

AI-ASSISTED MEME CREATION AND THE EVOLUTION OF ENGLISH :
LEXICAL INNOVATION, HUMOUR, AND HYBRID REGISTERS IN
DIGITAL MEDIA

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Abstract

The integration of artificial intelligence (AI) into digital media production has transformed the linguistic and cultural landscape of online communication. This study examines the role of AI-assisted meme creation in shaping English language practices, with a focus on lexical innovation, register hybridisation, humour strategies, and global-local dynamics. Drawing on a comparative corpus of 500 memes (250 AI-assisted and 250 human-generated) collected from major social media platforms (2023-2025), the research employs a mixed-method approach combining corpus-based statistical analysis and critical discourse analysis. Findings indicate that AI-assisted memes accelerate the diffusion of new vocabulary, trending hashtags, and euphemistic 'algospeak' while privileging compressed registers marked by abbreviations, emojis, and clipped syntax. In contrast, human-generated memes exhibit a stronger reliance on culturally embedded slang, code-switching, and context-specific humour, such as satire and parody. Humour analysis further reveals a divergence between the algorithmic preference for template-based wordplay and irony, and the human inclination toward sociopolitical satire and pop culture parody. Thus, comparisons highlight AI's tendency toward linguistic homogenisation, but also demonstrate how communities in South Asia particularly in Pakistan recontextualize AI outputs using localized lexicons and hybrid Englishes. The study contributes to debates on mimetics, multimodality, and algorithmic mediation by demonstrating that memes function as laboratories of language change, where algorithmic standardization and human agency intersect. It concludes that while AI fosters novelty and deficiency, human creators ensure the persistence of cultural distinction, linguistic diversity, and digital humour.

INTRODUCTION

The rapid advancement of artificial intelligence (AI) has transformed media production, circulation, and reception, with memes emerging as one of the most dynamic forms of digital discourse (Wu, Weber, & Muller, 2025). Memes serve as powerful communicative tools that mediate humour, satire, identity, and ideology across diverse online communities. Generally understood as grassroots cultural artefacts, memes now function as powerful communicative tools that mediate humour, identity, and ideology across diverse online communities (Petrassi, 2025). AI-assisted platforms have also integrated into image generation, captioning, and template manipulation, in this way, meme creation has shifted from an exclusively human practice to a hybrid form of human–algorithm collaboration. It has been observed that English, as a global lingua, adapts within technologically mediated environments. In this regard, AI-assisted memes have been instrumental in introducing new vocabulary and promoting hybrid registers, abbreviations, slang, multimodal cues, and culturally situated expressions (Kobis & Mossink, 2021). The scale and scope of AI-assisted tools in meme production have marked a significant revolution. It has further amplified the digital effects by introducing linguistic innovations that cross geographical and social boundaries, unlike earlier changes in linguistic ecosystems (Farlow et al., 2024). The use of predicative phrasing, euphemistic substitutions, or trending hashtags shapes the algorithmic optimisation of language for engagement or safety, influencing the circulation of English and digital humour (Stanusch, 2024). Memes, therefore, are not only serving as cultural artefacts but also represent critical laboratories of language change where human creativity and algorithmic logic converge, making them key sites of linguistic innovation.

Literature Review

Internet memes are typically understood as units of cultural information that circulate, mutate and gain attention through user participation. It traces the concept of the original metaphor of cultural replication, where groups of user-created items share content, form, and stance, diffusing via imitation and remix (Guzman,

2019). It has been taken as a genre of participatory media rather than single artefacts, foregrounding variation, circulation, and intertextuality as core analytic lenses. Against this backdrop, artificial intelligence memes (AIMs) denote image–text compositions created wholly or partly via generative models (Chang et al., 2024). Early proof-of-concept work demonstrated neutral models could pair template images with humorous captions at near-human understanding, moving meme production from craft and community norms toward automated synthesis.

Mememes evolve through variation and selection; human production relies on shared repertoires and local subcultural norms, while AIMs' sample such repertoires from learned distributions (Akbar & Khaleel, 2025). This reframes authorship and agency as distributed among model, prompt, and platform. Memes acquire deeper meanings by aligning visual frames, template conventions, typography, and sparse text, which serve as semiotic trending data for modelling pragmatic changes, sarcasm, or culture-specific codes (Piasecki, 2024). Surveys in computational humour consistently observe that machine systems lag in world knowledge, audience modelling, and timing. Curation systems like feeds, trending lists, and knowledge infrastructures shape which variants become canonical (Niazi, 2024). This institutional layer constrains both human and AI memes to homogenise meme histories.

