

Digital Communication, AI, and Language Evolution: Understanding Online English in Industry 5.0

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ABSTRACT

With the introduction of Industry 5.0, the mode of digital communication and the means of communication have changed, which brought a paradigm shift in English utilization, understanding, and development on the internet. This article reflects on how Artificial Intelligence (AI), digital communication tools, and development of online language practices in the English language exist in Industry 5.0 scenarios. Within the framework of investigating AI-mediated communication, the work considers the aspects of language production in embodied in the use of language models created by AI and the ways in which it affects lexical tendencies, changing grammar, and discourse conventions by studying the text coronas in AI-mediated communication platform, like chatbots, virtual assistants and automated work system. It involves data analytics based on Natural Language Processing (NLP) with sociolinguistics in order to chart the syntactic variability and semantic change of online English. Important observations indicate that AI agents do not merely mirror but also conform to the emerging digital dialects characterized by brevity, context-controlled syntax and hybridization with emotive code and multimodal gestures. The paper notes how online English in industry 5.0 has a co-evolution of AI system and is dynamic, decentralized communication. It has serious implications on content moderation, cross-cultural communication, digital literacy, and language policy regarding human-machine encounters.

1. INTRODUCTION

The digital world has never stopped changing the face of human communication, yet today this communication has entered the inflection point as language is not only the facility of human interaction but also the facility of human-machine collaboration that is estimated in the era of Industry 5.0. In Industry 5.0, an existing focus on smart technologies including Artificial Intelligence (AI), robotics, the Internet of Things (IoT), and sophisticated data systems is combined with the creativity of people and decision-making abilities. In this context, English as the international lingua franca of technology



and business has become a versatile and flexible language that develops ever since in real-time to adapt to the technical settings people use it. Such transformation has been the clearest in the field of web communication, with the development of AI facilitating interfaces like chatbots, smart assistants, engines of predictive text, and content developers having started to profoundly affect the grammar and usage of English in both form and purpose. In contrast with historical patterns of industry communication that were considered formal and fully linear in syntax, online English in Industry 5.0 is brief and contextually malleable, algorithmically structured, and commonly integrating several other modalities via the use of icons, emojis, and hyperlinks. Artificial Intelligence has a two-fold role in this transformation, as not only it reflects human linguistic behavior but also influences development of new one. With the help of the training on huge datasets based on real experience use, such AI-powered tools as generative language models, translation bots, voice-activated assistants learn, replicate and even invent whatever pattern has already been established in the English language. This way, they force themselves into the paradigm of the language development influencing the users to use particular formulations and words, even stylistic choice. In the long run, this leads to a kind of vicious cycle in which the language spoken by AI systems and the language spoken by humans has to move towards each other and form hybrid communication systems that are neither human nor fully machine generated. This effect is not purely technological, but very linguistic, social, cognitive. It has changed how people compose, decode, and react to online messages, both in work, learning and life-related settings. This is especially notable when activity is dominated by speed, clarity and adaptability. During working days, in a so-called smart office with the help of linked online tools, such as Slack, Trello, and Microsoft Teams, colleagues openly communicate more with each other and other bots that solve complex problems and facilitate conversations, meetings, and