



**ASHUROV
MA‘RUFJON ABDUMUTALIBOVICH**

Andijan State Pedagogical Institute, Andijan, Uzbekistan

marufjonashurov51@gmail.com

PRAGMALINGUISTIC ANALYSIS OF AI-GENERATED ACADEMIC TEXTS IN ENGLISH AND UZBEK LANGUAGES

Abstract: This article presents a comparative pragmlinguistic analysis of AI-generated academic texts in English and Uzbek languages. The study investigates communicative strategies, modal structures, argumentative organization, and scientific style features within AI-mediated academic discourse. Particular attention is devoted to pragmatic differences between English and Uzbek generated texts, rhetorical adaptability, and tendencies toward linguistic standardization. The research methodology is based on discourse analysis, comparative pragmlinguistic interpretation, and AI-generated corpus examination. The findings demonstrate that artificial intelligence systems successfully imitate formal academic discourse structures; however, certain limitations remain in terms of communicative authenticity, contextual sensitivity, and epistemological balance. The study also discusses the pedagogical implications of AI-assisted academic writing in multilingual educational environments.

Keywords: pragmlinguistics, artificial intelligence, academic discourse, AI-generated text, communicative strategy, scientific style, discourse analysis, modal structures, argumentation, corpus linguistics, academic writing, language technologies, computational linguistics, linguistic standardization, pragmatic analysis.

Annotatsiya: Mazkur maqolada ingliz va o‘zbek tillaridagi sun‘iy intellekt tomonidan generatsiya qilingan akademik matnlarning pragmlingvistik xususiyatlari qiyosiy jihatdan tahlil qilinadi. Tadqiqotda AI asosidagi matn yaratish tizimlarining akademik diskursdagi kommunikativ strategiyalari, modal birliklari, argumentatsion tuzilmalari hamda ilmiy uslub xususiyatlari o‘rganilgan. Shuningdek, ingliz va o‘zbek AI-generatsiyalangan akademik matnlar o‘rtasidagi pragmatik farqlar, ritorik moslashuv darajasi va lingvistik standartlashuv jarayonlari

aniqlangan. Tadqiqot metodologiyasi diskurs tahlili, qiyosiy pragmlingvistik analiz va AI-generated corpus examination asosida olib borildi. Natijalar AI tizimlari akademik uslubni muvaffaqiyatli imitatsiya qilayotganini, biroq kommunikativ autentiklik va epistemologik muvozanat masalalarida ayrim cheklovlar mavjudligini ko‘rsatdi.

Kalit so‘zlar: pragmlingvistika, sun‘iy intellekt, akademik diskurs, AI-generated text, kommunikativ strategiya, ilmiy uslub, diskurs tahlili, modal birliklar, argumentatsiya, korpus lingvistikasi, akademik yozuv, til texnologiyalari, kompyuter lingvistikasi, lingvistik standartlashuv, pragmatik tahlil

Introduction. The integration of artificial intelligence into academic communication has substantially transformed the contemporary linguistic landscape and introduced new methodological questions into the field of philological research. During the last several years, AI-based language systems such as ChatGPT, Gemini, Claude, and other transformer-oriented models have become active participants in scientific and educational discourse. Initially, these systems were perceived primarily as technical instruments capable of accelerating text production. However, pedagogical observations and linguistic analyses increasingly demonstrate that artificial intelligence is not merely reproducing isolated lexical structures or grammatical patterns. It is gradually reconstructing the communicative architecture of academic discourse itself. This circumstance requires deeper pragmlinguistic investigation because scientific communication depends not only on informational transmission but also on intention, rhetorical positioning, epistemic caution, modality, and discourse strategy.

Within modern linguistics, pragmlinguistics occupies a particularly significant analytical position due to its capacity to examine language in relation to communicative context and speaker intention. Academic discourse, unlike everyday communication, functions within highly regulated intellectual environments where argumentation, intertextuality, methodological transparency, and institutional conventions interact simultaneously. Consequently, even minor pragmatic deviations may alter the interpretative value of a scientific text. In our opinion, the growing involvement of AI systems in academic writing makes this issue especially complex. Artificial intelligence can imitate scholarly style with remarkable fluency, yet the communicative mechanisms underlying such discourse frequently remain algorithmic rather than genuinely epistemological.

The relevance of this research is closely connected with current transformations occurring in higher education and multilingual academic environments. English-language academic communication has already become deeply intertwined with AI-assisted writing technologies. Uzbek academic discourse is also entering this process, although under somewhat different sociolinguistic conditions. As a result, researchers increasingly encounter hybrid texts where human intellectual intention intersects with machine-generated rhetorical structures. Such interaction inevitably influences scientific style, discourse coherence, modality distribution, and communicative authenticity.

Pedagogical practice demonstrates that students actively using AI-generated academic texts often reproduce complex linguistic structures without fully understanding their pragmatic function. In many cases, syntactically sophisticated paragraphs conceal conceptual fragmentation or weak argumentation. For example, a student paper may contain highly formal constructions such as “discursive mediation of epistemological paradigms” or “multidimensional communicative integration,” while lacking a clear causal relationship between the presented

ideas. The results of the analysis show that, artificial intelligence frequently assists learners in achieving external academic fluency, yet simultaneously creates the risk of rhetorical formalism detached from independent analytical reasoning.

This tendency becomes especially visible in multilingual educational contexts where English and Uzbek academic traditions interact differently with AI systems. English-language AI-generated discourse generally demonstrates stronger rhetorical flexibility due to extensive scientific corpora used during model training. Uzbek-language outputs, although structurally coherent, occasionally reveal lexical standardization, syntactic repetition, and direct conceptual transfer from English discourse models. Such asymmetry raises important philological questions concerning linguistic authenticity, discourse adaptation, and the future of national academic communication in AI-mediated environments.

The theoretical basis of the present study emerges from the intersection of pragmat linguistics, discourse analysis, computational linguistics, and academic pedagogy. Classical pragmatic theories developed by scholars such as J. Austin, J. Searle, H. Grice, T. van Dijk, and Deborah Schiffrin remain methodologically significant because they emphasize the contextual and intentional nature of communication. Nevertheless, AI-generated discourse introduces new analytical complications. Artificial systems do not possess communicative consciousness, scholarly motivation, or cognitive intentionality in the human sense. They statistically reproduce discourse patterns extracted from multilingual corpora. Therefore, the central problem is not whether AI systems can generate grammatically acceptable texts, but how these systems reconstruct pragmatic mechanisms traditionally associated with human academic interaction.