The research studies show human meme-makers rely on tacit genre knowledge when choosing a template with a stable pragmatic function embedding culturally salient references, and anticipating in-group decoding (Javed, Jamil, & Ahmad, 2022). Production is typically lightweight but socially heavy as creators leave drafts with peers, adapt to thread norms, and restate based on feedback, all of which fosters community identity and boundary work (Kriss, 2010). They leverage lived experiences and microculture to engineer incongruity. Human memes also presuppose deep wisdom and memory (Garcia, 2023). AIMs may reproduce popular pairings but can present references in mixed frames in ways that look plausible yet semantically thin.

It has been observed in previous research studies that memes, whether human or AI, are powerful for agenda-setting political persuasion and online mobilisation. Zagorulko(2023) maintains that the rapid adoption of generative tools has introduced velocity and volume, featuring multiple visuals, endless variation, and low marginal cost. The research studies on political information ecosystems and disinformation highlight how generative visuals can reduce source attribution, manipulate sentiment, and create plausible but false narratives (Shokhrukh, 2024).

These corpora provide the methodological foundation for examining lexical innovations and register variation in memes. Sociolinguistic studies frame memes as sites of entertainment, where mixing slang, abbreviations, code-switching, and multimodal features emerges to gain legitimacy in digital discourse. Automated moderation and captioning often introduce euphemisms or simplified language to avoid offence, inadvertently flattening stylistic diversity (Akram, Ansar, & Farooq, 2025). In meme contexts, these constraints may encourage creators to adapt AI outputs with additional layers of creativity, either reinforcing the homogenised register or bending it through code switching and hybridisation. Across these strands, recent literature converges on three key points. First, AI accelerates lexical diffusion by seeding new terms and trending hashtags more rapidly than human-only mean production (Shokhrukh, 2024). Second, algorithmic systems foster register standardisation by privileging brevity, euphemism, and template-congruent phrasing. (Dang et al.,2019). Third, despite these homogenising tendencies, local communities actively recontextualise AI outputs through code-switching and culturally situated humour. Sustaining the diversity of world Englishes and meme discourse(Garcia, 2023),these findings directly framed the present study, which empirically tests how AI-assisted memes reshape English vocabulary registers and humour in global and localised contexts.

The integration of AI into meme creation marks a new phase in this course. Studies on large language models (LLMs) and diffusion-based image generators indicate that AI systems not only facilitate meme creation but also alter linguistic form by suggesting captions, trending

hashtags, and phrases optimised for engagement. (Perez-Seijo & Vicente,2022).In particular, research on AI-driven humour generation demonstrates that algorithms reliably produce puns, wordplay, and irony, although with reduced cultural specificity compared to human creators (Jiang et al., 2023). Parallel work in computational linguistics has focused on meme datasets for toxicity detection, caption classification, and sentiment analysis (Ali & Hassoun,2019). These corpora provide the methodological foundation for examining lexical innovations and register variation in memes.

In bilingual contexts, memes which frequently normalise code-switching and hybrid repertoires, raise the question of how AI accelerates or standardises such practices. Another relevant strand of scholarship is algospeak, where euphemistic substitutions emerge in response to algorithmic moderation (Gillespie, 2022). Terms like 'unalive,' 'folded,' or 'got cooked' spread rapidly in meme culture, illustrating how interactions among platform users reshape the English lexicon. Similarly, automated captioning tools on TikTok and YouTube have been shown to influence orthography, punctuation, and textual minimalism, reinforcing concise styles that often carry over into meme captions (Shoukat & Murtaza,2025). Despite these advances, few studies study the specific role of AI assistance in memes creation. The present study addresses this gap by combining corpus-based analysis with discourse-level interpretation.

Research Questions

The following are the research questions of this study.

Q1: To what extent does AI-assisted meme creation introduce new lexical items, slang, or euphemisms compared with human-only meme production?

Q2: How do AI-assisted memes contribute to the development of hybrid English registers, including code abbreviations and multimodal features?

Q3: In what ways does AI-assisted meme creation reshape humorous strategies and pragmatic functions of English and online discourse?