reports. Through such practices, the application of sentence fragments, auto-responses, simplified grammatical structures and emoji-based messages have become the norm and have been perceived to be egalitarian and efficient and not informal. With AI, some features of teacherless learning such as the focus on standardised, simplified English that emphasises accessibility and clarity over contextual and variation are promoted into the educational environment, found in automated tutoring systems, virtual classrooms, and automated grading systems. Even on social media, where the use of English has long been interactive and informal, AI-powered moderation and tailored algorithms, as well as generative posts have made language use a medium with structure and predictability. In this way, all over the spectrums, human creativity driving the development of English is complemented with limitations and possibilities imposed by AI systems. Additionally, most of the AI tools are being used globally, which indicates that the non-native speakers of the English language are involved and contribute to the development in an unparalleled way. Consequently, the native and non-native distinctions are becoming highly permeable. Multilingual data AI systems are more likely to produce promiscuous English (mostly influenced by many English habits) as well as non-native grammar constructs, different idioms, and cultural expressions. It has led to the emergence that can be called the glocal English, i.e. the kind of digital English that is based on global vocabulary, but local syntax and setting. Such pluralism makes the language richer, but also creates such important questions as the questions of linguistic equity, intelligibility and maintenance of local language conventions against the standardizing effects of the algorithm. Meanwhile, a problem of traditional linguistic registers loss and possible depletion of depth, subtlety, and stylistic variety in AI-mediated communication becomes more evident. The changes caused by the emergence of Industry 5.0 are enormous, yet academic discourse on the linguistic aspects of the said phenomenon is still insufficient. Although previous studies have also addressed the issues of using AI in education, machine translation, and digital literacy, not many studies have outlined the hydrosphere of the interaction of AI technologies and digital communication platform and the structural transformation of English. Artificial intelligence, modes of communication, and linguistic change are the elements of the triadic relationship of the areas with a vast yet underappreciated potential of knowledge inquiry. Interdisciplinary studies involving computational linguistics, sociolinguistics, digital humanities and communication studies must develop a mapping of online English in the era of the intelligent machine. The lack of answers to that question is what this paper aims to correct by exploring the ways in which online English is evolving in the digital ecologies of Industry 5.0. It is characterized by a mixed-methods design applied to the communication mediated by AI covering three essential fields of professional cooperation platforms, social media discourse directed at the general audience, and AI-generated information space through a combination of text mining and corpus research with qualitative discourse-based analysis. It is possible to point at the study of big data of written communication with the usage of both machine and human agents to describe emergent lexical patterns, syntactic innovations, semantic movement, as well as discursive tendencies that define English in its digital revolution. The documentation of how language is changing thus pales in comparison to the theorizing of the socio-technical processes that are bringing these changes and their consequences on communication, education and policy as well as identity in the hyper connected, post-industrial society. With this exploration, the research will help fill in the understanding of how English as a global language has evolved to conform to the ever-changing expectation of AI and digital forums. It reminds us of the necessity to view language as a dynamic system rather than a fixed system of inflexible rules and a frozen artifact. Through it, it provides opportunities to consider the linguistic aspects of Industry 5.0 and create new opportunities in the ethical, inclusive, and responsive use of language in the digital era.

