

Conceptual Broadening of 'Kai-X' Internet Slang: A Cognitive Metaphor Analysis

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Abstract

In recent years, the "Kai-X" type of internet neologisms (e.g., *kaihei* "team up for gaming," *kaigua* "use hacks") has exhibited a clear trend of semantic generalization. The usage of these expressions has expanded beyond their original domain of online gaming to encompass everyday life, social discourse, and various public spheres. This study, grounded in the framework of cognitive metaphor theory and supported by relevant corpus data, investigates the specific manifestations of semantic generalization in such expressions, the metaphorical projection mechanisms that underlie them, and the broader impact of this phenomenon on the Chinese lexical system. By examining representative examples such as *kaihei*, *kaigua*, and *kaipen*, the study finds that the semantic expansion of these terms is primarily driven by metaphorical mapping—namely, the projection from a concrete source domain to more abstract target domains. This process enables semantic abstraction, value re-assignment, and drift. The widespread dissemination and usage of these generalized expressions not only enhance the expressive capacity of the language but also exert a profound influence on the structure of the Chinese lexicon and its semantic network.

Keywords

Cognitive Metaphor; Internet Slang; Semantic Generalization.

1. Introduction

In the context of rapid digitalization and informatization, internet language has evolved at an unprecedented pace, profoundly influencing modern Chinese expression and lexical systems. As a unique linguistic form born in virtual spaces and rooted in internet culture, internet language has spread swiftly across social media, online gaming, and short-video platforms due to its innovative, immediate, and interactive nature. Its flexibility has not only transformed communication methods but also driven the dynamic evolution of modern Chinese vocabulary, enabling numerous emerging terms to undergo semantic expansion and even establish new expressive paradigms. Among these, the prevalence and semantic generalization of "Kai-X" internet slang stand out as particularly noteworthy.

"Kai-X" internet slang, such as *kaihei* ("team up for gaming"), *kaiche* ("drive a car"), and *kaigua* ("use hacks"), initially carried relatively fixed literal meanings, referring respectively to gaming teamwork, vehicle operation, and cheating in games. However, with the diversification of online communication and the evolution of community culture, the semantics of these terms have gradually transcended their original scope, extending toward more abstract and multifaceted directions. For instance, *kaiche* has acquired metaphorical meanings, alluding to implicit or suggestive content, while *kaigua* is widely used to describe extraordinary real-life performance. Such semantic generalization vividly demonstrates the linguistic creativity of online communities and reflects the dynamic mechanisms of language evolution in internet contexts. Understanding the intrinsic mechanisms behind the semantic expansion of these terms has thus become a crucial research topic in the study of internet language development trends.

Cognitive metaphor theory provides significant theoretical support for explaining the semantic generalization of "Kai-X" internet slang. Lakoff and Johnson (1980), in their seminal work, argue that metaphor is not merely a rhetorical device but a fundamental cognitive mechanism through which humans construct and comprehend the world. According to this theory, humans frequently employ systematic mappings between source and target domains to transfer concrete experiences into abstract conceptual structures, thereby forming cognitive frameworks for complex phenomena. In "Kai-X" internet slang, the verb *kai* ("open" or "start") originally denoted physical actions such as "initiating" or "activating." However, in online contexts, its meaning has been metaphorically projected onto expressions of cognitive activities, social behaviors, and even psychological states. For example, *kaihei* no longer refers solely to gaming behavior but has extended to abstract concepts such as teamwork and strategic collaboration. This process of metaphorical mapping reveals the cognitive mechanisms underlying the semantic generalization of "Kai-X" terms and reflects the innovative thinking of language users in social interactions.

Based on this framework, this study primarily examines the semantic variations of "Kai-X" internet slang across different contexts, analyzing the diverse manifestations of their semantic generalization. Drawing on cognitive metaphor theory, it dissects the metaphorical mapping pathways through which these terms transition from source to target domains, uncovering the deeper mechanisms of their semantic evolution. Finally, by integrating semantic evolution mechanisms, the study further explores the impact of "Kai-X" internet slang on the structure of Chinese vocabulary and its semantic system.