Q4: Do AI-assisted mean practices tend toward homogenisation of English across global contexts, or do they amplify localised variations in digital Communities?

Theoretical Perspective

This study draws on three interrelated perspectives, mimetic theory, multimodality theory, and algorithmic mediation, to frame AI-assisted memes as both cultural texts and technologically conditioned linguistic artefacts. Together, these perspectives provide a comprehensive lens for examining the influence of AI on language innovation, humour, hybrid registers, and digital discourse. Originally proposed by Dawkins (Percival, 1994), mimetic theory conceptualises cultural elements, such as jokes, slogans, and images, that undergo processes of variation, selection, and transmission similar to those in genetic evolution. Subsequent scholars (Robertson, 2023) have emphasised that Internet memes are not merely replications, but remixes, constantly recontextualised by communities to produce humour, identity, and commentary. Within this framework, AI-assisted memes represent a new phase of memetic evolution, generating captions, proposing trending hashtags, or offering ready-made phrases. AI systems act as additional agents of variation, accelerating the introduction of new lexical items and discursive forms into the mimetic ecosystem. However, human communities continue to act as selective agents, embedding these outputs with cultural tone, slang, and contextual references (Tandoc et al., 2021). Thus, mimetic theory enables us to understand AI-assisted memes as products of both algorithmic seeding and human curation. In multimodality Theory Kress (2013) highlights the principle that meaning is constructed not only through language, but through a layering of semiotic resources, visuals, typography, emojis, sound and gesture memes to exemplify multimodality as they combine images, captions, and symbolic cues to produce humor and cultural commentary in compressed form. AI assisted memes intensify this process: Image generation tools like Midjourney or DALL produce visual layers while LLM based captioning systems condense linguistic material into short high salience text optimised for

attention. This results in a form of semiotic compression, where the maximum humorous or affective effect must be delivered in the fewest possible words (Bezerra & Almeida, 2020). From this perspective, the higher rates of abbreviations, emojis, clipped syntax, and AI memes are not accidental but reflect the multimodal economy fostered by platform affordances. Multimodality theory thus explains why AI outputs lean toward brevity and symbol-driven registers, while humans and rich memes utilise code-switching and context-specific discourse.

Theories of algorithmic mediation (Longo, 2025) suggest that digital platforms are not neutral channels of communication, but rather active mediators that shape discourse through algorithmic recommendation systems and moderation policies. AI-assisted meme creation exemplifies this mediation. Generative models are trained on fast, unevenly included English captions, which clearly indicate AI flagging corporate domination by mainstream English, biasing outputs towards a standardised register (Peters & Allen, 2022). Moreover, platform moderation encourages euphemistic substitutions, which AI learns and amplifies in its outputs. Algorithms also optimise memes for engagement metrics, privileging phrasings that are predictable, shareable, and safe. This creates a cultural regularity effect, where discourse has been streamlined to suit algorithmic logics. Users resist homogenisation by recontextualising AI outputs, adding slang, cultural idioms, or hybridised English expressions that reinscribe local identity into global meme flows. Algorithmic mediation theory, therefore, helps explain the dialectic between homogenisation (driven by AI systems) and diversification driven by human communities.

Taken together, these perspectives highlight AI-assisted memes as culturally dynamic yet technologically constrained artefacts. Memetic theory sheds light on how AI introduces new lexical and humorous variations into the meme ecosystem. Multimodality theory accounts for the compression and multimodal blending evident in AI outputs. Algorithmic mediation highlights the structural pressures toward homogenisation and euphemism, even as human creators resist by embedding local

registers. This combined framework enables the study to capture the tensions between novelty and regularity, global standardisation and local hybridity, that define English language change in the era of AI-driven media.

Methodology

A comparative corpus-based discourse analysis was conducted using 500 memes (250 AI-assisted, 250 human-generated) collected from Instagram, Twitter, and Reddit. Selection criteria included English Captions, clear indicators of AI involvement (platform tags or disclosures), and a balance of global and local meme communities. The analysis targeted three linguistic dimensions :

i) Lexical innovation (neologisms, slang, hashtags, euphemisms).

ii) Register hybridisation (abbreviations, emojis, clipped syntax, code switching, multimodal blends).

iii) Humour strategies (puns, irony, satire, parody, absurdism)

Quantitative analysis employed corpus tools and chi-square tests, while qualitative discourse analysis examined the cultural and pragmatic functions of the data. Inter-coder reliability was established through double annotation, and ethical standards were maintained by anonymising data and analysing only publicly available content.