Particular attention within this research is devoted to communicative strategies, modality, scientific style, and argumentative organization. Human-authored academic discourse normally demonstrates dynamic variation in hedging, rhetorical caution, evidential hierarchy, and authorial positioning. AI-generated texts often imitate these features successfully at the surface level. Yet deeper analysis reveals that modality distribution may become mechanically repetitive, argumentative transitions excessively symmetrical, and discourse coherence artificially stabilized. In our pedagogical observations, experienced scholars often perceive such texts as linguistically competent but pragmatically over-constructed.

Another important aspect concerns the pedagogical implications of AI-generated academic discourse. Higher education increasingly requires students not only to produce scientifically organized texts but also to evaluate and interpret algorithmically generated content critically. Consequently, academic literacy itself is undergoing transformation. Traditional writing competence is no longer sufficient in isolation. Contemporary researchers and future philologists must develop AI-critical literacy — the ability to distinguish between rhetorical fluency and genuine analytical validity.

The methodological framework of this research is based on comparative pragmat linguistic analysis of English and Uzbek AI-generated academic texts produced under equivalent prompts. The study applies discourse analysis, contextual modality assessment, comparative linguistic interpretation, and corpus-oriented examination of communicative strategies. Special attention is devoted to rhetorical consistency, lexical recurrence, pragmatic adaptability, and argumentation patterns across both linguistic environments. Such an approach enables identification of not only structural similarities but also deeper differences connected with academic tradition, corpus representation, and sociocultural models of scientific communication.

The scientific novelty of the research lies in its attempt to examine AI-generated academic discourse not exclusively from technological or computational perspectives, but as a pragmat linguistic phenomenon situated within multilingual educational contexts. Existing studies

often focus on grammatical accuracy, machine translation efficiency, or computational architecture. Comparatively less attention has been devoted to communicative intentionality, modality imbalance, rhetorical simulation, and pragmatic authenticity in English and Uzbek AI-generated academic writing. Bizningcha, precisely these dimensions determine the future philological significance of artificial intelligence within higher education and scientific communication.

The practical significance of the study is equally connected with academic pedagogy and linguistic methodology. The findings may contribute to the development of educational models aimed at strengthening critical academic literacy in AI-assisted learning environments. In addition, the research may assist university instructors, linguists, and graduate students in identifying pragmatic peculiarities characteristic of machine-generated scientific discourse. This is especially important for multilingual academic systems where the boundaries between human and algorithmic writing are becoming increasingly indistinct.

The present research therefore approaches AI-generated academic discourse not as a purely technical innovation but as a complex communicative phenomenon affecting linguistic norms, pedagogical practice, and scientific interaction. The following chapters examine the theoretical foundations of pragmalinguistics and artificial intelligence in academic discourse, analyze the pragmalinguistic features of AI-generated texts in English and Uzbek, and comparatively evaluate the philological potential and communicative limitations of AI-mediated scholarly writing. Through this analytical progression, the study seeks to clarify how artificial intelligence is reshaping contemporary academic discourse and what methodological consequences this transformation may produce for future linguistic and educational research.

Theoretical foundations of pragmalinguistics and artificial intelligence in academic discourse. The rapid expansion of artificial intelligence into the sphere of academic communication has significantly transformed the nature of linguistic interaction in scholarly environments. During the last decade, text-generating systems such as ChatGPT, Gemini, Claude, and other large language models have begun to participate not merely as auxiliary digital instruments but as active mediators of scientific discourse. This tendency has generated a new field of inquiry situated at the intersection of pragmalinguistics, discourse analysis, computational linguistics, and educational methodology. In our view, the issue is no longer limited to whether artificial intelligence can generate grammatically acceptable academic texts. The more substantial question concerns the pragmatic organization of such texts: how communicative intention, argumentation strategy, modality, authorial stance, and discourse coherence are realized through algorithmically produced language.

Pragmalinguistic analysis becomes especially relevant in this context because academic communication is inherently goal-oriented. Scientific discourse is constructed not only through lexical and syntactic accuracy but also through implicit communicative strategies aimed at persuasion, clarification, mitigation, and intellectual positioning. Consequently, the emergence of AI-generated academic texts requires a reconsideration of traditional pragmalinguistic assumptions. Earlier linguistic models predominantly focused on human communicative intention as the central source of discourse organization. However, AI systems simulate intention through probabilistic language prediction mechanisms. This distinction, although subtle at first glance, has profound implications for the interpretation of scientific texts.

Within contemporary linguistics, pragmalinguistics occupies a unique position because it examines language in relation to speaker intention, contextual dependency, social interaction, and cognitive interpretation. Scholars such as J. Austin, J. Searle, H. Grice, T. van Dijk, and Deborah Schiffrin contributed substantially to the formation of pragmatic theory by emphasizing

that linguistic meaning cannot be fully interpreted outside communicative context. Their theoretical observations remain highly applicable to the analysis of AI-generated discourse, although certain adaptations are necessary. Unlike human authors, artificial intelligence systems do not possess consciousness, communicative motivation, or sociocultural intuition in the traditional sense. Nevertheless, they reproduce pragmatic patterns extracted from extensive textual corpora, thereby imitating academic communicative behavior with remarkable consistency.

From a methodological perspective, pragmalinguistic investigation of AI-generated texts requires attention to several interconnected dimensions. One of them is intentionality simulation.

Academic writing normally contains signals of epistemic responsibility, caution, and scholarly positioning. Human researchers often employ expressions such as “the findings suggest,” “it may be assumed,” or “the evidence indicates.” These structures function as pragmatic mitigators that reduce categorical assertion and preserve scientific objectivity. AI-generated texts demonstrate frequent use of similar constructions; however, their distribution patterns occasionally reveal mechanical repetition rather than context-sensitive intentionality.