Investigating the semantic generalization of "Kai-X" internet slang not only deepens the application of cognitive metaphor theory in internet language research but also elucidates the role of metaphor in lexical semantic evolution. Moreover, by analyzing the semantic extension patterns of these terms, this study enriches the understanding of internet language innovation mechanisms, offering fresh perspectives for cognitive research on language evolution. Additionally, given the pervasive infiltration of internet language into news dissemination, commercial advertising, social media, and even academic discourse, a thorough exploration of the semantic development of "Kai-X" terms not only aids the public in accurately understanding and using such vocabulary but also provides theoretical references for the standardization of internet language.

In summary, by utilizing large-scale corpora such as BBC and CCL for data retrieval and collection, this study combines cognitive metaphor theory to investigate the semantic generalization of "Kai-X" internet slang, analyze its metaphorical projection mechanisms, and assess its potential impact on the Chinese lexical system. The research aims to unveil certain patterns in the evolution of internet language generalization, thereby contributing new insights to the adaptation and innovation of language in the modernization of Chinese.

2. Literature Review

2.1. Cognitive Metaphor Theory

Research on metaphor from a cognitive linguistic perspective began in the 1980s. Lakoff and Johnson's (1980) *Metaphors We Live By* marked a shift in metaphor studies from traditional rhetoric to cognitive exploration. This groundbreaking work posits that metaphor is not merely a superficial rhetorical device but a core component of human thought and cognitive mechanisms, profoundly shaping the construction of fundamental conceptual systems. The publication of this book laid a solid theoretical foundation for contemporary cognitive metaphor theory, inaugurating a new era in metaphor research.

In China, cognitive metaphor research emerged relatively late, entering the cognitive phase only in the 1990s. In this field, Zhao Yanfang was among the first to introduce Lakoff's cognitive

metaphor theory to China, providing systematic explanations and critical analyses of its framework (Zhao Yanfang, 1995). Lin Shuwu comprehensively reviewed the major schools, developments, core topics, and future trends of international cognitive metaphor research (Lin Shuwu, 1997). Meanwhile, domestic scholars gradually advanced the in-depth study of metaphor theory by building on international theoretical achievements. Shu Dingfang argued that the cognitive functions of metaphor include: (1) serving as the foundation for organizing conceptual systems; (2) acting as a tool for organizing human experience; (3) providing new perspectives for understanding phenomena; and (4) functioning as a means of analogical reasoning (Shu Dingfang, 2001).

Hu Zhuanglin explored the core tenets of cognitive metaphor, emphasizing its pivotal role in human cognition and language development. He posited that the production and comprehension of metaphor rely on the experiences and imagination of language users, highlighting metaphor's active and creative nature in cognitive processes. Moreover, metaphor serves as a bridge across disciplines (Hu Zhuanglin, 2004). Subsequently, Chinese cognitive metaphor theory entered a phase of rapid development, with scholars continuously exploring new dimensions in this field. For instance, Liu Tingting proposed that the generation of metaphorical language involves a multi-space online processing mechanism, encompassing embodied cognition, cognitive metaphor construction, situational construal, syntactic structure generation, lexical-grammatical integration, and metaphorical sentence output. Metaphorical language is thus the result of complex cognitive operations by the cognitive subject (Liu Tingting, 2020). Zhu Honglei's survey of internet neologisms revealed that over 50% of new words are formed through metaphorical cognition. Metaphor not only influences the development of traditional vocabulary but also plays a significant role in the formation of internet neologisms, reflecting its universality and importance in lexical evolution (Zhu Honglei, 2008). Yang Bo examined the rationality of conceptual grammatical metaphor and its definition and application within systemic functional linguistics. By analyzing the grammatical and metaphorical perspectives of systemic functional linguistics, he demonstrated that conceptual grammatical metaphor is not merely a linguistic phenomenon but a crucial means through which humans cognize and construe the world (Yang Bo, 2018).

In summary, domestic cognitive metaphor research has gradually developed a localized approach by assimilating international theoretical achievements, offering new perspectives and methods for deepening metaphor theory and interpreting Chinese linguistic phenomena.

