

УДК 81'42:316.77:070

DOI <https://doi.org/10.32782/2412-933X/2025-XXV-1>

THE NARRATIVE STRUCTURE OF ONLINE NEWS: COGNITIVE MODELS AND PRAGMATIC FUNCTIONS

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This article presents a comprehensive study of the narrative structure of online news through the framework of cognitive models and pragmatic functions. The theoretical foundation combines insights from cognitive linguistics, which explains the role of schemata and idealized cognitive models in meaning construction, with pragmatic approaches to discourse analysis that reveal the communicative goals of journalistic texts. A review of scholarly literature demonstrates that headlines and other small-format elements of online journalism serve not only as informational devices but also as influential cues that elicit emotional responses, activate cognitive schemata, and guide interpretation.

The methodology integrates corpus analysis of online news articles, automated annotation of narrative and pragmatic features, and experimental research into audience responses. Particular attention is given to individual cognitive dispositions that shape differences in how readers perceive dramatization, emotional intensity, and simplified causal structures.

The findings indicate that these strategies substantially increase engagement and shareability in digital environments, yet simultaneously diminish trust and critical evaluation of content. The study concludes that online news has a dual nature: it relies on familiar cognitive models to facilitate rapid meaning-making, while pragmatically oriented toward capturing attention, persuading audiences, or achieving commercial success. The implications of the research extend to journalism practice, where ethical headline design and transparent narrative strategies can foster credibility, and to media literacy, where awareness of cognitive and pragmatic mechanisms can strengthen critical reading skills. Ultimately, this work underscores the need for balancing communicative effectiveness with epistemic responsibility in the evolving digital media landscape.

Key words: online news, narrative structure, cognitive models, pragmatic functions, headlines, media discourse, misinformation.

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НАРАТИВНА СТРУКТУРА ОНЛАЙН-НОВИН: КОГНІТИВНІ МОДЕЛІ ТА ПРАГМАТИЧНІ ФУНКЦІЇ

У статті здійснено комплексне дослідження наративної структури онлайн-новин крізь призму когнітивних моделей та прагматичних функцій. Теоретичною основою роботи стали положення когнітивної лінгвістики, які пояснюють роль схем та ідеалізованих когнітивних моделей у формуванні смислів, а також прагматичний підхід до аналізу дискурсу, що розкриває комунікативні цілі журналістських текстів. Огляд наукової літератури засвідчив, що заголовки й короткі формати онлайн-журналістики є не лише інформаційними,

а й впливовими елементами, здатними викликати емоційний відгук, актуалізувати певні когнітивні схеми та спрямовувати інтерпретацію читача.

Методологія дослідження ґрунтується на поєднанні корпусного аналізу онлайн-новин, автоматизованого анування наративних та прагматичних ознак і експериментального вивчення реакцій аудиторії. Особливу увагу приділено індивідуальним когнітивним характеристикам читачів, що зумовлюють відмінності у сприйнятті драматизації, емоційної насиченості та спрощених причинно-наслідкових структур.

Отримані результати доводять, що такі стратегії значно підвищують залученість і поширюваність новин у цифровому середовищі, однак водночас знижують рівень довіри та критичності у ставленні до змісту. Зроблено висновок, що онлайн-новини мають подвійний характер: вони активізують знайомі когнітивні моделі для забезпечення швидкого доступу до смислів, але прагматично орієнтовані на досягнення ефекту уваги, переконання чи комерційного успіху. Результати дослідження можуть бути використані для вдосконалення журналістської практики, розроблення стандартів відповідальної комунікації та розвитку медіаграмотності в умовах цифрової інформаційної екосистеми.

Ключові слова: онлайн-новини, наративна структура, когнітивні моделі, прагматичні функції, заголовки, медіадискурс, дезінформація.

Introduction. Digital news environments prioritize immediacy, ease of scanning, and emotional resonance. These platform affordances have reshaped the ways narratives are constructed: headlines must capture attention within moments; lead paragraphs compete for readers' limited focus; and multimedia elements, hyperlinks, and interactive features transform traditional narrative continuity. To understand the effects of these narrative choices, it is necessary to integrate insights from two research domains: cognitive models, which describe how readers structure and access knowledge and event schemata, and pragmatic functions, which examine how language accomplishes social and communicative goals. This paper synthesizes theoretical frameworks and recent empirical findings to explain how online news narratives engage readers' cognitive schemata to achieve pragmatic objectives, such as dramatization, persuasion, or signaling verification. Building on cognitive-pragmatic accounts of discourse and contemporary studies of online journalism, it argues that narrative structures in digital news function as interactional systems combining cognitive cues with strategic pragmatic design.