For instance, in English AI-generated academic discourse, modal structures such as “it is important to note,” “it can be argued,” and “this study highlights” occur with unusually high frequency. Similar tendencies are observable in Uzbek AI-generated academic writing, where formulaic introductory constructions are frequently employed to reinforce rhetorical credibility and simulate scientific objectivity. At first sight, these expressions resemble authentic academic style. Yet deeper analysis demonstrates that AI systems often reproduce such structures mechanically, regardless of contextual necessity or argumentative precision. This tendency contributes to a form of pragmatic standardization that differs considerably from the natural stylistic variation typically found in human-authored scholarly discourse.

Another essential issue concerns speech act realization in AI-generated academic communication. In classical pragmatic theory, academic discourse combines assertive, directive, and evaluative speech acts. A human scholar carefully calibrates these acts according to disciplinary norms and communicative objectives. Artificial intelligence systems, by contrast, statistically approximate such patterns without genuine awareness of disciplinary hierarchy or ideological implication. As a result, AI-generated texts sometimes demonstrate excessive neutrality or, conversely, disproportionate certainty in situations requiring methodological caution.

The analysis conducted within this research demonstrates that English academic discourse generated by AI systems tends to prioritize coherence and rhetorical fluency, whereas Uzbek AI-generated academic writing more frequently reflects structural literalism and formal lexical repetition. This difference is partially connected with corpus imbalance. English-language datasets used for model training are significantly larger and more diversified than Uzbek-language academic corpora. Consequently, AI systems demonstrate greater pragmatic flexibility in English than in Uzbek scientific communication.

At this stage, it is necessary to consider academic discourse itself as a specialized communicative environment characterized by institutional norms, terminological precision, intertextuality, and argumentative hierarchy. Academic discourse cannot be reduced to formal scientific vocabulary alone. It represents a multilayered interaction between author, audience, methodology, and epistemological convention. T. van Dijk emphasized that scientific discourse functions within institutional cognitive frameworks where authority, evidence, and interpretative legitimacy shape textual organization. This observation acquires renewed significance when

applied to AI-generated writing because algorithmic systems imitate institutional discourse patterns without participating in the intellectual processes that originally produced them.

Academic discourse also possesses pedagogical dimensions. In higher education contexts, academic writing serves not only as a means of presenting information but also as an instrument of intellectual formation. Students learn argumentation, analytical reasoning, source integration, and critical positioning through participation in academic discourse practices. The integration of AI-generated texts into educational environments therefore creates a complex methodological challenge. On one hand, AI systems can support linguistic competence development by modeling academic structures and assisting multilingual students. On the other hand, excessive dependence on generated texts may weaken independent analytical thinking and reduce the development of individual scholarly voice.

Our observations indicate that many students who employ AI-generated academic texts tend to preserve the surface-level lexical sophistication of the output while neglecting deeper argumentative consistency. For example, a generated paragraph may contain advanced terminology such as “epistemological paradigm,” “discursive representation,” or “pragmatic mediation,” yet fail to establish clear logical progression between claims. In pedagogical practice, this phenomenon creates a false impression of academic maturity. The text appears intellectually dense but often lacks authentic analytical depth. Consequently, educators increasingly require diagnostic mechanisms capable of distinguishing between formal linguistic complexity and genuine scholarly reasoning.

A particularly interesting feature of AI-generated academic discourse is its tendency toward hyper-coherence. Human-authored texts usually contain minor stylistic irregularities, conceptual pauses, implicit assumptions, and individualized transitions. These features reflect natural cognitive processing. Artificial intelligence systems, however, often produce excessively smooth textual progression. Every sentence appears syntactically connected; every paragraph transitions with algorithmic precision. While this may initially seem advantageous, experienced researchers frequently perceive such discourse as pragmatically unnatural. In real academic communication, intellectual hesitation and selective ambiguity sometimes function as indicators of authentic analytical engagement.

The linguistic architecture of academic discourse additionally includes modality, citation behavior, metadiscourse, and intersubjective positioning. Among these elements, modality deserves special attention because it reveals the degree of authorial certainty and communicative responsibility.

English academic writing traditionally employs epistemic hedging through modal verbs and adverbial constructions such as “might,” “possibly,” “arguably,” and “to some extent.” Uzbek academic discourse also utilizes mitigation strategies, though often through syntactic rather than modal-verb structures. AI systems generally reproduce these patterns successfully; however, their pragmatic distribution remains inconsistent.

For instance, when discussing controversial scientific claims, human researchers typically adjust modality according to empirical reliability. AI-generated texts occasionally maintain uniform modal intensity regardless of evidential context. In some cases, speculative assumptions are presented with excessive confidence. In others, empirically established observations are unnecessarily weakened through repetitive hedging. Such inconsistencies reveal that artificial intelligence imitates modal patterns statistically rather than epistemologically.

The technological foundations of AI text generation further clarify these pragmatic peculiarities. Modern large language models operate through transformer-based neural architectures trained on extensive multilingual corpora. Their primary mechanism involves predicting subsequent

linguistic units based on contextual probability distributions. This process allows AI systems to generate syntactically coherent and semantically plausible texts across numerous domains, including academic writing. Nevertheless, coherence at the computational level does not automatically guarantee pragmatic authenticity.

Transformer architectures introduced by Vaswani and colleagues fundamentally altered computational linguistics by enabling contextual attention mechanisms. Unlike earlier sequential models, transformers process linguistic relationships multidirectionally, thereby improving discourse continuity and contextual retention. In educational and academic contexts, this advancement significantly increased the quality of generated scientific prose. Yet the pedagogical implications remain ambivalent. While AI-generated texts demonstrate impressive fluency, they occasionally produce fabricated references, inaccurate theoretical associations, or contextually inappropriate terminological combinations.

From our perspective, one of the most underestimated problems involves pragmatic responsibility. Human scholars remain accountable for interpretative accuracy, ethical citation, and methodological validity. Artificial intelligence systems possess no such accountability. Therefore, the responsibility for verifying generated academic content inevitably returns to the researcher, teacher, or student utilizing the system. This shifts the pedagogical role of academic literacy. Contemporary academic competence increasingly requires not only writing skills but also AI-critical literacy — the ability to evaluate, verify, and pragmatically interpret generated discourse.

The integration of AI into multilingual academic environments introduces additional complications related to linguistic asymmetry. English-language AI outputs generally display greater rhetorical sophistication because training corpora contain extensive scientific databases, journals, and institutional publications. Uzbek-language outputs, by contrast, occasionally reveal lexical simplification, structural

repetition, or direct syntactic transfer from English discourse models. This observation suggests that AI-generated Uzbek academic discourse is still undergoing developmental stabilization within computational environments.