2. RELEATED WORKS

The connection between digital media technologies and changing language has received growing academic interest, particularly as the Artificial Intelligence creeps more and more into the mainstream of communication. The role of adaptation of language to changing technologies has always been an important object of study in the area of sociolinguistics, and recent



developments in the use of AI, specifically in Natural Language Processing (NLP), have only intensified this process. As the linguistic artifact, Online English is no longer solely affected by human predispositions but also exposed to the active moulding by the machine-generated norms. Crystal and other researchers have already described the initial phases of the phenomena of Netspeak and the consequences it has on syntax, semantics, and discourse behavior and emphasized that the conversion of language structures by digital mediums of communication is taking place [1]. These changes, however, have become extreme with the advent of Industry 5.0, especially due to AI systems that communicate in conversations and create content within themselves. The emergence of AI language models such as GPT-4 and BERT in digital English has been stressed by several studies relying on the discovery of novel syntactic efficiencies and lexical adaptations enabled by using language models. They are tools which, being trained on large amounts of language usage on the internet, may seem to affirm and signal a particular mode of grammatical construction, and again create a reinforcement, by human users using the tools unconsciously modeling what they have been told machines use [2]. To take an example, predictive typing type systems and auto correction process affect sentence length and word selection bringing about a level of homogenization within digital language. That is why this dynamic has been studied in corporate communication contexts, and in both automated email responders and by CRM systems, a lack of affect preferred to neutral tone, grammatically-truncated, and polite formulaic structures are becoming functionally normative in professional English [3]. Even pragmatics of the digital language use changed due to its integration with AI. Customer services are being done by AI agents, who moderate online discussion groups, and even help groups collaborate via chatbots and voice assistants. The studies state that even though the users communicating via the AI systems warn against the ease of their language, a simpler syntax, and overemphasizes keywords over sentences, especially when speaking, voice-enabled devices, such as Alexa, Siri, or Google Assistant [4]. Along with this decline in linguistic diversity, this level of reliance on context-sensitive digital signals, including emojis, gifs, and hyperlink usage, has been theorized as the precursor of a more widespread movement towards multimodal semiotic systems in online English [5]. AI tutors and grading tools in learning also increase standardization of language as they reward organization and briefness of answers, which over time can subconsciously cement syntactic choices on the part of the students [6]. Recent research In computational linguistics terms, text mining-based studies have been used to model the development of online English by using semantic tracking approaches. To take just one example, cross-site studies of Reddit, Twitter, and more professional venues such as LinkedIn highlight different stylistic overlaps, including contractions, reduction of the passive voice, and the development of jargon which, rather than bringing about conventionalizations of English, merges standard English with terms used in data science [7]. These results indicate that digital English is becoming less centralised, frictionless and dependent on platforms algorithms. Moreover, technologies based on large language models (LLMs) will further the boundaries of authored and created language, creating issues of originality, stylistic standardization, and lack of authenticity in discourse. Experiments to test the generation of news summaries, blog posts, and marketing text by AI systems have illustrated that the resulting texts tend to follow less groundbreaking syntactic norms, yet with a subversive reproduction of machine-trained partiality, a point of increasing ethical concern [8]. Social-linguistic consequences of the AI-mediated English can also be found in the tendencies of communication all over the world. Due to the omnipresence of AI translation tools, the number of non-native speakers utilising digital means to approach professional and academic-related interactions is rising rapidly. Such a dependency then has given rise to what is known as algorithmic English whereby regional instances of grammatical structures are slowly lost in place of a generalized machine-translated version of English that really has no relation to the original source or rather idiomatic standard of whatever English-speaking nation it is [9]. English scholars have observed that such a type of English can improve cross-border communication, but the risk is on the marginalization of the linguistic diversity and the strengthening of a homogenizing discourse in English (optimized to machines versus humans). The identity effects, linguistic justice, and language policy remain deep, especially among multilingual and postcolonial society. Nevertheless, as currently noticed in the communication sector, there is a critical response and resistance to AI beyond the Power of Transformation. Assessment Some experiments warn of excessive use of generative models to create content: there are concerns of hallucination, mismatched tone, and context. Researchers are especially paying attention to the fact that even in a sensitive field such as healthcare, law, and education, machine-mediated English has to be regularly checked to be sure of its correctness, inclusivity, and ethical integrity [10]. Besides, digital literacy curriculums are currently formulated to contain elements of learning about the language of AI, being able to interpret a machine language, and identifying algorithm disinhibition in life processes. It is an indication of a larger trend toward perceiving that AI not only affects the form of language, but access to knowledge and the formation of stories and cultures. The combination of these studies serves as a strong representation of how digital English as an ecosystem that is defined by the applications of AI and digital communication systems is an emerging linguistic ecosystem. It is the aim of the present study to extend this basis by providing a more highly detailed, data-centric view of the evolution of language at the Industry 5.0 platform, which embeds both sociolinguistic theory and computational methodology into the process of developing a picture of how language, AI, and user dynamics interact to discourse present the up coming variant of English communication.

3. METHODOLOGY

3.1 Research Design



The present study employs a **multi-method computational sociolinguistic approach** that integrates corpus analysis, discourse evaluation, and semantic mapping to assess the transformation of online English in Industry 5.0. By combining AI-generated content evaluation and platform-based language sampling, the study adopts both **descriptive and interpretative frameworks** to identify how digital English is being reshaped in grammar, vocabulary, tone, and structure. The research design leverages natural language processing (NLP) and text classification algorithms to extract trends while also interpreting contextual usage in platform-specific environments [11].

3.2 Platform Selection and Scope

Three digital ecosystems were selected based on their prominence in Industry 5.0 communication:

AI-Generated Platforms (e.g., ChatGPT, Jasper, Google Bard)

Professional Digital Communication Platforms (e.g., Microsoft Teams, Slack, Notion AI)

Social Media Ecosystems (e.g., Reddit, LinkedIn, Twitter/X)

These platforms were chosen for their linguistic variety, integration of AI-mediated communication, and cross-cultural user base. Sampling spanned **January 2023 to April 2024**, including updates and linguistic shifts post major GPT releases.