Literature Review. Cognitive Models and Narrative Comprehension. Research on cognitive models in discourse draws on foundational work by Fillmore on frames and Lakoff on idealized cognitive models (ICMs). These frameworks conceptualize narratives as organized mental representations activated during reading, allowing audiences to interpret events through familiar schemata like "crisis–response" or "scandal–denial". Cognitive linguistics demonstrates that news stories utilize such schemata to maintain coherence, enabling readers to infer missing information and assign causal relations even when reports are incomplete [12, p. 124]. More recent work in cognitive pragmatics emphasizes how narrative structures in media texts guide attention, memory, and theory-of-mind processes, influencing how readers interpret actors and events [7, p. 8].

Pragmatic Functions of News Discourse. Pragmatic analyses complement cognitive perspectives by examining communicative goals in journalism. Headlines, for example, operate as independent speech acts that convey propositional content while simultaneously serving persuasive, evaluative, and attention-directing roles [8]. Recent studies confirm that headlines do more than summarize; they orient readers toward evaluative positions through presupposition and implicature [7]. In digital contexts, strategies such as dramatization and sensational framing are increasingly prevalent, with headlines optimized for clicks and social sharing [8].

Narrative Features of Misinformation and Online News. The prevalence of online misinformation has intensified research into narrative effects on credibility and virality. Hamby et al. [6, p. 10] show that false news often relies on simplified causal chains, emotionally charged language, and vivid dramatization—techniques that align with easily accessible cognitive models, facilitating rapid dissemination. Similarly, Vosoughi, Roy, and Aral [11] found that false news spreads more quickly than verified content due to its novelty and emotional appeal. These studies suggest that pragmatic pressures in digital media reward narrative simplicity and affective engagement, sometimes at the expense of accuracy.

Reported Discourse and Perspectivization. Reported speech is another key narrative device. Piazza [9] notes that both direct and indirect quotations perform functions beyond attribution: they dramatize events, present multiple perspectives, and foreground or background responsibility. Comparative studies indicate that direct quotes enhance vividness and immediacy but may reduce credibility among analytically oriented readers [6, p. 9]. These findings underscore that discourse-level pragmatic choices shape both comprehension and trust.

Digital Platform Affordances. Online journalism differs from print not only in speed but also in multimodal and interactive features. Hyperlinks, embedded media, and interface design affect narrative coherence, creating fragmented yet interconnected pathways through content [10]. While such affordances can enhance storytelling, they may disrupt sequential comprehension, necessitating novel cognitive strategies for integrating dispersed narrative elements.

Synthesis. The literature indicates convergence: cognitive models explain how readers interpret narrative cues, while pragmatic analyses reveal why journalists employ them. In digital news, these dimensions interact to produce compressed, dramatized, and emotionally resonant narratives optimized for rapid consumption. Yet, the same strategies may compromise credibility and distort comprehension, highlighting the need for integrative research that examines the interplay of cognition and pragmatics in online news.

Methodology. To investigate the interplay between cognitive models and pragmatic functions in online news, this study adopts a mixed-methods approach integrating corpus analysis, controlled experimental procedures, and reader-profiling. This strategy aligns with contemporary multi-method research in both journalism studies and cognitive pragmatics, allowing for examination of large-scale textual patterns alongside fine-grained audience responses.

Corpus Compilation

A balanced corpus comprising approximately 6,000 online news articles was constructed. Sampling was stratified according to genre (hard news versus soft features), platform type (legacy outlets versus digital-native sources), and veracity (verified reporting versus fact-checked misinformation). Metadata collected for each article included headline classification, narrative markers (such as reported discourse and temporal sequencing), and multimedia features. This methodology mirrors recent protocols in online-journalism prototyping and narrative research.

Computational Annotation

Automated natural language processing (NLP) pipelines were employed to annotate key narrative features, including dramatized reported speech, causal connectors, affective language, headline compression, and framing devices. Reliability was ensured through manual coding of a randomly selected subset of 500 articles, targeting a Cohen's kappa > 0.75. This hybrid approach reflects established procedures in computational pragmatics for reconciling model predictions with human judgments.

Experimental Manipulation

Controlled stimuli were designed to systematically vary single narrative or pragmatic features—for example, headline framing (dramatic versus neutral), discourse type (direct versus indirect),

or emotional intensity of adjectives (high versus low). Participants' responses were measured across perceived credibility, immediacy, sharing intention, and recall. Baseline schema activation was assessed prior to exposure, following recent experimental designs in fake-news and headline research.

Reader-Profiling and Cognitive Measures

Participants' individual differences in analytical reasoning (via the Cognitive Reflection Test, CRT), need for cognition, and digital news consumption habits were captured to examine moderating effects. Prior research indicates that cognitive dispositions influence susceptibility to misinformation and the interpretive effort exerted by readers.

