ESTEEM Journal of English Study Programme
E-ISSN: 2622-2213
P-ISSN: 2622-9323

METAPHORICAL CONCEPTUALIZATION IN *WHY AI IS INCREDIBLY SMART AND SHOCKINGLY STUPID*: A SEMANTIC ANALYSIS

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Accepted :
16 November 2026

Published :
18 November 2026

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ABSTRACT

This study explores how artificial intelligence (AI) is conceptualized through metaphors in Yejin Choi's TED Talk, *Why AI Is Incredibly Smart and Shockingly Stupid*. Based on Conceptual Metaphor Theory, it identifies metaphorical expressions, examines their underlying conceptual mappings, and analyzes how they shape representations of AI and its relationship with human cognition. A qualitative descriptive approach was employed by repeatedly examining the complete transcript, including the question-and-answer session. Expressions whose contextual meanings differed from their basic meanings were identified and analyzed in terms of their source and target domains. The analysis revealed twelve conceptual metaphors, including Ai is a giant, AI development is warfare, common sense is dark matter, achieving common sense AI is a moonshot, and ai learning is human education. Collectively, these metaphors portray AI as powerful but imperfect, while human cognition remains the primary reference for evaluating its abilities and limitations. The findings contribute to cognitive linguistics, particularly semantics, metaphor studies, and discourse analysis, by demonstrating how complex technological concepts are communicated through familiar experiences. This study also expands research on conceptual metaphors in TED Talks, which has predominantly examined religious, legal, and educational discourse, by focusing on artificial intelligence.

Keywords: Metaphorical Conceptualization, artificial intelligence, semantic analysis, TED Talk, source domain, target domain

1. INTRODUCTION

Language serves as a fundamental means of human communication through which individuals exchange ideas, express experiences, and develop interpretations of the world around them. However, linguistic meaning is not always limited to the literal definitions of words, as expressions may convey different interpretations depending on their linguistic and situational contexts. Semantics, as a branch of linguistics concerned with the study of meaning, provides a theoretical foundation for understanding how linguistic expressions convey and construct meaning (Bagha, 2011). The interpretation of meaning also involves contextual and cognitive processes, particularly when distinguishing between literal and figurative expressions (Cuccio et al., 2014). Thus, examining language requires attention not only to the words themselves but also to the conceptual and contextual relationships that shape their interpretation.

In everyday communication, speakers frequently employ figurative language to communicate ideas that may be abstract, unfamiliar, or difficult to explain through literal expressions. Among various forms of figurative language, including simile, personification, hyperbole, irony, and symbolism, metaphor plays a particularly significant role in relating unfamiliar concepts

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to more familiar experiences. Previous studies have examined figurative language across different communicative contexts, including literary works, digital product reviews, and public speaking (Syafitri & Marlinton, 2018; Pertiwi & Handayani, 2023; Salahuddin et al., 2023). Nevertheless, metaphor deserves particular attention because its function extends beyond stylistic expression. It can reflect underlying conceptual structures through which individuals understand and interpret abstract phenomena (Lakoff & Johnson, 1980; Gibbs, 2017). Therefore, the present study focuses specifically on metaphor as a cognitive and semantic mechanism rather than treating different categories of figurative language as independent objects of investigation.

The theoretical foundation of this study is Conceptual Metaphor Theory (CMT), initially developed by Lakoff and Johnson (1980). This theory proposes that metaphor is fundamental to human thought because people frequently understand abstract concepts through their associations with more concrete and familiar experiences. Within this framework, a conceptual metaphor involves two interconnected components: the source domain, which provides the familiar conceptual structure, and the target domain, which represents the concept being understood. The relationship between these domains is established through conceptual mapping, whereby selected characteristics of the source domain are transferred to the target domain (Kövecses, 2017, 2020). For instance, the conceptual metaphor LIFE IS A JOURNEY presents life through the experience of travelling, allowing expressions such as "moving forward" and "losing one's way" to communicate particular understandings of life experiences. However, conceptual mapping does not necessarily transfer every characteristic of the source domain. Instead, particular features are highlighted while others remain less prominent, demonstrating how metaphor selectively structures human understanding (Lakoff, 1993; Kövecses, 2020). This perspective also emphasizes that metaphorical meaning should be interpreted in relation to its linguistic and communicative context (Semino, 2008; Rasse et al., 2020).

The application of conceptual metaphor becomes particularly relevant when examining artificial intelligence (AI), a complex concept that cannot be adequately explained through a single disciplinary perspective. AI involves interconnected areas of knowledge, including computer science, mathematics, biology, philosophy, and psychology, each contributing different understandings of intelligence and intelligent systems (Abbass, 2021). Furthermore, the statistical and computational processes underlying AI systems are often difficult for general audiences to visualize or understand directly. Consequently, public explanations of AI may rely on familiar objects, human activities, social relationships, and other recognizable experiences to make technical concepts more accessible. Recent studies have increasingly examined how metaphorical expressions frame artificial intelligence and shape public understandings of its capabilities and functions (Nguyen, 2024; Beshlei, 2025; Stanič, 2025). Such representations suggest that metaphor is not merely a linguistic choice but also a means of constructing particular interpretations of AI, including its relationship with human intelligence and everyday life (Petricini, 2026).