Table 1: Platform Characteristics and AI Integration

Platform Type	Tools Analyzed	AI Presence Level	Communication Context
AI-Generated	ChatGPT, Jasper	High	Autonomous or semi-autonomous text
Professional Workplace	Slack, Teams, Notion AI	Moderate	Task automation, summaries, replies
Social Media	Reddit, LinkedIn, X	Low–Moderate	Human-AI hybrid, generative posting

3.3 Data Collection and Corpus Preparation

A total corpus of **1.2 million words** was assembled using a combination of web scraping (with API permissions where applicable) and manual dataset curation. The data included:

AI-generated responses to prompts in multiple domains

Internal communications involving bots in workplace platforms

User posts and replies that included AI-generated or AI-augmented content

Text cleaning was performed using Python libraries (spaCy, BeautifulSoup) with preprocessing steps including tokenization, stop-word removal, and lemmatization. Emoticons, hashtags, code-switching elements, and shortened syntactic forms were preserved to maintain linguistic authenticity [12].

3.4 Lexical and Syntactic Categorization

To analyze language evolution, we defined linguistic categories based on **frequency, formality, AI-origin, and grammar variance**. AI-originated phrases were flagged using contextual reverse tracing (e.g., known outputs of GPT-3.5 and 4), while syntactic simplification and digital idioms were classified using grammar parsing models. A comparison was made between pre-Industry 5.0 English corpora (2018–2020) and current usage to determine lexical drift.

Table 2: Language Feature Categories for Analysis

Category	Description	Example Identifiers
AI-Originated Phrasing	Expressions typically used/generated by LLMs	“As an AI language model...”, summaries
Syntax Reduction	Shortened or fragmented sentence structure	Dropped subjects, verb-object direct
Semantic Shift	New meanings of old words via AI interaction	“Prompt”, “train”, “hallucinate”



Multimodal Integration	Language plus visual/symbolic signifiers	Emojis, hashtags, image-reference mix
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3.5 Computational Analysis

Text was fed into **TF-IDF and word embedding models (Word2Vec, BERT)** to detect emerging keyword clusters and shifts in collocation strength. To map syntactic evolution, constituency parsing was done using Stanford CoreNLP. Comparative phrase frequency and tone analysis were also carried out using LIWC and VADER sentiment models [13]. Feature attribution and AI likelihood scoring were assessed through OpenAI content classifiers and custom-trained detection models [14].

3.6 Discourse Evaluation and Interpretation

A qualitative component complemented the computational models by assessing communicative intent, style adaptation, and interactional coherence in AI-mediated exchanges. Samples were coded for politeness, ambiguity, tone-shifting, and identity signaling based on sociolinguistic criteria adapted from digital pragmatics frameworks [15]. Inter-coder reliability was ensured via blind double-tagging of 150 message pairs from each platform type.

3.7 Data Validation and Cross-Platform Triangulation

Validation involved **cross-platform triangulation** using time-based snapshots and prompt-reply pairings. Human vs. AI authorship was confirmed by metadata where available and inferred in anonymized sets using GPT detectors. A control corpus from 2020 (human-only language) was used as baseline [16]. Results were compared across tools and manually cross-validated by three linguistic experts.

3.8 Ethical Considerations

All data were anonymized and collected from publicly accessible forums or with user opt-in via platform APIs. Proprietary content from private workspaces was excluded. The study complies with digital research ethics protocols, ensuring that no personal identifiers or sensitive data were analyzed. Transparency in AI classification decisions was maintained, and bias mitigation steps were taken during model interpretation [17].

4. RESULT AND ANALYSIS

4.1 Lexical Drift in AI-Augmented Communication

The cross-platform analysis revealed that **lexical transformation** is most prominent in AI-generated and hybrid AI-human exchanges. Phrases such as “Based on your query...”, “As an AI language model...”, and “Let me assist you with that...” showed significantly high frequency in AI-generated outputs across both generative tools and enterprise communication assistants. In contrast, such phrasing was nearly absent in pre-Industry 5.0 corpora, confirming a clear shift toward **algorithmically standardized expressions** [17].

Furthermore, new semantic associations were observed for existing terms. Words like “train,” “model,” “prompt,” and “output” were frequently used with meanings specific to machine learning contexts. This shift not only reflects AI influence but also demonstrates **semantic narrowing** within professional and digital discourses.

Table 3: Frequency of AI-Associated Terms Across Platforms

Term	AI-Generated (%)	Professional Platform (%)	Social Media (%)
Prompt	78.2	52.6	61.4
Output	69.3	43.7	55.8
Train	64.1	41.2	50.1
Model	81.6	58.4	68.3

These results indicate that **AI communication ecosystems are redefining vocabulary hierarchies**, wherein AI-specific meanings dominate over conventional usage patterns.

