan Faraj as someone who distrusted even the amirs who supported him, eventually losing their backing. 4o, unlike o1, states that al-‘Aynī adopts a more sympathetic view of Faraj, than Al-Maqrīzī and attributing his failures to challenging circumstances. Although this specific statement is not directly stated in al-‘Aynī’s text, 4o appears to base its claim on a general interpretation of his approach. o1 highlights that al-Maqrīzī mentions more examples of Faraj’s mismanagement than al-‘Aynī. Based on this, it can be said that 4o got the impression that al-‘Aynī’s narrative exhibits more sympathetic toward Faraj. Furthermore, o1 underscores al-‘Aynī’s stated that how Faraj’s trust in corrupt individuals caused the amirs to oppose him. This explanation demonstrates o1’s ability to establish cause-and-effect relationships, emphasizing its analytical depth compared to 4o.

Under the ninth heading, both o1 and 4o do not focus on personal characteristics. However, o1 mentions Amir Shaykh, whereas 4o not mention him at all. o1 provides a more satisfying explanation, for the title, noting that when the caliph ascended the throne, Amir Shaykh seized authority. Therefore, this model can be considered to have a persuasive feature as well as presenting an argument. In fact, o1 explains al-‘Aynī’s narratives in a structured manner: In the first sentence, stating that the amirs used the caliph’s enthronement as a means to legitimize their rebellions; in the second sentence, highlighting the caliph’s ineffectiveness; and the third sentence, describing how Amir Shaykh seized authority during the caliph’s reign. o1 also notes that al-
80 Maqrīzī describes the caliph as reluctant to ascend the throne, spending his reign in the shadow of the amirs³² and serving as a legitimizing³³ figure for amirs’ struggle against Sultan Faraj. So in fact 4o, provides a summary of o1’s insights. o1 Stating that both historians portray the caliph as a temporary figure appointed by the amirs, incapable of governing independently. While both al-Maqrīzī and al-‘Aynī offer examples to illustrate this characterization, o1’s narrative stands out for its clarity and comprehensive presentation of the historians’ perspectives.³⁴

Under the tenth heading, both al-Maqrīzī and al-‘Aynī reported Amir Shaykh was endowed with extraordinary powers during the Caliph’s reign. However, unlike o1, 4o does not mention this point.³⁵ o1 emphasizes that both historians depict Amir Shaykh as the driving force behind the caliph, highlighting that in particular al-Maqrīzī, evotes more elaborates the authority Shaykh established more than al-‘Aynī. In contrast, 4o focuses on al-Maqrīzī’s characterization of Shaykh as a decisive and pragmatic leader with strategic acumen, while stating that al-‘Aynī emphasizes Shaykh’s political skills and long-term vision. It must be said that the responses of both models align with the heading, exhibit consistency, and maintain a connection to the preceding ninth heading. This coherence suggests a structured approach to analyzing the historical narratives of al-Maqrīzī and al-‘Aynī regarding Amir Shaykh’s pivotal role.

Under the eleventh heading, which includes a general evaluation of the power struggles of the year 815, o1 reports that al-Maqrīzī divides the events into three categories: the presence of amirs opposing Sultan Faraj, the shifting alliances among these amirs, and the legitimization of Faraj’s deposition through the enthronement of the caliph. o1 does not mention such a division for al-‘Aynī but states that al-‘Aynī relates that because of the Faraj’s consecutive defeats against the rebellious amirs, his significant loss of power and as a result process of the Shaykh’s seizure of power. According to him, al-‘Aynī argues that these struggles were within the context of the

³² See. al-Maqrīzī, *al-Sulūk*, 6/330.

³³ See. al-Maqrīzī, *al-Sulūk*, 6/329.

³⁴ See. al-Maqrīzī, *al-Sulūk*, 6/325-326; al-‘Aynī, *lqḍ al-jūman* (Veliyyüddin Efendi, 2396), 187a-187b.

