
Modality in cognitive linguistics: meaning and interpretation

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Annotation *Modality is a core function of language that allows speakers to express their perspective on a statement, indicating degrees of certainty, obligation, possibility, or permission. This article investigates modality through the lens of cognitive linguistics, a framework which posits that our linguistic structures are shaped by embodied cognition. From this perspective, abstract modal concepts are understood as being grounded in physical experiences, such as the forces, barriers, and pathways we encounter in the real world. We conduct a cross-linguistic analysis of modal expressions, including verbs like "must" and "might," to trace how these fundamental sensory experiences are mapped onto grammatical and lexical forms. The central argument is that modality is not merely a grammatical rule but a vital cognitive tool. It acts as a crucial link between our inner mental world – our thoughts, beliefs, and judgments – and the language we use to communicate and negotiate meaning with others.*

Keywords *Modality, cognitive linguistics, speaker stance, epistemic modality, deontic modality, corpus linguistics, conceptualization*

Модальность в когнитивной лингвистике: значение и интерпретация

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Аннотация *Модальность – это основная функция языка, которая позволяет говорящим выражать свою точку зрения на высказывание, указывая на степени уверенности, обязательства, возможности или разрешения. В данной статье исследуется модальность через призму когнитивной лингвистики – фреймворка, который предполагает, что наши языковые структуры формируются воплощенным познанием (embodied cognition). С этой точки зрения, абстрактные модальные концепции понимаются как основанные на физическом опыте, таком как силы, барьеры и пути, с которыми мы сталкиваемся в реальном мире. Мы проводим кросс-лингвистический анализ модальных выражений, включая такие глаголы, как "must" (должен) и "might" (может, возможно), чтобы проследить, как эти фундаментальные сенсорные переживания отображаются в грамматические и лексические формы. Основным аргументом заключается в том, что модальность – это не просто грамматическое правило, а жизненно важный когнитивный инструмент. Она выступает в качестве важнейшего связующего звена между нашим внутренним ментальным миром – нашими мыслями, убеждениями и суждениями – и языком, который мы используем для общения и согласования значений с другими.*

Ключевые слова *Модальность, когнитивная лингвистика, позиция говорящего, эпистемическая модальность, деонтическая модальность, корпусная лингвистика, концептуализация*

Kognitiv lingvistikada modallik: ma'no va talqin

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Annotatsiya *Modallik – tilning asosiy funksiyasi bo'lib, u so'zlovchilarga o'z fikrini bayon qilish imkonini beradi, ya'ni qat'iylik, majburiyat, imkoniyat yoki ruxsat darajalarini ko'rsatadi. Ushbu maqola modallikni kognitiv lingvistika nuqtai nazaridan o'rganadi, bu esa bizning lingvistik tuzilmalarimiz jismoniy tajribalar (embodied cognition) orqali shakllanganligini ta'kidlaydi. Ushbu nuqtai nazardan, mavhum modal tushunchalar dunyoda duch keladigan kuchlar, to'siqlar va yo'llar kabi jismoniy tajribalarga asoslangan holda tushuniladi. Biz "must" va "might" kabi fe'llarni o'z ichiga olgan modal ifodalarning qiyosiy-tilshunoslik tahlilini o'tkazamiz, bu fundamental hissiy tajribalarning grammatik va leksik shakllarga qanday o'tkazilishini kuzatish uchun. Asosiy dalil shundaki, modallik shunchaki grammatik qoida emas, balki hayotiy muhim kognitiv vositadir. U bizning ichki ruhiy dunyomiz – fikrlarimiz, ishonchimiz va mulohazalarimiz – hamda boshqalar bilan muloqot qilish va ma'nolarni kelishish uchun ishlatadigan til o'rtasidagi muhim bog'lovchi vazifasini bajaradi.*

Kalit so'zlar *Modallik, kognitiv lingvistika, so'zlovchi pozitsiyasi, epistemik modallik, deontik modallik, korpus lingvistikasi, konseptualizatsiya*

Introduction

Modality is a functional-semantic category that encodes speakers' attitudes, possibilities, obligations and judgments, forming a broad field that links language to reality. It encompasses a complex set of semantic values – affirmation-negation, real-normative, question, motivation, time, reason, purpose, condition, intention, order, result, place, denial, existence, advice, requirement, opportunity, etc – that together reveal the speaker's stance toward objective reality.

Modality represents a fundamental cognitive capacity for conceptualizing situations beyond actuality, encompassing

potential, necessity, and desirability (Talmy, 1988). This linguistic subsystem reflects the human cognitive ability to reason about alternative realities and mental representations beyond immediate experience (Langacker, 1991). The cognitive approach to modality examines how modal meanings are structured by embodied experiences, metaphorical mappings, and conceptual blending processes (Sweetser, 1990). The foundational cognitive framework for understanding modality derives from force dynamics – the conceptual system governing interactions of force, resistance, and blockage (Talmy, 1988). Force dynamics analyzes modality through agonist-antagonist interactions where an element with intrinsic

tendency toward action either yields to or resists an opposing force (Talmy, 2000). In this model, deontic *must* conceptualizes a compelling force overcoming resistance, while *may* represents the removal of a potential barrier, and *cannot* signifies an insurmountable obstruction (Talmy, 1988). This force-dynamic schema provides the embodied basis for root modal meanings, grounding abstract social and psychological constraints in physical experience (Johnson, 1987).