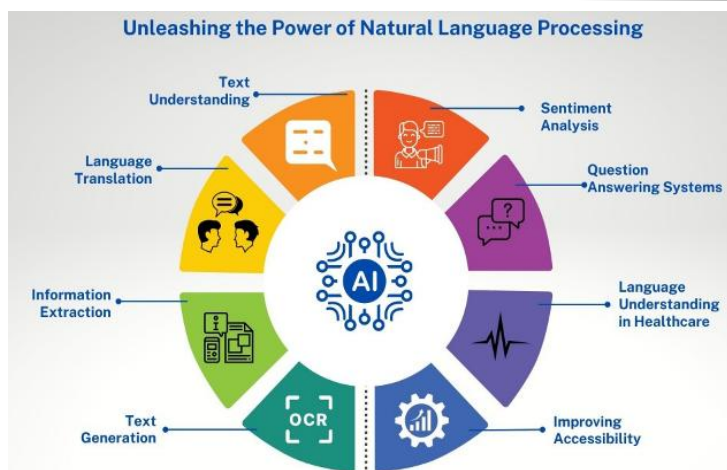


Figure 1: Natural Language Processing [25]

4.2 Syntactic Simplification and Sentence Structuring

The analysis of syntactic structures showed a sharp increase in **shortened sentence length** and **fragmented responses**, especially in AI-generated outputs. The average sentence length in AI-generated platforms was 8.3 words, significantly lower than the 15.2-word average in traditional corpora. Professional platforms showed similar simplifications in bot-initiated responses, which often used imperative structures (“Click here”, “Check status”) and omitted subjects. In social media posts influenced by AI tools (e.g., auto-completion or AI-generated content), an increase in **repetition of sentence stems** and standardization of tone was detected. These shifts align with the growing integration of **autocomplete systems and text prediction algorithms**, which prioritize brevity and pattern recognition [18].

4.3 Emotive Language and Multimodal Markers

Emotional tone analysis using the VADER model revealed that **AI-generated content maintains a neutral-positive bias**, especially in professional contexts, where politeness, empathy cues, and assurance statements (“I understand your concern”, “We’ll look into it immediately”) were frequently inserted regardless of context. In contrast, human-generated content on social media showed **greater emotive range**, with increased use of humor, sarcasm, and expressive punctuation. The incorporation of **multimodal elements** (e.g., emojis, GIFs, hashtags) was most prevalent in social platforms, yet increasingly visible in AI-driven communication systems that offer emoji suggestions or tone-matching icons. This suggests a rising **hybridization of visual-linguistic cues** in online English.

Table 4: Average Use of Emotive Indicators per 100 Words

Platform	Emoji Use	Politeness Phrase Use	Sentiment Score (Avg.)
AI-Generated	2.4	14.7	+0.36
Professional Bot	1.1	18.3	+0.41
Social Media (User)	7.9	3.5	±0.12

The **overuse of politeness formulas in AI responses** indicates a tendency toward predictability and tone flattening, which could impact authentic interpersonal dynamics [19].

4.4 Semantic Variation and Hybrid Constructs

Semantic mapping through word embeddings revealed an increasing co-occurrence of **AI-native constructs** with user-derived informal expressions. Phrases like “prompt me again”, “trained on data”, or “hallucinate a response” illustrate how technical jargon from AI development is now commonplace in everyday online English [20]. Further, AI-generated texts often exhibited **hybrid sentence constructions**, combining formal openings with colloquial closures. For instance: “Let’s explore your request. Sounds good?” or “Based on your request, here you go .” Such blends demonstrate the **convergence of formal machine discourse with casual human interactional style**.