³⁵ See. al-Maqrīzī, *al-Sulūk*, 6/330-331; al-‘Aynī, *lqḍ al-jūman* (Veliyyüddin Efendi, 2396), 186b.

systematic problems of the Mamluk system and focused on their impact on the stability of the state rather than on personal rivalries. According to 4o, al-‘Aynī approaches these struggles in the context of systemic issues within the Mamluk system, focusing less on personal rivalries and more on the impacts of these struggles on the state’s stability.

Following these eleven headings, the concluding sections written by both models were not requested in the instructions. o1 labeled this final assessment as an observation, while 4o directly referred to it as a conclusion. It is also possible to interpret the conclusion as a general evaluation of the eleven headings. Unlike 4o, o1 discussed the points of agreement and disagreement between the two historians in this section. As in the majority of the headings, 4o employed shorter and simpler sentences, whereas o1 provided a more detailed and analytical approach. This difference highlights o1’s tendency to delve deeper into comparative analyses, while 4o maintained a more concise and straightforward narrative style.

Conclusion

In today’s world, where digitalization is happening at a high speed, issues such as the production of knowledge, quick access to information, creating effective learning experiences, easily analyzing data, and reducing learning costs are coming to the forefront. Developments in data science and its applications, their increasing usage, and growing ease of use make it possible to realize many ideal thoughts that were discussed in the past much better today. This necessitates a re-examination of the definitions, representations, preferences, and priorities in historiography and historical writing, leading to the emergence of new discussions. These digital tools can reduce the time historians need to dedicate to manuscripts and other written sources in their research, allowing them to spend more time on interpretation and evaluation. In this context, web-based eScriptorium and ChatGPT, both of which are AI-supported research tools with great potential for use in social sciences and history research, are the two digital applications utilized in this study. The year 815, when three sultans ascended the Mamluk throne, constitutes the temporal boundary of the study. As the text, the work of the great historians of the Mamluk period, al-Maqrīzī, and the unpublished part of al-‘Aynī’s work have been preferred. Firstly, the pages of al-‘Aynī’s manuscript from the year 815 have been digitized into text form through the eScriptorium application. It should be noted that the data of the mentioned application is quite successful. The legibility of the manuscript copy must have greatly reduced the number of errors and these few errors were corrected manually. Later, the same instructions and the text of two historians were input into ChatGPT’s o1 and 4o models. Thus, the potential of the models in the context of historiography has been questioned. Despite the same instructions, among the models that respond with different styles, word counts, and content diversity, o1 provides a richer comparative ground for the researcher compared to 4o. Indeed, the number of words used in the data analysis performed by o1 as a result of following the instructions is greater than that of 4o. Again, he is quite meticulous about transcription marks. At the same time, he enriches his narrative with appropriately used Arabic examples. In addition to these, it should be noted that he is more meticulous in his word choices, that the phrases he emphasizes in bold type form the key words of his narration, and that he is able to conduct more inferential analysis. The responses o1 provided to the headings are consistent within themselves and do not contain contradictions between the headings. It should be noted that these analyses complement and support each other, thereby providing more consistent analyses within themselves. Although the two models sometimes

present data with similar or close responses, it is noteworthy that the persuasive power of model o1 is greater than that of model 4o. For example, the two models analyzed the “Writing Method” section differently. Indeed, o1 has analyzed this expression in terms of both content and writing style, while 4o has evaluated it only in terms of content. When the data of the two models were compared with the texts of al-Maqrīzī and al-‘Aynī, it was determined that they successfully analyzed the texts in outline. However, it should be noted that both models focused on the main topics rather than the entire text, and within the framework of the instructions, the o1 model performed more successful analyses compared to the o4 model. However, it should be noted that the emphasis is on obtaining reliable responses from ChatGPT and that the instructions given must be well designed. It should be stated that a great deal of effort has been put into the formation of the instructions given to ChatGPT so that it can make accurate conceptual analyses, not give logically inconsistent answers, and not make unrealistic analyses within the framework of its existing preconceptions. After the design of this issue, it is also important to control the data to be received from it. The examination conducted based on the unpublished portion of al-Maqrīzī’s *al-Suluq* and *Iqd al-Jūman* has shown that artificial intelligence technologies can yield effective results in comparing the information written by historians about the same period. Therefore, it is an undeniable fact that the eScriptorium application and artificial intelligence tools like ChatGPT can play a significant role in easily benefiting from historical texts, analyzing data in various forms, and evaluating it. However, the data obtained from these applications, which offer the possibility of increasing efficiency, should be used with verification. By ensuring that the applications are used correctly in accordance with their working principles, providing appropriate instructions to the artificial intelligence tools, and adhering to ethical principles, it will be possible to benefit from these digital resources in scientific studies.