Analysis and Results

Quantitative corpus analysis revealed clear differences in lexical patterns between AI-assisted and human-generated memes.

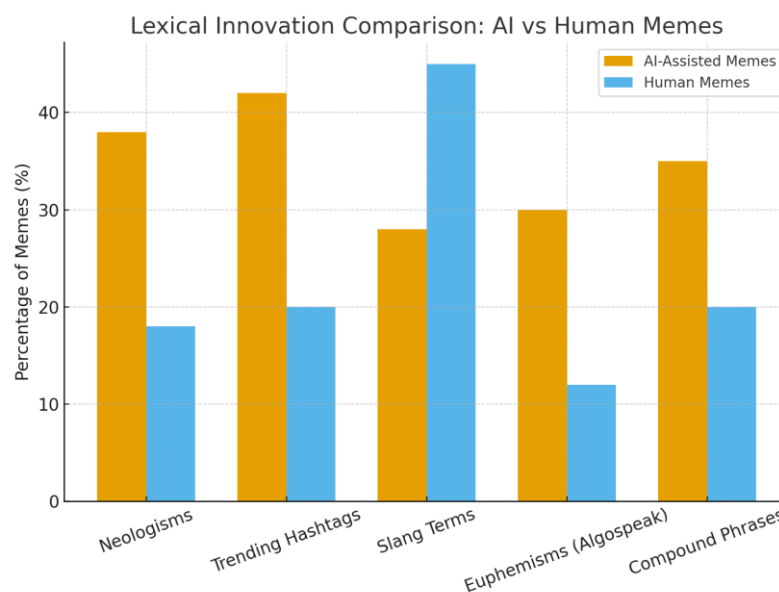


Figure 1. Lexical Innovation Comparison

As Figure 1 illustrates, AI-assisted memes were contained proportionally. More neologisms (38%), trending hashtags (42%), and euphemistic substitutions (30%) compared with human memes, which relied most heavily on slang and colloquial terms (45%). AI outputs also introduced more compound expressions and hybrid phrase constructions (35%) than human memes (20%). Statistical testing confirmed these trends. A chi-square test indicated significant differences in lexical category distributions between the two groups.

($\chi^2 = 19.6, P < .01$). This suggests that AI not only accelerates the uptake of emerging vocabulary from trending corpora, but also structures memes around predictable, algorithmically curated terms. By contrast, human memes draw from contextually embedded, culturally marked slang reflecting the role of community knowledge and shared intertextual references. The findings support the claim that AI-assisted meme production fosters faster lexical diffusion by privileging globally trending forms, while human memes sustain

community-specific repertoires of English register hybridisation. Register features were examined across five categories: abbreviations,

emojis, clipped syntax, code switching, and multimodal blends.

Table 1. Register Hybridisation Features in AI vs Human Memes

Feature	AI-Assisted Memes (per 100)	Human Memes (per 100)
Abbreviations	75	50
Emojis	70	55
Clipped Syntax	85	45
Code-Switching	58	65
Multimodal Blends	80	60
Feature	AI-Assisted Memes (per 100)	

As shown in Table 1, AI-assisted memes were consistently more compressed and multimodal: (abbreviation 75 vs. 50 per 100 memes), (emojis 70 vs. 55 clips), (clipped syntax 85 vs. 45), and (multimodal blends 80 vs. 60). Human memes, however, exhibited greater code switching frequency (65 vs. 58).

At the t-test, comparing overall hybridization scores confirmed a significant difference.

$$t = 498 = 14.7, P < .001.$$

AI tools appear to amplify platform-driven brevity, generating highly condensed captions that rely on emojis, abbreviations, and minimal syntax. This aligns with multimodal theory, which emphasises the compression of meaning across textual and visual channels. Human creators, by contrast, use code switching as a resource for identity expression, maintaining localised hybridity and meme discourse.