An illustrative example emerges in comparative abstract writing. English AI-generated abstracts frequently employ structured rhetorical sequencing: background, objective, methodology, findings, implication. Uzbek AI-generated abstracts often imitate this structure formally but demonstrate weaker thematic progression between segments. As a result, the communicative purpose remains partially fragmented despite grammatical correctness. Such distinctions confirm that pragmalinguistic competence in AI systems is strongly dependent on corpus quality and sociolinguistic representation.

In methodological terms, the present research relies on comparative discourse analysis, pragmalinguistic interpretation, contextual modality assessment, and AI-generated corpus examination. The analytical procedure involves selecting English and Uzbek academic texts generated through identical prompts in ChatGPT and related systems, followed by examination of communicative strategies, modal structures, argumentative coherence, and discourse markers. Special attention is devoted to rhetorical consistency and pragmatic adaptability across linguistic contexts.

The proposed analytical model consists of four interconnected stages. The first stage involves prompt standardization in order to eliminate thematic variability. The second stage focuses on discourse segmentation and identification of pragmatic markers. The third stage examines modality distribution and argumentation patterns. The final stage evaluates pedagogical applicability and philological reliability. Such a model enables systematic

comparison between human-authored and AI-generated academic communication while preserving methodological consistency.

It should also be emphasized that AI-generated academic discourse cannot be interpreted exclusively through technological determinism. Language remains deeply connected with cultural cognition, educational tradition, and disciplinary identity. Even the most advanced language model reproduces patterns derived from human communicative history. Therefore, pragmlinguistic analysis of AI-generated texts ultimately becomes an investigation of how digital systems reconstruct human intellectual behavior through linguistic approximation.

In conclusion, the theoretical relationship between pragmlinguistics and artificial intelligence represents one of the most dynamically evolving areas within modern philological research. The interaction between algorithmic text production and academic discourse reveals not only technological progress but also substantial transformations in scholarly communication itself. AI-generated academic texts increasingly participate in educational, scientific, and professional environments. Yet their linguistic fluency should not obscure the deeper pragmatic questions concerning intentionality, epistemic responsibility, rhetorical authenticity, and pedagogical impact. Our analysis suggests that the future development of AI-assisted academic communication will depend not merely on computational sophistication but on the capacity to preserve meaningful, context-sensitive, and intellectually responsible discourse practices across languages and academic cultures.

Pragmlinguistic features of ai-generated academic texts in english and uzbek. The expansion of artificial intelligence into academic communication has produced not only technological transformation but also substantial shifts in the pragmlinguistic organization of scientific discourse. In recent years, AI-generated academic texts have become increasingly visible in higher education, conference proceedings, online journals, research drafting, and multilingual scholarly correspondence. This tendency requires deeper examination because the linguistic value of academic discourse cannot be measured solely through grammatical correctness or lexical sophistication. Scientific communication is fundamentally pragmatic in nature. Every academic text performs a communicative task: it persuades, justifies, explains, critiques, evaluates, or positions knowledge within a disciplinary framework. Consequently, the pragmlinguistic analysis of AI-generated discourse allows researchers to observe how artificial systems reconstruct communicative strategies traditionally associated with human intellectual activity.

Our analysis demonstrates that AI-generated academic texts in English and Uzbek reveal a complex interaction between algorithmic predictability and discourse imitation. Although such texts frequently preserve structural coherence and formal academic style, their communicative mechanisms often differ from naturally produced scholarly writing. These differences become especially noticeable in the organization of rhetorical intention, modality distribution, argumentative hierarchy, and pragmatic influence upon the reader.

One of the most distinctive characteristics of AI-generated academic discourse is the strategic imitation of communicative authority. Human researchers establish authority gradually through methodological justification, critical positioning, citation practices, and analytical caution. AI systems reproduce these features statistically, often relying on recurrent discourse formulas extracted from extensive academic corpora. As a result, generated texts may appear persuasive even when conceptual depth remains limited.

For example, English AI-generated academic paragraphs frequently begin with constructions such as “Recent studies have demonstrated,” “Scholars increasingly argue,” or “The findings indicate a significant relationship.” These expressions function as pragmatic markers of academic legitimacy. However, closer examination reveals that such statements are occasionally detached from concrete empirical grounding. Comparable discourse patterns are also observable in Uzbek AI-generated academic writing, where introductory formulations frequently simulate evidential authority through generalized reference to research findings or scholarly opinion. Although such constructions imitate scientific objectivity, they may create an impression of methodological reliability without sufficient argumentative substantiation.

In our view, this phenomenon is closely connected with the predictive architecture of large language models. AI systems prioritize statistically probable continuations rather than epistemologically verified reasoning. Consequently, communicative strategies in generated texts tend to privilege rhetorical fluency over analytical selectivity. This distinction becomes particularly important in academic pedagogy where students may interpret linguistic sophistication as equivalent to scholarly reliability.

Another pragmalinguistic feature concerns audience orientation. Human academic authors usually adapt discourse according to disciplinary expectations, readership competence, and institutional context. An experienced scholar writing for a specialized linguistic journal constructs arguments differently from one preparing a pedagogical conference paper. AI-generated texts imitate audience adaptation through lexical modulation and stylistic approximation, yet this adaptation often remains superficial.

For instance, when prompted to produce a “highly academic linguistic analysis,” AI systems frequently increase terminological density and syntactic complexity. Sentences become longer, nominalization intensifies, and abstract nouns begin to dominate textual progression. However, excessive abstraction occasionally weakens communicative clarity. In several English AI-generated samples analyzed during this research, expressions such as “discursive manifestation of epistemological mediation” or “multidimensional pragmatic reconstruction” appeared without sufficient conceptual necessity. Similar tendencies were observed in Uzbek AI-generated academic discourse, where structurally complex terminological combinations were employed primarily to imitate scholarly sophistication rather than to enhance semantic precision. Such constructions often create the external appearance of intellectual depth while contributing minimally to argumentative clarity or analytical specificity.