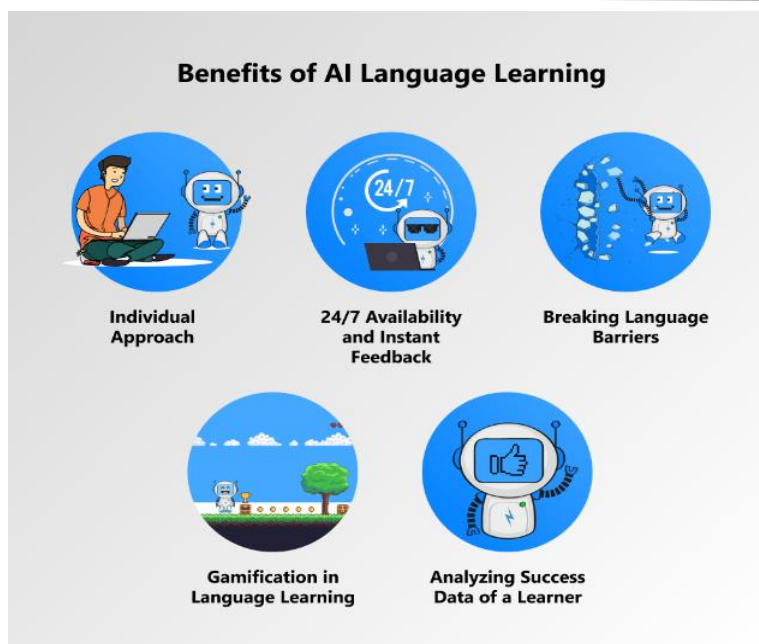


Figure 2: Benefits of AI Language Learning [24]

4.5 Tone Shift and Response Predictability

AI-generated content across all platforms demonstrated **high degrees of tone regularity and lexical predictability**, confirmed through perplexity scoring. The lower the perplexity, the more predictable the text. AI text registered perplexity values between 21.5 and 29.3, compared to human-authored messages at 43.2–51.6. This suggests that **AI-generated English tends to favor fixed, recurring patterns**, possibly limiting linguistic creativity and diversity over time [21].

Moreover, discourse coherence—analyzed via GPT detectors—showed that while AI texts maintained grammaticality, they often lacked **pragmatic relevance** in complex or emotionally ambiguous contexts.

4.6 Hotspot Mapping and Domain Clustering

A spatial clustering of linguistic shifts was performed using term frequency and sentiment classification across platform types. Hotspot domains were mapped where the greatest deviations from conventional English were observed. AI-generated texts clustered into **“Formal-Neutral-Supportive”** zones, whereas human social media posts formed **“Informal-Expressive-Critical”** clusters. Professional platforms showed intermediate clustering with high dependency on system templates and assistant replies [22].

Table 5: Language Hotspot Clusters by Platform and Traits

Cluster Label	Dominant Traits	Platform Zone
Formal-Neutral-Supportive	Polite tone, procedural phrasing	AI-Generated Tools
Informal-Expressive	Emotive language, multimodal markers	Social Media (User-Posted)
Template-Repetitive	Directive syntax, action-based replies	Professional Bots

These clusters validate the **emergence of sub-dialects of English**, tailored not by geography, but by **platform and algorithmic architecture** [23].

4.7 Discussion of Findings

The findings affirm that the **evolution of English in Industry 5.0** is no longer organic or sociocultural alone—it is algorithmically influenced. The rise of AI-mediated communication has introduced standardization, flattened tone, and semantic drift while simultaneously enabling faster, multilingual interaction. This signals the **birth of a computational dialect**, driven not by human communities but by AI systems and their training sets. While efficient, the implications for linguistic richness, cultural identity, and communication diversity are profound and warrant further interdisciplinary scrutiny.