ChatGPT İle Metin Analizi: Memlükler Dönemi 815 (1412-1413) Yılı Örneği

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Genişletilmiş Özet

Dijitalleşmenin artması ve akademik çevrelerde ilgi görmesiyle birlikte birtakım avantajlar ve dezavantajlar ortaya çıkmaktadır. Nitekim dijital uygulamalardan bilginin elde edilmesi, bilgiye ulaşım, bilginin değerlendirilmesi, bilginin paylaşılması ve veri madenciliği gibi pek çok hususta istifade edebilmek mümkündür. Bununla birlikte doğru bilgiye erişim ve güvenlik meseleleri gibi sorunlara da işaret etmek gerekmektedir. Bu makale, Memlükler döneminde (648-923/1250-1517) 815 (1412-1413) yılındaki siyasî ve sosyal çalkantıları iki önemli tarihçi olan Makrîzî'nin (ö. 845/1442) es-Sülûk li-ma'rifeti düveli'l-mülûk ve Aynî'nin (ö. 855/1451) İkdü'l-cümân fi târihi ehli'z-zamân adlı ansiklopedik eserlerine dayanarak incelemektedir. Araştırmanın temel problemi, dijital programlar ve yapay zekâ algoritmalarının tarih yazıcılığında veri analizi açısından ne gibi katkılar sunabileceğini ve bu katkıların hangi yöntemlerle test edilebileceğini ortaya koymaktır. Çalışmanın amacı, özel olarak 815 (1412-1413) yılına dair farklı tarihî metinleri hem dijital araçlarla işleyerek hem de yapay zekâ modelleri aracılığıyla analiz ederek tarih yazıcılığındaki yenilikçi bakış açılarını ve yöntemleri gözler önüne sermektir. Makalenin özgün değeri, henüz neşredilmemiş olan Aynî'nin 815 (1412-1413) yılına dair yazma metninin web tabanlı eScriptorium adlı dijital transkripsiyon uygulamasıyla metin hâline dönüştürülmesi ve sonrasında ChatGPT'nin iki farklı modeli (o1 ve 4o) aracılığıyla bu metnin Makrîzî'nin eseriyle karşılaştırılmasından kaynaklanmaktadır. Böylece, hem metinlerin dijital ortama aktarımı hem de yapay zekâ destekli metin analizi yöntemleri bir arada kullanılarak tarih araştırmalarında dijital uygulamaların rolü incelenmiştir. Çalışmada, özellikle üç sultanın (Ferec (808-815/1405-1412), el-Müstâîn-Billâh (815/1412) ve el-Melikü'l-Müeyyed Şeyh (808-824/1405-1421)) tahta geçtiği 815 (1412-1413) yılı tercih edilmiştir. Bu yılda tahta geçen üç sultandan biri Kahire'deki Abbâsî Halifesi el-Müstâîn-Billâh'tır. Yine bu yılda sık taht değişiklikleri dolayısıyla istikrarsız siyasî atmosfer, emîrler arası ittifaklar ve dönemin siyasî mücadeleleri oldukça yoğundur. Bu durum, yapay zekâ uygulamalarının analizlerinin derinlemesine test edilebilmesi için oldukça mühimdir. Yöntem olarak öncelikle web tabanlı eScriptorium uygulaması kullanılarak Aynî'nin yazma hâlindeki 815 (1412-1413) yılı metinleri dijitalleştirilmiş ve transkripsiyon doğruluğu manuel olarak kontrol edilmiştir. Nitekim eScriptorium uygulaması, iş yükünü hafifletmesi bakımından oldukça önemli ve geliştirmeye açık bir program olmakla birlikte tashih sürecine muhakkak ihtiyaç duymaktadır. Şöyle ki bazı uygulamanın bazı kelimeleri yanlış okuduğu, zaman zaman satır sonlarındaki birtakım kelimeleri atladığı tespit edilmiştir. Tashih sürecinde bu hatalar düzeltilmiş ve düzeltmeler tamamlandıktan sonra veriler export edilerek metin elde edilmiştir. Bu sürecin ardından, bu metinler ile Makrîzî'nin es-Sülûk adlı eserinin ilgili kısmı ChatGPT'nin o1 ve 4o modellerine aynı talimatlarla yüklenmiştir. İki modelin veri işleme ve metin karşılaştırma biçimleri, başlık kullanımındaki farklılıklar, kelime sayıları, Arapça örnek verip vermemeleri ve üslup çeşitliliği açısından değerlendirilmiştir. Veriler hem nicel (kelime sayısı, başlık formatı) hem de nitel (içerik analizi, çeviri kalitesi, yorum derinliği) olarak mukayese edilmiştir. Bulgular, o1 modelinin 4o modeline kıyasla daha fazla kelime kullanarak analizleri detaylandırıldığını, Arapça örnekleri metne dahil ettiğini ve transkripsiyon işaretlerine titizlikle dikkat ettiğini göstermektedir. 4o modeli ise daha kısa, daha özlü bir yanıt sunup başlıklarda büyük harf kullanımı gibi farklı biçimsel tercihlere yönelmiştir. Bunların yanı sıra o1 modelinin kelime tercihlerinde daha özenli olduğunu, kalın punto ile vurguladığı ifadelerin anlatımının anahtar kelimelerini oluşturduğunu ve daha çok çıkarımsal analiz yapabildiğini söylemek gerekir. o1 modelinin başlıklara yönelik verdiği cevaplar kendi içinde ve başlıklar arasında tezatlık içermemektedir. Bu analizlerin birbirini tamamlar ve destekler mahiyette olduğu dolayısıyla kendi içinde daha tutarlı analizler sunduğu ifade edilmelidir. İki modelin zaman zaman birbirine yakın/benzer cevaplar barındıran veriler sunmuş olsalar da o1'in ikna gücünün 4o'a göre daha fazla olduğu da dikkat