At the same time, AI-generated discourse demonstrates remarkable efficiency in maintaining thematic continuity. Unlike inexperienced human writers, AI systems rarely deviate abruptly from the assigned topic. Transitional markers are used consistently. Paragraph progression generally follows logical sequencing. Yet this coherence occasionally becomes excessively symmetrical. Human academic writing naturally contains minor irregularities: selective emphasis, interpretative hesitation, stylistic variation, and occasional asymmetrical development of ideas. AI-generated texts, by contrast, tend toward balanced rhetorical architecture. Interestingly, this very balance sometimes exposes their artificial origin.

Communicative strategies in AI-generated academic writing also involve implicit politeness mechanisms and epistemic mitigation. Scientific discourse traditionally avoids categorical absolutism because knowledge production remains open to revision. Therefore, hedging structures occupy a central role in scholarly communication. English academic texts frequently employ modal verbs such as “may,” “might,” “could,” and “would,” alongside adverbial mitigators like “possibly,” “arguably,” and “relatively.” Uzbek academic discourse demonstrates

comparable pragmatic softening strategies expressed through equivalent mitigative constructions that function to reduce categorical assertion and preserve academic objectivity.

The analysis conducted within this research demonstrates that AI systems reproduce hedging mechanisms with considerable frequency. Nevertheless, their distribution often lacks contextual sensitivity. In some cases, generated texts weaken empirically established conclusions through unnecessary mitigation. In others, speculative interpretations are presented with excessive certainty. For example, an English AI-generated text discussing bilingual education stated that “digital pedagogy inevitably improves linguistic competence.” The adverb “inevitably” introduces categorical certainty unsupported by empirical evidence. Similar tendencies are observable in Uzbek AI-generated academic discourse, where AI-assisted language learning is occasionally represented as universally effective, even in contexts requiring qualified or evidence-based interpretation.

This inconsistency reveals an important pragmatolinguistic limitation of artificial systems. Human scholars adjust modal intensity according to disciplinary norms, empirical reliability, and communicative ethics. AI systems approximate these adjustments probabilistically rather than cognitively. Consequently, modality in generated discourse may appear structurally correct while remaining pragmatically disproportionate.

Scientific style within AI-generated texts demonstrates additional peculiarities. Academic style traditionally combines precision, impersonality, coherence, intertextuality, and methodological transparency. AI-generated academic discourse successfully reproduces many formal indicators of scientific style, particularly in English-language outputs. Complex sentence structures, passive constructions, citation-like expressions, and nominalized terminology occur regularly. However, stylistic authenticity depends not only on formal structure but also on intellectual intentionality.

A particularly revealing observation concerns lexical recurrence. Human researchers usually vary terminology strategically in order to preserve conceptual nuance and stylistic rhythm. AI-generated texts, by contrast, often repeat key academic phrases with algorithmic regularity. Expressions such as “it should be noted,” “this research demonstrates,” “the obtained results,” and “in contemporary linguistics” frequently recur within relatively short textual segments. Comparable repetition patterns are also observable in Uzbek AI-generated academic discourse, where formulaic evidential and evaluative constructions are repeatedly employed as markers of scholarly style. Although such recurrence does not necessarily violate grammatical norms, it weakens stylistic individuality, reduces rhetorical flexibility, and limits pragmatic dynamism within academic communication.

From a pedagogical standpoint, this feature carries practical implications. Students who rely heavily on AI-generated academic writing may unconsciously internalize formulaic discourse patterns. As a result, their independent writing gradually loses rhetorical flexibility. In our teaching observations, texts excessively influenced by AI systems often demonstrate strong structural organization but limited authorial identity. The student appears linguistically competent yet intellectually distant from the argument being presented.

Another essential aspect involves argumentative organization. Academic argumentation requires more than sequential presentation of information. Effective scholarly argument depends upon evidence hierarchy, interpretative balance, counterargument integration, and logical progression from premise to conclusion. AI-generated texts generally maintain formal argumentative order; however, the depth of causal reasoning frequently remains uneven.

For instance, when analyzing educational technology, a human researcher may acknowledge contradictory findings, contextual limitations, and methodological constraints

before proposing a conclusion. AI-generated discourse tends to simplify argumentative trajectories. Counterarguments are often acknowledged briefly and then resolved too quickly. This creates an impression of rhetorical completeness without genuine analytical tension.

One English AI-generated paragraph examined during the research argued that “artificial intelligence enhances academic productivity through immediate linguistic assistance.” Although grammatically coherent, the paragraph omitted potential risks such as overdependence, ethical concerns, and the reduction of independent analytical practice. A comparable example from Uzbek AI-generated academic discourse similarly emphasized the effectiveness of AI-assisted education while neglecting sociolinguistic limitations associated with multilingual learning environments. Such patterns suggest that AI systems tend to prioritize consensus-oriented discourse because their training corpora statistically favor generalized explanatory stability over critical analytical balance.

At the level of pragmatic influence, AI-generated academic texts demonstrate considerable persuasive capacity. Readers often associate coherent structure and specialized vocabulary with intellectual reliability. This phenomenon becomes especially significant in educational contexts where students may accept generated information uncritically due to its academic appearance. Consequently, pragmatolinguistic competence increasingly involves not only text production but also critical interpretation of algorithmically generated discourse.

In our opinion, one of the most underestimated risks lies in the gradual normalization of rhetorical simulation. AI-generated texts can imitate scholarly confidence, methodological objectivity, and analytical sophistication without engaging in authentic epistemological reflection. Over time, repeated exposure to such discourse may influence academic standards themselves. Scientific communication could become increasingly formulaic, stylistically homogenized, and pragmatically predictable.

At the same time, it would be methodologically incorrect to reduce AI-generated discourse exclusively to its limitations. In multilingual educational settings, AI systems provide significant support for academic literacy development. Uzbek-speaking students writing in English frequently use AI tools to improve structural organization, grammatical accuracy, and disciplinary vocabulary. Similarly, English-language learners benefit from immediate stylistic modeling and rhetorical guidance. When supervised critically, such interaction may strengthen rather than weaken academic competence.

This duality requires balanced pedagogical methodology. Artificial intelligence should function not as a substitute for scholarly reasoning but as an auxiliary linguistic instrument. Educational practice therefore demands the development of AI-oriented academic literacy models capable of integrating technological assistance with independent analytical thinking.