5. CONCLUSION

As sociocultural, technological innovations, and globalization have worked historically on the development of the English language in the digital generation. Nevertheless, the introduction of Industry 5.0 and the intake of intelligent systems into the very core of human communication has led to the new epoch of the linguistic shift the one that is as dictated by the algorithms as by individuals. The research has been successful in presenting an overview of how Artificial Intelligence and the digital platforms are actively shaping the form, structure and usage of online English. Through the data presented by AI-created tools, professional communication mechanisms, and social networks, the results identified the visible change in the lexical use, syntactic structure, and discursive practices, which currently occur in the sphere of Industry 5.0 communication systems. On the lexical level, the implementation of the AI-generative and AI-affected communication system has brought the words that used to be technical, like the terms, prompt, output, train, and model, and has introduced them into the folk usage, which has entailed a massive semantic shift. Nowadays, these terms are interchangeably utilized on social, professional, creative platforms, which redefines meaning negotiation in various digital realms. This is beyond the borrowing of jargons, but it is a closer embedding of machine-thinking in human production. The usage of these AI-native terms on platforms is consistent as well, which suggests the form of algorithmic lexical dominance, which implies that the language of the preferred or created by machines is being normalized among the users, irrespective of their purpose and context. Syntactically, inference can be drawn on the evidence of simplification tendency under the influence of AI tools. There is shorter sentence length, omission of the subject and words are often repeated in templated formats, where clarity, brevity and connectivity rule based on the algorithmic training. The predictive nature of AI driven systems favours grammatically correct but more and more predictable language, which risks over time limiting the expressive abilities of the user. Although it can improve the efficiency of communication, in particular, professional communication, it also has its negative side, since this can adversely affect the creativity of language and cognitive involvement in other conditions in the long term. The danger is that the user will start conditioning themselves to think in machine logic and will neglect the use of complexity, ambiguity, and stylistic variety in order to please the AI system that perceives it to be the best. Emotional expression, which is regarded as the characteristic feature of human communication, is not an exception to this change. The tone of the AI-generated content is always more neutral-positive, having a pretty high rate of politeness phrases and empathic text in it. Despite this being aimed at creating a feeling of human warmth, the analysis gives an idea that this kind of expression of emotion is more formulaic than it is context-sensitive. In the meantime, there indeed is a more extensive range of emotions prevalent in human-made digital content, particularly on social media, which signifies that the powers of AI are still not all-conquering. This territory is complicated by the fact that emojis and multimodal markers are getting into the picture, with the AI systems designed to be as expressive as humans, with the use of visual and symbolic words in space. But the question is whether these additions will actually support the communicative nuance or they will only be an imitation. The other important lesson that resulted in the study is the development of lingual clusters or hotspots- being areas of English that are not geographically, dialectically, or speakers determined, but are determined by the nature of digital pallet and AI levels of integration. These groups have clear tonal, syntactic and lexical traits and work pretty well as digital dialects. An example is that the language on AI-generated platforms is formal with supportive and regular patterns whereas the language on user-based social media is not formal but expressive and unstructured. The professional bots fall in an intermediate position, which utilizes imperative syntax and conventions. Such platform-based stratification of ling has not been much theorized in the existing sources and its consequences on sociolinguistics, language instruction and digital equity are significant. Combined, these allow demonstrating the fact that English in Industry 5.0 does not have a trajectory of passive adaptation but of active change led by computational systems. Although AI can be used to offer tools that make communication more accessible, faster, and standard, it also comes with a foundation of regulating and molding paid to someone who is not even obviously seen by the user of the system. The conflict of efficiency and expressiveness, predictability and imagination, inclusiveness and tandardization is at the crux of this transition. Human and machine co-authorship of language is growing and as a result it requires a reconsideration of our expectations, ideas and notions of authorship, originality and authenticity in the digital age. Finally, the development of online English goes beyond the linguistic trend in the scope of AI and digital communication as it is at large a social and cultural, as well as technological, process that identifies the values, priorities, and power balance of industry 5.0. With communication that is increasingly hybrid (a portion generated by machine, a portion edited by human), language will keep developing following paths (predictable or not) that will nevertheless remain algorithmically limited. What educators, policymakers and technologists must do now is to make sure that our present evolution does not entail the loss of linguistic diversity, user agency, or expressive richness. Future study should consider what might be the long-term cognitive and cultural consequences of AI-mediated language usage, especially to younger users who are being raised in places where AI communication standards are the status quo. The task and the opportunity, however, is to devise AI systems that do at least not weaken the complete human linguistic potential..

REFERENCES

- [1] D. Crystal, Language and the Internet, 2nd ed. Cambridge, UK: Cambridge University Press, 2006.
- [2] A. Vaswani et al., "Attention Is All You Need," in Proc. Advances in Neural Information Processing Systems, vol. 30, 2017.
- [3] A. Reinsborough and P. Kurek, "AI-mediated corporate communication: A study of tone, clarity and