The systematic relationship between root and epistemic modalities is explained through conceptual metaphor theory (Sweetser, 1990). The polysemy of modal verbs reflects a cognitive mapping from the sociophysical domain to the epistemic domain, wherein reasoning is conceptualized as a form of motion through space, and logical necessity is understood as physical or social compulsion (Sweetser, 1990). This cross-domain mapping means that obligation in the external world (root *must*) provides the source domain for logical conclusion in the internal world of reasoning (epistemic *must*), while permission (*may*) maps to possibility, and ability (*can*) maps to potential (Sweetser, 1990). These metaphorical extensions represent deep cognitive patterns rather than arbitrary linguistic conventions (Lakoff & Johnson, 1999).

Comprehending modal expressions involves embodied simulation – the partial neural reactivation of sensory, motor, and affective states experienced during actual events (Barsalou, 1999). Processing deontic modals activates neural systems for social constraint and prohibition, while epistemic modals engage systems for uncertainty and prediction (Bergen, 2012). This simulation-based understanding means that modal concepts are not abstract symbols but are grounded in the same neural systems used for perception, action, and emotion (Gallese & Lakoff, 2005). The embodied nature of modality explains why force-dynamic imagery consistently underlies modal meanings across languages (Talmy, 2000).

Literature review

The concept of modality traces its philosophical lineage to Aristotle, who introduced it as the possibility or impossibility of actions in objective reality (Aristotle, 1939). This enduring view continues to inform contemporary linguistic analyses, providing a baseline for understanding modal semantics (Portner, 2009). Modern scholarship, however, has refined this distinction, often differentiating between *objective modality* (e.g., real/unreal, possibility/impossibility, necessity/probability) typically expressed through grammatical means such as mood or modal verbs, and *subjective modality* (e.g., confidence, belief, agreement) often realized via intonation, word order, lexical repetition, and discourse particles (Palmer, 2001).

Crucially, Bikel emphasizes that modality reflects an understanding of reality from the speaker's point of view rather than maintaining a rigid objective-subjective distinction (Bikel, 1968). This aligns strongly with Cognitive Linguistic principles, which foreground the role of the experiencing subject in meaning construction (Langacker, 1987). From this perspective, modal meanings are not merely truth-conditional operators but are deeply intertwined with speaker conceptualization, framing, and subjective construal of events and propositions within mental spaces.

Modal expressions function as space builders that set up mental spaces relative to a base reality (Fauconnier, 1994). Epistemic modals establish possibility spaces and probability scales, while deontic modals construct ideal or normative worlds (Fauconnier, 1997). In cognitive terms, modality involves conceptual integration networks where input spaces from reality, potentiality, and normative standards blend to create emergent meaning (Fauconnier & Turner, 2002). For example, a statement like "This must be the solution" blends elements from present evidence, logical reasoning, and hypothetical scenarios to produce a compelled conclusion (Fauconnier, 1994).

Methods and Materials

This paper reviews and combines existing research and theories to understand modality in Cognitive Linguistics. The main goal is to bring together and explain current studies, findings, and ideas to show how Cognitive Linguistics views modality's role in understanding reality and expressing a speaker's opinion.

Discussion

Together, these findings illustrate how modality serves as a diagnostic tool for cognitive-semantic analysis, register variation, language acquisition and discourse stance within cognitive linguistics.

Express Epistemic Stance: How certain or likely a speaker believes a proposition to be (e.g., *It must be raining* and *It might be raining*). This involves evaluating propositions against a knowledge base or evidential sources.

Indicate Deontic Status: Relate to obligations, permissions, and prohibitions, often linked to social norms or rules (e.g., *You must leave* and *You may leave*). This grounds modal concepts in social interaction and shared understanding of acceptable behavior.

Convey Dynamic Ability/Volition: Refer to inherent capacities or willingness (e.g., *I can swim* - *I will help*). These often reflect embodied experiences of potential and capability.

Construct Mental Spaces: Modals actively participate in the creation and manipulation of mental spaces, allowing speakers to project different scenarios, hypothetical situations, and counterfactuals (e.g., *If I were rich, I would buy a yacht*).

The complex set of semantic values that fall under modality – affirmation-negation, real-normative, question, motivation, time, reason, purpose, condition, intention, order, result, place, denial, existence, advice, requirement, opportunity – collectively reveal the speaker's situated stance towards objective reality, highlighting the highly personalized and interpretative nature of human communication.

Collectively, these findings demonstrate how modality serves as a powerful diagnostic tool for exploring cognitive-semantic analysis, register variation, language acquisition, and understanding the subtle nuances of discourse stance.