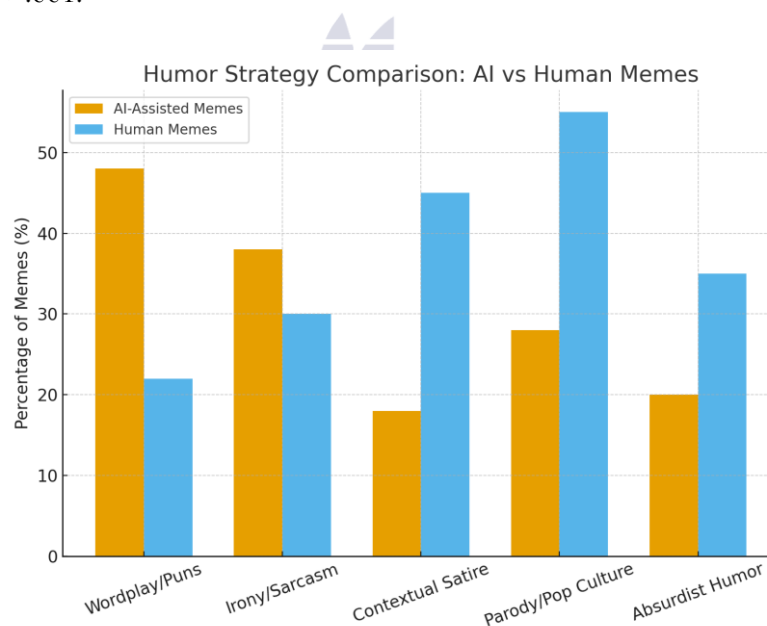


Figure 2. Humour Strategy Comparison

Humour analysis presented in Figure 2 highlights a sharp divergence in strategy. AI-assisted memes primarily employed wordplay and puns (48%) and irony/sarcasm (38%). Strategies that are easily aligned with template-driven formats. Human memes, however, favoured contextual satire (45%) and parody of pop culture references (55%), with a notable

presence of absurdist humour (35%), compared to AI's (20%). Chi-square testing confirmed significant variation in humour type distribution ($\chi^2 = 2 = 23.8, P < .01$). This reflects the algorithmic tendency toward predictable, linguistically reproducible humour. At the same time, human meme makers adapt their humour

to socio-political events, pop culture moments, and community and jokes.

AI memes are standardised, portable, and universally legible, while human memes remain situated, culturally nuanced, and context-responsive.

Cross-platform analysis indicated that AI-generated memes tended to exhibit linguistic homogenisation, reflecting the global trending data that underpins generative models. Mainstream English vocabulary and safe euphemisms dominated captions, making AI outputs globally legible. However, within AI generated content was often localised in post-production. Users added Urdu or Hindi words, cultural references, and hybrid expressions to AI drafts. This created a layered hybridity. AI provided standardisation tempered by human adaptation. Taken together, the results confirm three dynamics,

1: Acceleration and Novelty: AI-assisted memes are more lexically innovative, accelerating the spread of neologisms, hashtags, and euphemistic algospeak.

2: Compression and Standardisation: AI outputs privileged brevity, multimodality, and reproducible humour strategies leading to linguistic regularisation across platforms.

3: Localisation and resistance: Human meme creators preserve contextual slang, code switching, and culturally anchored humour, ensuring that English and memes remain diverse despite algorithmic homogenisation.

Discussion

The findings support the claim that AI-assisted meme production fosters faster lexical diffusion by privileging globally trending forms, while human memes sustain community-specific repertoires of English register hybridisation. Register features were examined across five categories: abbreviations, emojis, clipped syntax, code switching, and multimodal blends. As shown in Table 1, AI-assisted memes were consistently more compressed and multimodal in nature. Abbreviation (75 versus 50 per 100 memes, emojis 70 versus 55 clips, syntax 85 versus 45, and multimodal blends 80 versus 60). Human memes, however, exhibited a greater frequency of code-switching (65 versus 58). A t-test comparing overall hybridisation scores

confirmed a significant difference, $t(498) = 14.7$, $p < .001$.