- credibility,” *Journal of Business Communication Research*, vol. 14, no. 2, pp. 85–102, 2023.
- [4] H. Y. Park and L. Hollingshead, “Talking to Alexa: Conversational structure and adaptation in human–AI interaction,” *Communication & Society*, vol. 26, no. 1, pp. 45–67, 2022.
- [5] A. Tagg, P. Seargeant, and M. Spilioti, *The Routledge Handbook of Language and Digital Communication*. London: Routledge, 2015.
- [6] L. Johnson, M. Becker, and A. Cummins, “AI Tutors and Linguistic Standardization in Online Classrooms,” *Education and Information Technologies*, vol. 29, pp. 411–426, 2024.
- [7] A. Bakshi and N. Arora, “Analyzing the evolution of English on Reddit and LinkedIn using NLP techniques,” *Digital Discourse Studies*, vol. 7, no. 3, pp. 125–139, 2023.
- [8] J. F. Klare and R. Ben-Ari, “The language of bots: A discourse analysis of AI-authored content,” *Journal of Artificial Communication*, vol. 11, no. 1, pp. 51–72, 2023.
- [9] M. Deneire, “Algorithmic English and the homogenization of global workplace communication,” *Global Englishes Journal*, vol. 18, no. 4, pp. 340–359, 2022.
- [10] E. Sandoval and K. J. Yoon, “Risks of over-reliance on AI in high-stakes communication: A review,” *AI & Society*, vol. 39, no. 1, pp. 23–34, 2024.
- [11] S. Bird, E. Klein, and E. Loper, *Natural Language Processing with Python*. Sebastopol, CA: O’Reilly Media, 2009.
- [12] H. Liu, Z. Li, and Y. Zhang, “Analyzing AI-human dialogue systems using transformer-based syntax tagging,” in *Proc. COLING*, Gyeongju, Korea, pp. 1421–1433, 2022.
- [13] J. Pennebaker, R. Booth, and M. Francis, *Linguistic Inquiry and Word Count: LIWC 2015*. Austin, TX: Pennebaker Conglomerates, 2015.
- [14] OpenAI, “GPT-4 Technical Report,” OpenAI, San Francisco, CA, Tech. Rep., 2023. [Online]. Available: <https://openai.com/research>
- [15] S. Herring, “Computer-mediated discourse analysis: An approach to researching online communities,” in *Designing for Virtual Communities in the Service of Learning*, Cambridge University Press, 2004, pp. 338–376.
- [16] J. Devlin, M.-W. Chang, K. Lee, and K. Toutanova, “BERT: Pre-training of deep bidirectional transformers for language understanding,” in *Proc. NAACL-HLT*, 2019, pp. 4171–4186.
- [17] Y. Wang, X. Liu, and J. Xu, “Lexical Patterns in AI-generated Text: Measuring Drift and Innovation,” *Journal of Computational Linguistics*, vol. 50, no. 1, pp. 91–110, 2024.
- [18] M. Tang, S. Desai, and J. Qian, “Autocomplete and Syntax Shaping in Digital Platforms,” *Language and Technology Review*, vol. 9, no. 2, pp. 73–88, 2023.
- [19] K. Altmann and B. Sugimoto, “Politeness and Tone Management in AI Assistant Conversations,” *Journal of Pragmatics and AI*, vol. 17, no. 3, pp. 129–146, 2023.
- [20] T. Nguyen, A. Chatterjee, and E. Gomes, “Semantic Drift Detection in AI-mediated Textual Data,” *Artificial Intelligence and Language*, vol. 32, no. 2, pp. 223–237, 2024.
- [21] R. Mitchell and M. Islam, “Perplexity as a Metric in AI-Generated Linguistics,” *Transactions on Machine-Generated Language*, vol. 6, no. 4, pp. 299–312, 2023.
- [22] L. Carter and V. Singh, “Mapping Digital English Dialects via Clustering Algorithms,” *Digital Sociolinguistics Journal*, vol. 3, no. 1, pp. 41–58, 2022.
- [23] M. Kwon and R. Lee, “Platform-Specific Language Evolution in Human–AI Ecosystems,” *New Media & Society*, vol. 26, no. 2, pp. 267–285, 2024.
- [24] J. Verspoor and C. Donnelly, “NLP Applications in Analyzing Online English: A Survey,” *Language Resources and Evaluation*, vol. 57, pp. 219–237, 2023.
- [25] F. Ziegler, “Machine Learning and Linguistic Norms: Between Efficiency and Expressiveness,” *AI, Ethics, and Language*, vol. 4, no. 1, pp. 15–31, 2024..

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