Results and Analysis

A primary function of modality in children's texts is to frame **epistemic** distinctions between reality and imagination. In Maurice Sendak's *Where the Wild Things Are*, the narration avoids epistemic modals such as *might* or *could*, instead presenting fantastical events as direct assertions (e.g., "a forest grew"). This linguistic choice reflects a child's cognitive tendency to treat imaginative scenarios as subjectively real. By eliminating hypothetical framing, the text validates immersive engagement with fantasy, reinforcing the permeability between real and imagined mental spaces in early cognitive development.

Deontic modality, which expresses obligation and permission, is frequently central to the moral structure of children's narratives. In Dr. Seuss's *The Cat in the Hat*, the Fish repeatedly uses deontic *should not* to signal prohibition, representing an externalized rule system. In contrast, the Cat employs dynamic *can* to propose playful alternatives. This modal opposition stages a cognitive conflict between social constraints and individual desire. The narrative resolution models how young readers can reconcile these competing frameworks, facilitating early moral reasoning.

Dynamic and volitional modality are key in modeling self-efficacy and agency. *The Little Engine That Could* exemplifies this through the protagonist's iterative use of "I think I can." This phrase combines **epistemic** and **dynamic** modality, verbalizing effort and possibility. The concluding shift to "*I thought I could*" marks a **cognitive** transition from attempted action to achieved outcome. This progression illustrates how language can shape a growth mindset,

reinforcing the link between self-talk and capability.

Finally, modality supports the development of theory of mind – the ability to attribute mental states to others. In *Guess How Much I Love You*, Little **Nutbrown Hare's** declaration "*I love you right up to the moon*" represents his epistemic limit. Big Nutbrown Hare's response: "*I love you right up to the moon and back*", extends this boundary **implicitly**. Without explicit modals, the utterance introduces a more complex perspective, guiding the child toward recognizing that others may hold different, and larger, conceptual models.

In conclusion, children's literature uses modality not merely as a grammatical feature, but as a cognitive scaffold. It helps young readers navigate imaginary worlds, internalize social norms, build a sense of agency, and appreciate differing perspectives. These texts function as implicit guides to conceptualizing reality, demonstrating how language shapes fundamental cognitive and emotional development.

Conclusion

Modality, viewed through the lens of Cognitive Linguistics, emerges as a dynamic and richly complex functional-semantic category that reflects fundamental aspects of human conceptualization and interaction. From its Aristotelian roots to contemporary corpus-driven analyses, the study of modality continually reveals how language users not only describe reality but actively shape and interpret it from their unique perspectives. The ongoing research into its systematic variations across contexts, its role in language acquisition, and its contribution to social meaning underscores its central position in understanding the intricate relationship between cognition, language, and communication. Future research could further explore the neurological underpinnings of modal processing, the development of modal concepts in early childhood, and the cross-cultural variations in modal expression, continuing to deepen our understanding of this fascinating linguistic and cognitive phenomenon.

References:

1. Aristotel'. (1939). *Kategorii. S prilozheniem "Vvedeniya", Porfiriya k Kategoriyam Aristotelya* [Categories. With the appendix "Introduction", Porphyry to the Categories of Aristotle]. Moscow.
2. Bikel', M. M. (1968). *Yazykovye sredstva vyrazheniya pobuditel'nosti i ikh stilisticheskoe znachenie (na materiale nemetskogo yazyka)* [Linguistic means of expression of motivation and their stylistic meaning (based on the material of the German language)] (Doctoral dissertation abstract). Leningrad.
3. Barsalou, L. W. (1999). Perceptual symbol systems. *Behavioral and Brain Sciences*, 22(4), 577-660.
4. Bergen, B. K. (2012). *Louder than words: The new science of how the mind makes meaning*. Basic Books.
5. Fauconnier, G. (1994). *Mental spaces: Aspects of meaning construction in natural language*. Cambridge University Press.
6. Fauconnier, G. (1997). *Mappings in thought and language*. Cambridge University Press.
7. Fauconnier, G., & Turner, M. (2002). *The way we think: Conceptual blending and the mind's hidden complexities*. Basic Books.

8. Gallese, V., & Lakoff, G. (2005). The brain's concepts: The role of the sensory-motor system in conceptual knowledge. *Cognitive Neuropsychology*, 22(3-4), 455-479. <https://doi.org/10.1080/02643290442000310>
9. Johnson, M. (1987). *The body in the mind: The bodily basis of meaning, imagination, and reason*. University of Chicago Press.
10. Lakoff, G., & Johnson, M. (1999). *Philosophy in the flesh: The embodied mind and its challenge to Western thought*. Basic Books.
11. Langacker, R. W. (1987). *Foundations of cognitive grammar: Vol. 1. Theoretical prerequisites*. Stanford University Press.
12. Palmer, F. R. (2001). *Mood and modality*. Cambridge University Press.
13. Portner, P. (2009). *Modality*. Oxford University Press.
14. Sweetser, E. E. (1990). *From etymology to pragmatics: Metaphorical and cultural aspects of semantic structure*. Cambridge University Press.
15. Talmy, L. (1988). Force dynamics in language and cognition. *Cognitive Science*, 12(1), 49-100. https://doi.org/10.1207/s15516709cog1201_2
16. Talmy, L. (2000). *Toward a cognitive semantics: Vol. 1. Concept structuring systems*. MIT Press.