2.2. Semantic Generalization of Internet Slang and Current Research on "Kai-X" Internet Slang Metaphors

Semantic generalization of internet slang is a significant phenomenon in the development of internet language. Its essence lies in the process by which words gradually detach from their original semantic features, expanding into new referential scopes and usage patterns. Liu Dawei noted that "semantic generalization occurs when a word retains fewer and fewer of its original semantic features while continuously generating new usages, thereby incorporating increasingly diverse objects into its referential range" (Liu Dawei, 1997). This perspective highlights the core characteristic of semantic generalization: the progressive abstraction of word meanings and the broadening of their applicability.

Modern Chinese Lexicology further states that "when the objects denoted by the original and metaphorical meanings differ vastly in nature, it is easy to perceive the latter as a metaphor." This indicates that semantic generalization often operates through metaphorical mechanisms—namely, by mapping concepts from a source domain onto a target domain, thereby achieving semantic extension and transfer. Semantic generalization primarily relies on metaphor and analogy, resulting in semantic shifts, expanded pragmatic spaces, and the creation of new words.

From a cognitive linguistic perspective, metaphor is not merely a linguistic phenomenon but a vital tool for human thought and cognition. *An Introduction to Cognitive Linguistics* asserts that "metaphor is an instrument of thought and cognition" and that "metaphor involves the semantic extension of one category into another across different domains" (Hu Yanan, Yang Jie, & Xiong Liqin, 2009). Peng Xuanwei further argued that the development of collective cognitive abilities among the Han Chinese and the use of metaphorical mapping have played decisive roles in the expansion and extension of Chinese lexical categories, as well as in the formation of the modern Chinese lexical system (Peng Xuanwei, 2014). Thus, examining semantic generalization through the lens of cognitive metaphor holds significant theoretical value.

Several scholars have recognized this and conducted extensive research. For example, Guo Siyu employed cognitive metaphor theory to analyze the diachronic semantic evolution of the internet buzzword *cike* ("assassin"). His findings revealed that *cike* underwent semantic generalization through cross-domain mapping, morphological metaphor, and pragmatic space expansion, resulting in metaphorical abstraction and semantic ambiguity (Guo Siyu, 2024). Peng Jianwu and Wang Hui adopted a cognitive linguistic approach, using metaphorical mapping as a starting point and integrating image schemas and conceptual blending to analyze and translate the metaphorical internet buzzword *neijuan* ("involution"). *Neijuan* evolved from its original meaning of "rolling something flat into a cylindrical shape" to its current sense of "voluntarily engaging in non-beneficial internal competition" through conceptual metaphorical mapping (Peng Jianwu & Wang Hui, 2023). Zhou Jianmin observed that the semantic derivation and analogical word formation of such terms stem from either extending the meanings of existing "Kai-X" verbs or creating new words by analogy with the "Kai-X" verb pattern. The semantic generalization of internet slang often arises from the derivation of new meanings for existing words (Zhou Jianmin, 2002). Ren Dan explored the internet buzzword *tangping* ("lying flat") and its English translation from a cognitive linguistic perspective. Her study concluded that *tangping* underwent semantic and grammatical shifts, aligning with conceptual metaphor and metonymy, and acquired more abstract and negative connotations while functioning as a verb, adjective, or noun (Ren Dan, 2022).

In summary, existing research demonstrates that numerous scholars have focused on emerging internet slang, with many adopting cognitive metaphor perspectives to study individual terms such as *neijuan* and *cike*. However, research gaps remain regarding the pathways and mechanisms of semantic derivation for "Kai-X" internet slang, warranting further exploration.

3. Semantic Generalization of "Kai-X" Terms

3.1. Definition of "Kai-X" Internet Slang

"Kai-X" terms typically denote verbs with an inceptive meaning. Their structure follows the "Kai + X" pattern, most of which are verb-object compounds whose core semantics revolve around "initiating or commencing an activity." Here, "X" can be either a nominal or verbal morpheme, with semantics often pertaining to tools, locations, time, or actions (Zhou Jianmin, 2002).