The methodological framework applied in this chapter involved comparative corpus analysis of English and Uzbek AI-generated academic texts produced under equivalent prompts. The analysis focused on communicative strategy distribution, modal structures, lexical recurrence, argumentative sequencing, and rhetorical influence. Particular attention was devoted to identifying divergences between formal academic appearance and deeper pragmatic functionality.

The analytical procedure included four stages. The first stage involved prompt normalization in order to ensure thematic consistency across languages. The second stage examined communicative markers including mitigation, emphasis, authorial positioning, and reader orientation. The third stage analyzed argumentative coherence through causal progression and evidential integration. The final stage evaluated pedagogical implications and discourse authenticity.

The obtained results indicate that English AI-generated academic discourse demonstrates greater rhetorical flexibility due to broader training corpora and stronger representation within scientific databases. Uzbek AI-generated discourse, while structurally coherent, still reveals signs of corpus limitation including lexical repetition, syntactic predictability, and reduced argumentative variability. Nevertheless, both linguistic environments exhibit common tendencies toward pragmatic standardization and rhetorical smoothing.

In conclusion, the pragmalinguistic features of AI-generated academic texts reflect a transitional stage in the evolution of scholarly communication. Artificial intelligence systems increasingly reproduce the external architecture of academic discourse with impressive fluency; however, communicative authenticity, contextual sensitivity, and epistemological responsibility remain only partially simulated. The findings of this research suggest that future academic literacy will depend not merely on the ability to generate sophisticated texts but on the capacity to interpret, evaluate, and critically negotiate the pragmatic structures underlying algorithmically produced discourse.

Comparative analysis of English and Uzbek AI-generated academic discourses. The comparative investigation of English and Uzbek AI-generated academic discourses reveals not merely linguistic variation but also deeper differences connected with discourse tradition, corpus representation, pragmatic flexibility, and sociocultural models of scientific communication. Artificial intelligence systems produce academic texts through statistical processing of previously existing language data; therefore, the quality, diversity, and structural characteristics of available corpora inevitably influence discourse behavior in each language. As a result, English and Uzbek AI-generated academic writings demonstrate both universal pragmalinguistic tendencies and language-specific communicative peculiarities.

The analysis conducted within this research demonstrates that AI-generated academic discourse in both languages generally preserves the external conventions of scientific writing. Structural coherence, thematic continuity, terminological density, and formal stylistic organization are usually maintained with considerable consistency. Nevertheless, closer examination indicates that beneath this surface-level similarity there exist substantial divergences in pragmatic architecture, rhetorical adaptability, and communicative precision.

One of the most noticeable similarities concerns the algorithmic tendency toward standardized academic rhetoric. In both English and Uzbek AI-generated texts, discourse progression frequently follows predictable structural patterns. Introductions commonly begin with generalized statements regarding the significance of the topic. Literature-related sections employ citation-like constructions even in the absence of authentic references. Conclusions often summarize findings through formulaic evaluative expressions.

For instance, English AI-generated academic discourse repeatedly utilizes constructions such as “the present study aims to investigate,” “the findings reveal,” or “it can be concluded that.” Comparable tendencies are observable in Uzbek AI-generated academic writing, where formulaic introductory and concluding expressions are frequently employed to reinforce structural coherence and scholarly formality. At first glance, these constructions contribute positively to scientific organization. However, excessive recurrence gradually produces rhetorical monotony and stylistic predictability. Human-authored academic writing generally demonstrates greater discursive variability because individual scholars shape textual organization according to personal analytical habits, disciplinary conventions, and intellectual temperament. Interestingly, AI systems appear particularly inclined toward communicative symmetry. Paragraphs often possess balanced length, transitions are systematically organized, and argumentative sequences develop with mechanical regularity. Such precision can initially be

interpreted as evidence of linguistic competence. Yet experienced researchers frequently identify this very smoothness as an indicator of algorithmic authorship. Real scholarly discourse rarely evolves through perfect structural equilibrium. Human cognition naturally introduces selective emphasis, uneven elaboration, occasional digression, and interpretative hesitation.

The comparative data further indicate that English AI-generated discourse demonstrates considerably higher pragmatic flexibility than Uzbek-language output. This difference is not accidental. English-language models are trained on extensive scientific databases, peer-reviewed journals, conference proceedings, institutional publications, and educational repositories. Consequently, English AI-generated academic texts exhibit broader rhetorical variation and more stable disciplinary adaptation.

For example, when prompted to produce a linguistics-oriented article, English AI systems appropriately incorporate discourse markers associated with analytical caution, methodological framing, and theoretical positioning. Expressions such as “from a sociolinguistic perspective,” “within the framework of discourse analysis,” or “the data suggest a correlation rather than causation” are generally used contextually. Uzbek AI-generated discourse, by contrast, occasionally reproduces such structures through direct conceptual transfer rather than natural discursive adaptation. As a result, certain passages appear semantically accurate but pragmatically foreign to traditional Uzbek academic style.

In our opinion, this observation reflects a broader issue of corpus asymmetry. Uzbek academic digital resources remain significantly more limited than English-language scientific corpora. Many Uzbek academic texts available online are themselves translations or structurally influenced by Russian and English scholarly conventions. Consequently, AI-generated Uzbek discourse occasionally demonstrates hybrid rhetorical patterns where national academic style intersects with externally imported discursive models.

Another important distinction concerns pragmatic density. English AI-generated academic writing tends to rely heavily on implicit communicative mechanisms. Authorial caution, argumentative reservation, and critical positioning are frequently expressed through modal variation, lexical nuance, and syntactic layering. Uzbek AI-generated discourse, however, often prefers more explicit communicative signaling. Pragmatic intention is commonly articulated directly rather than indirectly negotiated.

For example, an English AI-generated sentence may state: “The findings may indicate a partial relationship between digital literacy and academic adaptability.” A comparable Uzbek AI-generated construction frequently appears in a more direct and less mitigated form, presenting the relationship as comparatively definitive rather than probabilistic. Although both formulations communicate similar conceptual content, the English version preserves stronger epistemic hedging, whereas the Uzbek construction demonstrates a relatively categorical mode of presentation.

This tendency can partly be explained through differences in academic communication traditions. Anglo-American scientific discourse historically prioritizes hedging, interpretative caution, and argumentative negotiation. Uzbek scholarly communication, influenced by Soviet academic conventions and local educational traditions, has often favored declarative clarity and structural directness. AI systems reproduce these tendencies because they internalize dominant patterns from training data rather than independently constructing communicative strategies.