This mixed-methods framework enables linking textual strategies (pragmatic choices) to cognitive activation and behavioral outcomes, combining corpus-level pattern observation with individual-level processing analysis. Triangulating corpus analysis, computational annotation, and controlled experimentation allows for both macro- and micro-level insights into how narrative and pragmatic cues interact in online news discourse.

Corpus Construction and Sampling Details

The corpus included 6,000 online news items drawn from legacy media outlets (e.g., *The Guardian*, *The New York Times*), digital-native platforms (e.g., *BuzzFeed News*), and repositories of fact-checked misinformation (e.g., PolitiFact, Snopes). Sampling ensured coverage from 2022 to 2024, including 1,000 articles per outlet type across hard news, soft news, and opinion pieces. This stratified approach facilitated comparative analysis between mainstream reporting and misleading narratives.

Annotation of Narrative Features

Narrative elements were identified using a hybrid approach combining automated detection and manual verification. Reported discourse (direct versus indirect quotations) was first extracted through syntactic parsing and then validated in 500 articles (Cohen's kappa = 0.82). Headline structures were coded for pragmatic functions such as presupposition (e.g., "Government admits failure in policy") and dramatization (e.g., "Shocking revelations shake parliament"), consistent with established headline typologies.

Experimental Manipulation

A between-subjects experiment with 320 participants randomly assigned to four versions of a news item examined the cognitive and pragmatic effects of narrative variation:

- Version A: neutral headline, indirect discourse ("Minister stated that the reforms would continue")
- Version B: neutral headline, direct discourse ("Minister: 'The reforms will continue'")
- Version C: emotive headline, indirect discourse ("Minister insists reforms will continue")
- Version D: emotive headline, direct discourse ("Minister: 'We insist the reforms will continue'")

Dependent variables included perceived credibility (7-point Likert scale), recall of factual information, and intention to share via social media.

Reader Profiling and Cognitive Assessment

Participants also completed the CRT and a Media Habits Inventory to evaluate how reasoning ability and news consumption patterns moderated the impact of narrative and pragmatic cues. Preliminary findings indicated that participants with higher CRT scores perceived emotive headlines as less credible, whereas frequent social-media users were more likely to share content regardless of credibility assessments.

Results. Headlines as Schema-Activators: Headlines featuring compressed causal propositions and affective markers reliably prime readers' event schemata, generating higher

immediate engagement (clicks and brief dwell time) compared with neutral headlines. Small-format analyses highlight headlines as self-contained communicative units with significant pragmatic impact.

Dramatization Effects: Dramatized reported discourse, including direct quotations and vivid detail, enhances perceived immediacy but can reduce credibility among analytically minded readers. Conversely, low-effort consumers are more likely to share such content, explaining the persistence of sensational narrative structures despite credibility trade-offs.

Narrative Simplicity and Shareability: Articles with simplified causal chains and emotive framing demonstrate higher shareability across both factual and misleading reporting, exploiting common idealized cognitive models (ICMs) and reducing cognitive load, thereby facilitating rapid dissemination.

Cognitive Moderation: Analytical reasoning (CRT scores) reduces susceptibility to dramatized cues and increases sensitivity to source reliability, while habitual news consumers display nuanced patterns of trust or disengagement depending on perceived outlet credibility.

Multimodal Affordances: Hyperlinks, embedded videos, and captions act as narrative anchors or detours, influencing how readers construct event models. Interactive elements can either enhance exposition or fragment narrative continuity, contingent on design choices.

These results reveal a recurring tension: pragmatic incentives such as attention and shareability favor narrative strategies that activate readily accessible cognitive models, whereas epistemic goals like accuracy are best supported by structures promoting analytic processing.

Conclusins. News content is not a neutral reflection of events; it represents a constructed narrative shaped by readers' mental templates (cognitive models) and journalists' communicative objectives (pragmatic functions). In digital environments, where attention is scarce and sharing is instantaneous, strategies that simplify, dramatize, and emotionally charge information are effective in engaging audiences but can impede accurate comprehension. Headlines and reported discourse act as pivot points, activating schemata that influence memory, interpretation, and sharing behavior. Individual differences in reasoning and media habits further modulate these effects.

Practical Implications: Readers should approach sensational headlines, emotionally vivid quotations, and compressed causal claims with critical scrutiny. For journalists and platform designers, clarity, transparent timelines, and coherent narrative structures can sustain both engagement and informational accuracy. Understanding the interplay between cognitive and pragmatic mechanisms offers actionable strategies for improving public information environments and fostering media literacy.

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Дата надходження статті: 26.09.2025

Дата прийняття статті: 20.10.2025

Опубліковано: 10.12.2025