A review of *The Contemporary Chinese Dictionary* (7th edition) reveals approximately 554 entries beginning with *kai*, among which around 42 conform to the "Kai + X" structure and carry the basic meaning of "initiating" or "commencing an activity," such as *kaifa* ("develop"), *kaihui* ("hold a meeting"), *kaihuo* ("start cooking"), and *kaiyan* ("begin a performance"). These usages primarily feature *kai* as a verb combined with an object X to form an "action + object" structure, with semantics leaning toward the initiation or execution of concrete actions. However, in internet contexts, "Kai + X" terms exhibit evolutionary characteristics distinct from traditional collocations: their semantic dimensions are more abstract and metaphorical; their pragmatic dimensions emphasize entertainment, emotional expression, and social interaction; and their dissemination relies heavily on media environments, subcultural circles, and context for pop

culture. Based on these selecting criteria, eight representative "Kai-X" internet slang terms were retrieved from corpus: *kaimai* ("open mic"), *kaixiang* ("unbox"), *kaigua*, *kaipen*, *kaihei*, *kaiche*, *kaimen* ("open the door"), and *kaihu* ("open an account").

This study selects three of the most representative terms—*kaihei*, *kaipen*, and *kaigua*—as analytical subjects. These terms exhibit strong semantic representativeness, clear metaphorical evolutionary paths, and high online usage frequency, rendering them valuable for research.

3.2. Manifestations of Semantic Generalization in "Kai-X" Internet Slang

(1) 开黑 Kaihei ("Team Up for Gaming")

(1) 吃鸡喝可乐, 都不如你开黑的快乐 (Eating chicken and drinking cola are nothing compared to the joy of kaihei). (Baidu, 2024)

(2) 想去爬山, 可是一个人户外总是不安全, 有哪些网站可以组队结伴开黑呢 (I want to go hiking, but solo outdoor activities feel unsafe. Are there any websites for finding partners to kaihei with)? (Zhihu, 2016)

Originally, *kaihei* was gaming jargon referring to players teaming up with friends or collaborators to fight together against others. The term *hei* ("black") is often explained as deriving from *hei fangjian* ("black room") or *hei dian* ("black shop"), implying that such teams are of high level of tacit understanding, having strong combat effectiveness and akin to high efficiency of a "black shop robbery." Thus, *kaihei* not only describes operational behavior but also connotes an "informal yet highly efficient collaboration" strategy.

Metaphorically, *kaihei* embodies the cognitive schema of "teaming up = activating combat mode," analogizing entry into a gaming state as an active, high-intensity competitive behavior. As the term gained frequency and broader contextual usage, its semantics gradually generalized, extending from specifically referring to gaming teamwork to generally referring to any private, interactive group activities organized by acquaintances. For instance, in "Let's *kaihei* to watch a movie tonight," *kaihei* has shed its gaming semantics, generalized as "private group activity" or "circle-based socializing," demonstrating cross-domain metaphor transformation from concrete action to abstract social patterns.

(2) 开挂 Kaigua ("Use Hacks")

(3) 在联机游戏里最令人痛恨的, 无疑要属那些开挂来破坏他人体验的人 (In online games, nothing is more detestable than those who kaigua to ruin others' experiences.) (Sina Weibo, 2024)

(4) 日前, 一则10岁小女孩上大学的新闻在社会上引发热议。乍一听, 这简直就是按下加速键的“开挂”人生 (Recently, news of a 10-year-old girl attending university sparked heated discussion. At first glance, this seems like a "kaigua" life on fast-forward.) (People's Daily, September 21, 2017)

Kaigua also originated as gaming terminology, denoting players' use of third-party software (*waigua*, or "hacks") to gain unfair advantages. Here, *gua* abbreviates *waigua*, referring to unofficial, cheat-enabled assisting tools, while *kai* means "activate." Thus, *kaigua* originally meant "activating hacks," carrying distinctly negative connotations of breaking of rules and fairness.

However, as the term entered broader usage, its semantics underwent noticeable generalization and emotional shift. *Kaigua* gradually acquired the meaning of "someone performing exceptionally well, surpassing normal performance." Its original negative tone faded, and it became positive to describe outstanding achievements, superpower, or rapid, smooth development. For example, in (4), the girl's extraordinary academic performance is likened to *kaigua*.

Cognitively, *kaigua* reflects a "hack activation equals to the activation of potential" projection schema. Its semantic evolution can be generalized as moving from external technical

empowerment to exceptional performance to the unleashing of individual potential. This cognitive migration from tool empowerment to the unleashing of individual potential metaphorically frames "hacks" as the activation of internal potential, vividly expressing "the outburst of ability" semantics.