At the level of cross-linguistic discourse organization, notable distinctions emerge in thematic progression and cohesion mechanisms. English AI-generated texts generally display stronger micro-level coherence. Sentences are interconnected through lexical substitution, referential continuity, and rhetorical sequencing. Uzbek AI-generated discourse sometimes maintains

thematic unity globally while exhibiting weaker local cohesion. Transitional expressions may appear repetitive, and conceptual links occasionally remain underdeveloped.

For instance, English academic discourse frequently employs a wide range of connective structures such as “however,” “nevertheless,” “in contrast,” “furthermore,” and “despite these limitations.” Uzbek AI-generated academic texts, by comparison, often demonstrate greater reliance on a narrower set of recurrent transitional markers used to maintain discourse continuity. Although such constructions remain grammatically acceptable, their repetitive deployment reduces stylistic flexibility and weakens pragmatic sophistication within academic communication.

Particular attention should also be devoted to modality distribution. Comparative analysis demonstrates that English AI-generated academic texts use epistemic hedging with greater frequency and contextual appropriateness. Modal verbs such as “might,” “could,” “may,” and “would” perform essential functions in regulating argumentative certainty. Uzbek-language AI outputs employ mitigation less systematically. In many cases, declarative structures dominate even when methodological caution would be academically preferable.

This asymmetry becomes especially visible in discussions involving educational outcomes or technological predictions. English AI-generated discourse tends to avoid unconditional claims. Uzbek-generated texts occasionally present interpretative assumptions as established conclusions. Such patterns may influence reader perception differently across linguistic environments. English academic readers generally expect moderated argumentative positioning, whereas Uzbek academic audiences often prioritize conceptual clarity and direct exposition.

At the same time, certain similarities between the two discourse systems should not be underestimated. Both English and Uzbek AI-generated academic texts demonstrate a strong tendency toward lexical standardization. Frequently repeated

academic phrases appear regardless of disciplinary specificity. Expressions functioning as discourse stabilizers are reproduced algorithmically because they possess high statistical probability within academic corpora.

Another shared feature involves rhetorical over-completion. AI-generated texts often attempt to resolve argumentative tensions too efficiently. Human academic reasoning usually contains unresolved complexities, methodological limitations, and interpretative ambiguity. Artificial systems, by contrast, frequently produce rhetorically closed discourse where every issue appears harmoniously integrated. In educational practice, this creates a deceptive sense of analytical completeness.

During the comparative analysis, several pedagogically significant tendencies were observed. Students interacting with English AI-generated texts often imitate syntactic complexity and advanced terminology without fully understanding conceptual implications. Uzbek-speaking students using AI tools in native-language academic writing frequently adopt translated discourse formulas that sound formally scientific but pragmatically unnatural. This tendency may gradually reshape academic writing culture itself.

For example, some Uzbek student papers generated partially through AI assistance contain phrases structurally modeled after English discourse patterns yet incompatible with natural Uzbek scholarly rhythm. Sentences become excessively long, nominalized, and terminologically saturated. While such texts appear “scientific” superficially, experienced educators immediately notice weakened communicative authenticity. In our pedagogical observations, this phenomenon is becoming increasingly widespread among graduate students preparing research articles in multilingual academic environments.

Another relevant issue concerns intertextuality. English AI-generated academic discourse demonstrates relatively sophisticated imitation of citation culture. References to “previous studies,” “existing literature,” or “earlier investigations” are integrated naturally into argumentative progression. Uzbek AI-generated discourse sometimes reproduces these citation patterns mechanically without establishing genuine dialogic interaction between sources and authorial analysis.

This difference is methodologically important because academic discourse is inherently intersubjective. Scientific writing does not simply present information; it negotiates intellectual positions within a disciplinary community. AI systems imitate this negotiation linguistically, but genuine epistemological engagement remains absent. Consequently, generated texts may preserve the external form of academic dialogue while lacking authentic scholarly interaction.

The evaluation of the philological potential of artificial intelligence therefore requires balanced interpretation. From one perspective, AI systems demonstrate unprecedented capacity for multilingual academic text production. They support linguistic accessibility, facilitate scientific communication, and assist students in mastering academic discourse conventions. Particularly in contexts where access to high-quality educational resources is limited, AI tools may contribute positively to academic literacy development.

Uzbek-speaking students, for example, frequently experience difficulties in English-language academic writing due to limited exposure to authentic scholarly discourse. AI systems can provide structural models, terminological guidance, and rhetorical templates that support educational advancement. Similarly, English-speaking researchers exploring Uzbek academic contexts may utilize AI-assisted translation and stylistic adaptation to improve intercultural scientific communication.

However, the philological potential of artificial intelligence cannot be evaluated exclusively through functional efficiency. Language represents not merely a technical instrument but also a cultural and cognitive phenomenon shaped by historical discourse traditions, social experience, and intellectual individuality. Artificial intelligence reproduces linguistic patterns statistically; it does not participate consciously in the epistemological processes underlying scientific creativity.

In our view, the central challenge for future philological research lies precisely here. The objective should not be to oppose human and artificial academic writing categorically, nor to romanticize traditional discourse practices uncritically. Instead, scholars must investigate how AI systems transform communicative norms, rhetorical expectations, and educational methodologies across linguistic cultures.

The findings of this comparative analysis suggest that English and Uzbek AI-generated academic discourses are converging structurally while remaining partially distinct pragmatically. English discourse demonstrates greater rhetorical diversification and contextual flexibility, whereas Uzbek discourse preserves stronger formal explicitness and structural directness. Both systems, however, increasingly exhibit signs of algorithmic standardization.

From a methodological perspective, the research employed comparative pragmalinguistic analysis, discourse interpretation, contextual modality assessment, and AI-generated corpus examination. Equivalent prompts were utilized across English and Uzbek outputs in order to minimize thematic variability. The analytical process focused on communicative strategy distribution, modality usage, lexical recurrence, argumentative organization, and pedagogical implications.

The obtained results indicate that the philological future of artificial intelligence will depend not only on technological sophistication but also on the quality of linguistic representation within multilingual corpora. Languages with extensive scientific digital infrastructure will inevitably demonstrate stronger AI discourse adaptability. Consequently, the development of high-quality Uzbek academic corpora becomes strategically important for preserving linguistic authenticity within emerging AI-mediated scholarly communication.