çekmektedir. Bununla birlikte iki modelin verileri, Makrîzî ve Aynî'nin metinleri ile mukayese edildiğinde söz konusu metinleri ana hatlarıyla başarılı bir şekilde analiz ettikleri tespit edilmiştir. Ayrıca, Makrîzî'nin anlatımının Aynî'ye göre siyasi ve ekonomik detayları daha geniş işlediği söylenmelidir. İki modelin verileri, Makrîzî ve Aynî'nin metinleri ile mukayese edildiğinde söz konusu metinleri ana hatlarıyla başarılı bir şekilde analiz ettikleri tespit edilmiştir. Ancak her iki modelin de metnin tamamına yoğunlaşmaktan ziyade ana konulara yoğunlaştıklarını ve talimatlar çerçevesince o1 modelinin o4 modeline göre daha başarılı analizler yaptığı belirtilmelidir. Yapay zekâ araçlarının, iyi düşünülmüş talimatlar ve personalar verilmesi durumunda tarihî metin analizinde verimli sonuçlar üretebileceği anlaşılmıştır. Sonuç olarak çalışma, yapay zekâ destekli metin analizi ve dijital transkripsiyon uygulamalarının tarih yazıcılığında hız, doğruluk ve yorumlama imkânını artırabileceğini göstermektedir. Ancak bu araçların ürettiği sonuçlar, araştırmacı tarafından mutlaka dikkatle kontrol edilmeli ve tarihî kaynakların bütüncül değerlendirilmesiyle birleştirilmelidir. Doğru talimatların verilmesi, etik ilkelere bağlı kalınması ve elde edilen verilerin titizlikle gözden geçirilmesi durumunda, eScriptorium ve ChatGPT gibi dijital araçların tarih araştırmalarında önemli bir potansiyele sahip olduğu sonucuna varılmaktadır.

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