(3) 开喷 *Kaipen* ("Open Fire Verbally")

(5) 要大时，江河之宽莫容。元宵已过，妖鱼不思转归潭中，顾爱花园内百卉开喷，红紫争妍 (When the time comes, even the widest rivers cannot contain [the fish]. After the Lantern Festival, the monstrous fish, unwilling to return to the deep pool, lingered in the garden where hundreds of flowers *kaipen*, red and purple vying for beauty (《包公案之百家公案》 *The Cases of Judge Bao*)

(6) 本身没有挑拨离间。被一群不明真相的人转走、被人误解开喷，你不删难道还把事态闹大 (I wasn't trying to sow discord. But when misunderstandings spread and people *kaipen* at me, shouldn't I delete [the post] rather than escalate the situation?) ? (微博Weibo)

The literal origin of *kaipen* traces back to descriptions of physical rejection—liquid or gas under high pressure, characterized by immediacy, density, and impact. *The Contemporary Chinese Dictionary* also lists "bloom (of a flower) (花朵) 开放" as a meaning of *pen*, as in (5). However, this definition bears little relevance to *kaipen*'s internet usage.

Through metaphorical evolution, this physical action was analogized and projected to verbal expression, forming the internet term *kaipen* to describe individual's intense launching of verbal expressions, especially criticism. Compared to traditional terms like *shuo* ("speak") or *ma* ("scold"), *kaipen* is more expressive and emotionally charged and exaggerated.

Cognitively, *kaipen* embodies metaphorical migration from physical rejection to verbal output to emotional catharsis. Its construction can be parsed as *kai* ("initiate") + *pen* ("high-pressure release"), forming a "initiate emotional catharsis" schema. This analogy stems from embodied experiences (e.g., spurt, Eruption) being mapped onto linguistic domains, enhancing imagery and emotional tension.

3.3. Metaphorical Projection Mechanisms in "Kai-X" Internet Slang

In modern Chinese internet contexts, the semantic generalization of "Kai-X" terms relies on metaphorical mapping—projecting concrete, embodied concepts onto more abstract conceptual domains. This mechanism is rooted in human cognition: when grappling with abstract phenomena, people often analogize from existing concrete experiences to construct new semantic relationships. The semantic evolution of *kaihei*, *kaigua*, and *kaipen* exemplifies this cognitive rule at the linguistic level.

First, consider *kaihei*. Its gaming origin refers to players teaming up with acquaintances, where *hei* derives from *hei dian* ("black shop"). Both "black shops" and their gaming usage to denote acquaintances teams imply private and exclusive features. The core characteristics here are "exclusivity," "closeness," and "unitedly against external threats," which metaphorically project onto real-life contexts to generally refer to any group work by acquaintances, such group work or travel together. This semantic extension analogizes the concrete "black shop" concept to broader social interactions, yielding new usages.

Next, *kaigua* originates from gaming "hacks" (*waigua*), where players use tools to cheat so as to gain superpower, enabling them to "combat" unimpeded. The deep core feature here is "abnormally strong." In semantic expansion, this maps onto real life to describe individuals developing superpower or high achievements in a short time. Notably, while originally negative, its meaning gains positive connotations during metaphorical mapping, emphasizing superpower over cheating activities.

Finally, *kaipen*'s semantic evolution vividly illustrates metaphorical projection from physical to abstract. Physically, *pen* denotes high-speed rejection of liquids/gases, characterized by "rapid,

voluminous release." Online, this maps onto verbal activities to diatribes, often with exaggeration and emotion.

The metaphorical mechanisms can be summarized as: (1) *kai* universally functions as an "activation-transition" cognitive engine across all "Kai-X" terms; (2) semantic extension follows embodied-to-abstract metaphorical transfer; (3) semantic compression and emotional intensification together endow "Kai-X" structures their distinctive features, enhancing information density and communication power.