Comparing overall hybridisation scores confirmed a significant difference. AI tools appear to amplify platform-driven brevity, generating highly condensed captions that rely on emojis, abbreviations, and minimal syntax. This aligns with modality theory, which emphasises the compression of meaning across textual and visual channels. Human creators, by contrast, use code switching as a resource for identity expression, maintaining localised hybridity, and meme discourse. Humour analysis presented in Figure 2 highlights a sharp divergence. AI-assisted memes primarily employed word play and puns 48%, and irony, sarcasm 38%, strategies that are easily aligned with template-driven formats. Human memes, however, favoured contextual satire (45%) and parody of pop culture references (55%), with the notable presence of absurdist humour (35%) compared to AI's (20%). Chi-square testing confirmed significant variation in the distribution of humour types, $\chi^2 = 23.8$, $P < .01$. This reflects the algorithmic tendency toward predictability. Linguistically reproducible humour while human meme makers adapt their humour to sociopolitical events, pop culture moments, and community and jokes. Interpretation AI memes are standardised, portable, and universally legible, while human memes remain situated, culturally nuanced, and context-responsive. Cross-platform and localised patterns in cross-platform analysis indicated that AI-generated memes tended to exhibit linguistic homogenisation, reflecting the global trending data that underpins generative models. Mainstream English vocabulary and safe euphemisms dominated captions, making AI outputs globally legible, however within rural communities, AI-generated content was often localised to suit the specific needs of each community. The same communities infused AI outputs with localised idioms, proverbs, and contextual references, reinforcing the persistence of world Englishes online.

The study aimed to investigate how the creation of memes shapes English language practices, encompassing lexical innovation, register hybridisation, humour strategies, and global-local dynamics. The findings demonstrate that while AI accelerates the production and

circulation of novel vocabulary, it also contributes to the standard stylistic and humorous forms, however, human meme creators continue to act as agents of contextualisation, embedding localised registers and cultural nuances into digital humour.

The results confirmed that AI-assisted memes introduced neologisms, hashtags, and euphemisms disproportionately more often than human-generated memes. This outcome supports prior claims that generative AI draws from trending corpora and predictive phrase models (Zagorulko, 2023). By embedding unique and compound expressions into meme captions, AI functions as a driver of lexical diffusion across online spaces. In contrast, humans drew on culturally specific slang, confirming that memes reflect community-specific repertoires. Thus, AI broadens the lexical pool while human creativity anchors it in social experience. The higher prevalence of abbreviations, emojis, clipped syntax, and AI-assisted memes illustrates how AI tools privilege brevity and multimodal expression, aligning with Kress's (2010) multimodality theory. Human memes, however, exhibited more frequent code-switching, in which digital communities use to create hybrid registers that index identity, solidarity, and humour. These results suggest that AI enforces compression, while human agency ensures that local hybridity remains embedded in meme discourse. The analysis of humour types indicates that AI outputs rely on wordplay and irony, reflecting their reliance on predictable templates and statistical regularities. Human memes, conversely, favoured contextual satire and parody, often referencing sociopolitical events and popular culture. These findings echo Beers' (2017) concern that algorithmic mediation produces regularised cultural forms, while also confirming that human humour retains unpredictability and situatedness. AI thus produces humour that circulates widely due to universality, but human memes retain depth and resonance because of their cultural specificity. The cross-platform findings show that AI-assisted memes promote linguistic homogenisation, standardising English around globally legible euphemisms and simplified structures.

Conclusion

The observed tension between global algorithmic templates and localised humour practices suggests that AI-driven communication is redefining the boundaries of linguistic diversity and authenticity. Policy makers and educators in digital literacy should thus consider integrating critical AI awareness and semiotic analysis into media education to equip users with interpretive and ethical competencies for navigating and shaping such evolving discourse environments. By providing empirical evidence, theoretical framing, and cross-varietal insights, this study contributes to emerging scholarship on AI-driven discourse and invites sustained inquiry into how technology is reshaping the very texture of global communication. The empirical evidence on AI's role in meme-mediated language change, along with the theorisation of algorithmic humour as a distinct discourse pattern, provides insights into how global and local varieties interact in AI-meme ecologies.

The findings of this study hold important implications for the fields of digital linguistics, discourse analysis, and cultural communication. By illustrating how AI-assisted memes accelerate lexical innovation and reshape humour strategies through multimodal brevity, a concept that refers to the use of multiple modes of communication in a concise manner, the research foregrounds the role of algorithmic systems as active participants in language evolution. This underscores the necessity of reconceptualising digital texts not merely as artifacts of user creativity, but as products of human-AI co-construction, where platform algorithms influence both linguistic and cultural outcomes. For future research, longitudinal studies could track how AI-influenced memes evolve across time and platforms, capturing shifts in linguistic patterns, visual tropes, and audience engagement. Cross-linguistic and cross-cultural comparisons would further elucidate how English varieties interact with regional languages in meme ecologies shaped by differing algorithmic infrastructure. These potential research avenues hold the promise of uncovering even more about the dynamic interplay between AI, language, and culture.

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