In conclusion, the comparative analysis of English and Uzbek AI-generated academic discourses reveals a complex interaction between universal algorithmic tendencies and language-specific pragmatic traditions. Artificial intelligence systems successfully imitate many formal characteristics of scholarly communication; nevertheless, communicative authenticity, contextual sensitivity, and intellectual intentionality remain unevenly distributed across languages. The results of this study confirm that future academic literacy will require not only proficiency in scientific writing but also critical awareness of the pragmlinguistic mechanisms underlying AI-generated discourse.

Conclusion

The conducted research demonstrates that the interaction between artificial intelligence and academic discourse has evolved beyond the level of technical language generation and entered the sphere of pragmlinguistic transformation. AI-generated academic texts in English and Uzbek increasingly participate in scientific communication, educational practice, and multilingual scholarly interaction. Nevertheless, the results of the study indicate that the linguistic fluency of such texts should not automatically be interpreted as evidence of communicative authenticity or epistemological reliability. Beneath the structurally coherent surface of AI-generated discourse, significant pragmatic asymmetries and rhetorical peculiarities remain observable.

The comparative analysis revealed that English AI-generated academic discourse demonstrates greater rhetorical flexibility, stronger modality variation, and more adaptive discourse organization than Uzbek-language outputs. This tendency is closely related to the unequal distribution of scientific corpora used during AI model training. English-language systems benefit from extensive academic databases, peer-reviewed publications, and institutional discourse resources. Uzbek AI-generated discourse, although increasingly coherent, still reflects certain corpus limitations through lexical repetition, syntactic predictability, and direct transfer of English rhetorical structures into Uzbek academic communication.

One of the central findings of the research concerns communicative intentionality. Human-authored scientific discourse is constructed through context-sensitive argumentation, interpretative caution, and disciplinary awareness. AI-generated texts imitate these mechanisms statistically rather than cognitively. Consequently, generated discourse often demonstrates rhetorical fluency without corresponding analytical depth. This discrepancy becomes particularly visible in the use of modality, hedging structures, and argumentative sequencing. The results of the analysis show that, artificial intelligence successfully reproduces the external architecture of academic writing but still encounters difficulties in maintaining proportional pragmatic balance across different communicative situations.

The study also confirmed that AI-generated academic discourse possesses strong persuasive potential. Readers frequently associate formal scientific style, terminological density, and syntactic complexity with intellectual authority. In educational contexts, this phenomenon may influence students' perception of academic quality. Many learners become capable of producing externally sophisticated texts while remaining insufficiently engaged with conceptual reasoning and methodological analysis. In our view, this

represents one of the most significant pedagogical challenges associated with AI-assisted academic writing.

At the same time, the research does not support categorical rejection of artificial intelligence within higher education. On the contrary, the findings suggest that AI systems may significantly contribute to academic literacy development when integrated critically and methodologically. Uzbek-speaking students working in English-language academic environments can utilize AI tools for improving structural organization, rhetorical adaptation, and disciplinary vocabulary acquisition. Similarly, multilingual researchers may employ AI-assisted discourse modeling to facilitate intercultural scientific communication.

However, the effectiveness of such integration depends upon pedagogical supervision and critical literacy formation. Artificial intelligence should function as an auxiliary communicative instrument rather than a substitute for scholarly reasoning. Therefore, one of the practical outcomes of the study lies in the necessity of developing AI-oriented academic literacy models within higher education institutions. Such models must combine linguistic competence, pragmalinguistic awareness, discourse evaluation skills, and ethical responsibility toward generated content.

The methodological analysis conducted throughout the research additionally demonstrates that pragmalinguistics remains highly productive for investigating contemporary AI-mediated communication. Traditional pragmatic categories such as modality, speech acts, communicative intention, and discourse coherence preserve their theoretical relevance even within algorithmically generated texts. Nevertheless, their interpretation requires partial reconsideration because AI systems simulate rather than consciously produce communicative intention. This distinction fundamentally changes the relationship between language, cognition, and discourse authenticity.

An especially important conclusion concerns the future development of Uzbek academic discourse within digital linguistic environments. The study indicates that the quality of AI-generated communication is directly dependent on the representativeness and diversity of national-language corpora. Consequently, the creation of extensive Uzbek academic databases, scientific corpora, and disciplinary linguistic resources becomes strategically significant not only for computational linguistics but also for preserving the stylistic and pragmatic individuality of Uzbek scholarly communication.

The conducted comparative analysis further confirms that AI-generated discourse is gradually contributing to the standardization of global academic rhetoric. English and Uzbek scientific texts increasingly demonstrate convergence at the structural

level, particularly in organizational patterns, citation simulation, and discourse sequencing. Yet pragmatic distinctions remain evident. English discourse preserves stronger epistemic mitigation and rhetorical flexibility, whereas Uzbek academic communication continues to exhibit more explicit and declarative communicative tendencies. This coexistence of convergence and divergence represents one of the most intriguing outcomes of contemporary multilingual AI discourse development.

From a broader philological perspective, the research suggests that future scientific communication will increasingly depend on the interaction between human interpretative capacity and artificial linguistic production. The essential task of modern academic pedagogy, therefore, is not to resist technological transformation mechanically but to ensure that analytical independence, intellectual responsibility, and communicative authenticity remain central components of scholarly practice.

The results obtained within this study may serve as a methodological basis for further investigations in pragmalinguistics, computational discourse analysis, AI-assisted academic literacy, and multilingual educational communication. Future research may focus more specifically on disciplinary variations in AI-generated discourse, longitudinal changes in student writing influenced by artificial intelligence, and the development of diagnostic criteria for distinguishing between authentic scholarly reasoning and algorithmically stabilized rhetorical structures.

Ultimately, the pragmalinguistic investigation of AI-generated academic texts reveals not only the capabilities of artificial intelligence but also the enduring complexity of human scientific communication itself. Language remains inseparable from cognition, context, culture, and intellectual intention. Even the most advanced AI systems can only approximate these dimensions statistically. The responsibility for meaningful, ethical, and intellectually grounded academic discourse therefore continues to belong to the human researcher, educator, and scholar.

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