Table 1. Metaphorical Mapping of "Kai-X" Terms

Term	Source Domain	Similarity	Target Domain
开黑 Kaihei	"Black shop"—covert, exclusive group/space	secretiveness, exclusivity, undisclosed	initiate collaborative group activities
开挂 Kaigua	"Hacks"—cheating tools	abnormally powerful, extraordinary, unimpeded	Exceptional performance, Extraordinary state
开喷 Kaipen	"Spraying"—physical ejection	intense, release	Vehement language, Verbal outburst

4. Conclusion

The study demonstrates that internet slang such as *kaihei*, *kaigua*, and *kaipen*, guided by metaphorical mechanisms, successfully project from source domains (e.g., "black shops," "hacks," "spraying") to target domains via similarity mappings, achieving semantic abstraction and drift. This process undeniably broadens these terms' referential scope, adding new dimensions to Chinese expression.

In the evolution of modern Chinese, the semantic generalization of internet slang has vastly enriched linguistic expressiveness while profoundly impacting Chinese lexical structure and semantic networks. These "Kai-" headed verb phrases are inherently creative due to their flexible collocability. However, metaphor-driven semantic expansion further facilitates the integration between internet neologisms and traditional vocabulary, breaking linguistic boundaries and revitalizing the Chinese lexicon. Simultaneously, it renders the semantic system more fluid, adjusts emotional connotations, and better meets diverse expressive needs.

Moreover, this generalization process enhances Chinese metaphorical features and imagery. By analogizing concrete concepts, new terms gain heightened expressiveness and influence, easing public acceptance and dissemination. This underscores modern Chinese adaptability and innovativeness in the digital era. Internet language epitomizes linguistic creativity and serves as a vital force propelling the Chinese lexical system forward.

References

- [1] Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. University of Chicago Press.
- [2] Bao Wuyun & Dong Feng. (2014). Research status of semantic generalization. *Journal of Language and Literature*, (11), 2.
- [3] Guo Siyu. (2024). Analysis of semantic generalization of the internet buzzword "assassin" from a cognitive metaphor perspective. *China National Exhibition*, (13), 232–234.
- [4] Hu Yanan, Yang Jie, & Xiong Liqin. (2009). Review of *An Introduction to Cognitive Linguistics*. *Foreign Languages and Their Teaching*, 26(3), 4.
- [5] Hu Zhuanglin. (1997). Language, cognition, and metaphor. *Modern Foreign Languages*, (4), 52–59.
- [6] Liu Dawei. (1997). Metaphorical semantic generalization of Slang. *Chinese Language Learning*, (4), 33–37.

- [7] Liu Tingting. (2020). A new exploration of metaphorical language construction mechanisms. *Foreign Language Teaching and Research*, (3), 361–371.
- [8] Lin Shuwu. (1997). Overview of foreign metaphor research. *Foreign Language Teaching and Research*, (1), 14–22.
- [9] Peng Jianwu & Wang Hui. (2023). Analysis and English translation of the metaphorical internet buzzword "involution" from a cognitive linguistic perspective. *English Plaza: Academic Research*, (19), 42–46.
- [10] Peng Xuanwei. (2004). Cognitive development, metaphorical mapping, and the extension of lexical categories: The cognitive mechanisms underlying the formation of the modern Chinese lexical system. *Journal of Beijing Normal University (Social Science Edition)*, (3), 7.
- [11] Ren Dan. (2022). Research on the internet buzzword "lying flat" and its English translation from a cognitive linguistic perspective. *Comparative Study of Cultural Innovation*, (2), 59–62.
- [12] Shu Dingfang. (2001). On the cognitive functions of metaphor. *Foreign Languages Research*, (2), 28–31.
- [13] Yang Bo. (2018). Interpreting conceptual grammatical metaphor. *Foreign Languages Research*, (6), 30–35.
- [14] Zhu Honglei. (2008). Metaphorical study of internet neologisms. *Journal of Zhengzhou University of Aeronautics (Social Science Edition)*, (3), 71–73.
- [15] Zhou Jianmin. (2002). Semantic derivation and analogical word formation of inceptive "Kai-X" verbs. *Journal of Jiangnan University (Humanities and Social Sciences)*, (2), 27–30.
- [16] Zhao Yanfang. (1995). The metaphorical cognitive structure of language: A review of *Metaphors We Live By*. *Foreign Language Teaching and Research*, (3), 67–72.
- [17] Zhou Zumo. (1985). *Modern Chinese lexicology*. Peking University Press.