Scottish International Conference on

Multidisciplinary research and Innovation (SICMRI 2026)

# STRUCTURAL-SEMANTIC AND PRAGMATIC FEATURES OF NEOLOGISMS RELATED TO ARTIFICIAL INTELLIGENCE IN THE ENGLISH LANGUAGE

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**Abstract.** The rapid expansion of artificial intelligence (AI) has generated a dynamic layer of English vocabulary that reflects technological innovation and changing social attitudes. This thesis examines the structural formation, semantic development, and pragmatic functions of selected AI-related neologisms and newly specialized expressions. Using a qualitative, illustrative linguistic analysis, it identifies compounding, abbreviation, blending, and semantic extension as productive mechanisms. The discussion demonstrates how expressions such as prompt engineering, deepfake, AI hallucination, and alignment function not only as technical labels but also as tools of persuasion, evaluation, and public framing. The findings highlight the importance of contextual interpretation and critical language awareness in AI communication.

**Keywords:** artificial intelligence, neologism, word formation, semantic change, pragmatics, discourse, terminology.

## INTRODUCTION

Technological change is a major driver of lexical innovation. As artificial intelligence moves from specialized research environments into education, journalism, business, and everyday communication, English speakers increasingly use new terms and assign new meanings to familiar words. Vocabulary such as generative AI, chatbot, deepfake, prompt engineering, and hallucination makes complex systems easier to discuss, but it can also transmit assumptions about machine abilities and limitations. Studying these expressions requires attention to their internal structure, meaning, and use in communicative situations.

The aim of this thesis is to characterize the structural-semantic and pragmatic properties of AI-related lexical innovations in contemporary English. Its objectives are to identify dominant word-formation patterns, describe shifts between everyday and technical meanings, and explain how the same term can perform different functions across scientific, commercial, and public discourse. The analysis draws on established accounts of English word formation and pragmatics (Bauer, 1983; Levinson, 1983; Plag, 2003).

## MAIN PART

### 1. Analytical approach and structural patterns

This paper applies qualitative descriptive analysis to a purposive set of widely recognizable AI expressions. The examples are illustrative rather than a statistically representative corpus; no frequency claims are made. Each item is considered along three dimensions: morphological structure, semantic content, and likely communicative function. Such an approach connects the productivity of English



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word-formation processes to the contexts in which lexical innovations gain currency (Bauer, 1983; Plag, 2003).

Compounding combines existing units into a new technical label, as in prompt engineering and language model. Abbreviation condenses long institutional or scientific terms, as in AI and LLM (large language model). Blending produces compressed expressions such as deepfake, commonly understood as combining deep (from deep learning) and fake. Derivational patterns are evident in forms such as AI-generated, while semantic specialization or metaphorical extension occurs when ordinary words such as hallucination, agent, and alignment acquire distinctive AI-related senses. Importantly, not every item is a newly coined word: some are older forms with new domain-specific meanings.

**Table 1. Illustrative structural, semantic, and pragmatic analysis of AI-related expressions**

| Expression | Formation | Semantic interpretation | Typical pragmatic function |
|---|---|---|---|
| Deepfake | Blend | Synthetic or manipulated media often designed to appear authentic | Can warn about deception or dramatize technological risks |
| Prompt engineering | Compound | Designing and refining instructions for AI systems | Signals specialized expertise and professional practice |
| LLM | Initialism | Large language model | Creates concise in-group technical reference |
| Hallucination | Semantic extension | Model output that is fluent but factually unsupported or incorrect | Frames errors metaphorically; may soften attribution of system failure |
| AI alignment | Semantic specialization | Efforts to make AI behavior conform to intended goals or values | Invokes trust, safety, and governance priorities |
| AI slop | Compound / evaluative label | Perceived low-quality, mass-produced AI-generated content | Expresses criticism and social disapproval |

Note. The table presents contextual interpretations, not mutually exclusive linguistic categories. “AI slop” is an explicitly evaluative expression, whereas “LLM” is principally a technical abbreviation.



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2. Semantic change and conceptual framing

AI terminology often migrates from specialist usage into ordinary English. During this movement, technical precision may weaken and additional connotations emerge. For example, hallucination traditionally refers to a human perceptual experience; in AI discourse it metaphorically denotes certain unreliable model outputs. The metaphor is memorable, yet it may encourage anthropomorphic interpretations. Similarly, agent may refer to an automated system performing tasks, although in everyday English it commonly designates a person acting on behalf of another. Semantic analysis should therefore distinguish technical definition from figurative associations.

The expressions generative AI and artificial general intelligence also organize expectations: the former emphasizes content production, whereas the latter gestures toward a much broader hypothetical capability. These labels can shape how audiences judge technological progress before they encounter operational definitions. Public descriptions of AI should therefore clarify the intended sense, system boundaries, and uncertainty rather than rely on suggestive terminology alone. Research on language models has likewise stressed the risks of treating fluent generated text as evidence of human-like understanding (Bender et al., 2021).

3. Pragmatic functions in contemporary discourse

From a pragmatic perspective, the meaning of an AI term depends on who uses it, for whom, and to achieve what purpose (Levinson, 1983). In academic writing, model alignment may identify a research problem; in policy debate, the same expression can signal normative priorities or institutional responsibility. In promotional communication, AI-powered often functions as an attention-getting indicator of innovation, even where the exact technological implementation is not explained. By contrast, AI slop expresses negative evaluation and invites readers to question the quality or authenticity of digital content.

Three recurrent pragmatic functions emerge from this illustrative analysis. First, terminological economy supports efficient communication among specialists, as with LLM. Second, persuasive framing encourages audiences to associate products or practices with novelty, efficiency, or risk. Third, stance-taking and social positioning allow speakers to express enthusiasm, skepticism, or ethical concerns. These functions may coexist; a technical term can become a marketing slogan or an object of critique as it circulates across communities.

The educational implication is that AI-related vocabulary should be taught not as a static glossary but as a set of evolving expressions. Students and professionals benefit from identifying morphological components, comparing general and technical meanings, and testing the pragmatic implications of claims encountered in news, advertising, and research. Corpus-based follow-up studies could compare frequencies and contexts across genres and periods to evaluate the qualitative patterns proposed here.

CONCLUSION

AI-related neologisms demonstrate the flexibility of English in responding to technological developments. Compounding, abbreviation, blending, and semantic specialization provide efficient means of naming emerging concepts. Their significance, however, extends beyond word formation: such expressions frame expertise, shape perceptions of safety and reliability, and convey positive or negative social attitudes. The distinction between a genuinely new lexeme and an older word with an innovative specialized sense is essential for sound linguistic description. Because this thesis uses illustrative examples rather than a systematic corpus, its conclusions are interpretive rather than quantitative. Future



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research should examine large, dated corpora and compare academic, journalistic, and social-media discourse to trace lexical diffusion and changes in pragmatic meaning.

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