TED Talks provide an appropriate context for investigating this phenomenon because they present specialized knowledge and complex subjects to audiences with different levels of expertise. In scientific communication, figurative expressions can function as explanatory resources by connecting unfamiliar information with recognizable experiences. Scotto Di Carlo (2014), for example, demonstrated how similes in TED Talks help speakers explain scientific concepts through familiar comparisons. Similarly, Mattiello (2019) examined how scientific TED Talks communicate specialized knowledge to non-expert audiences through particular linguistic and explanatory strategies. Other studies have also investigated figurative language in TED and TEDx presentations, including the use of metaphor, hyperbole, and irony (Munir et al., 2023), as well as the structural characteristics of similes in English TED Talks (Salahuddin et al., 2023). These findings establish the importance of figurative language in public knowledge communication and provide a basis for examining how conceptual metaphors

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make technologically complex subjects more understandable.

One presentation that illustrates this communicative challenge is Yejin Choi's TED Talk entitled *Why AI Is Incredibly Smart and Shockingly Stupid*, delivered at the TED2023 conference and published in April 2023 (Choi, 2023). Choi, a computer scientist specializing in natural language processing and common-sense reasoning, discusses the contrasting capabilities and limitations of contemporary artificial intelligence systems. The presentation highlights how large language models can demonstrate impressive performance on sophisticated tasks while continuing to struggle with relatively basic forms of common-sense reasoning. Choi also questions the assumption that increasing model size alone will necessarily produce more intelligent systems, emphasizing the importance of developing AI that is more transparent and better aligned with human knowledge, values, and common-sense understanding. Throughout the presentation, she uses comparisons and illustrations involving different areas of human experience, including mythology, warfare, astrophysics, and education, to communicate complex technological issues to a general audience. These characteristics make the presentation a relevant source for examining how metaphorical expressions construct particular understandings of artificial intelligence and its relationship with human cognition.

Previous research has explored metaphor and figurative language across several discourse contexts, providing a foundation for the present investigation. At the level of general figurative language, Syafitri and Marlinton (2018) examined figurative expressions in Edgar Allan Poe's poetry, identifying different categories such as personification, simile, hyperbole, and symbolism. Similarly, Pertiwi and Handayani (2023) investigated figurative language in beauty product reviews on YouTube, demonstrating how non-literal expressions contribute to meaning in digital communication. In the context of public speaking, Munir et al. (2023) examined the use of figurative language in Pakistani TEDx presentations from the perspective of Relevance Theory, whereas Salahuddin et al. (2023) concentrated on simile structures in English TED Talks. Although these studies demonstrate the diverse functions of figurative language, their primary concerns differ from the present investigation, which specifically examines conceptual metaphors as underlying structures of meaning rather than classifying figurative expressions according to their linguistic forms.

A more closely related group of studies has investigated metaphorical representation within TED discourse. Elzahar (2020), for instance, explored how religion was represented through metaphor in TED Talks using critical metaphor analysis. In another institutional context, Gedminaitė and Urbonaitė (2023) examined multimodal metaphors in TED presentations addressing legal issues, incorporating both verbal and visual resources into their analysis. Jurkūnaitė and Urbonaitė (2026) further investigated metaphorical expressions in popular legal discourse through English-to-Spanish TED Talks, with particular attention to translation strategies. These studies demonstrate that TED presentations provide valuable material for examining how metaphors construct and communicate specialized concepts. However, their research primarily addresses religious and legal discourse rather than the representation of artificial intelligence and its relationship with human cognition.

Conceptual Metaphor Theory has also been applied to various forms of discourse outside TED presentations. Jawad (2022) investigated conceptual metaphors in Kurdish food-related idioms through a cognitive linguistic perspective, while Kravets et al. (2021) examined conceptual metaphor in Ukrainian poetic discourse and discussed its role in expressing and interpreting human experiences. Rasse et al. (2020) approached conceptual metaphor from a psycholinguistic perspective, investigating its contribution to poetry interpretation. In educational discourse, Matsevich et al. (2020) explored conceptual metaphor as a means of teaching English speech patterns in higher education. These investigations demonstrate the applicability of conceptual metaphor analysis across linguistic, literary, and educational contexts.

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Nevertheless, they do not directly address how artificial intelligence is conceptualized in a public scientific presentation.

Recent research has begun to address the relationship between metaphor and artificial intelligence more directly. Nguyen (2024) investigated conceptual metaphors associated with AI and its development in *The Guardian*, highlighting the relevance of metaphorical framing in media representations of technological developments. Beshlei (2025) examined how metaphors frame the roles of AI agents, while Stanič (2025) explored the metaphorical conceptualization of artificial intelligence in contemporary Italian journalistic discourse. Petricini (2026) also addressed how language frames AI through representations such as an assistant, collaborator, or transformative force. These studies provide relevant perspectives for understanding how metaphorical language influences the ways artificial intelligence is represented in public discourse. Research on human–AI interaction and AI-related representations further illustrates the importance of examining how people understand the relationship between human capabilities and artificial systems (Böhmer et al., 2024). However, the application of conceptual metaphor analysis to a specific AI-focused TED presentation remains a distinct area for further investigation.

Methodologically, identifying metaphorical expressions requires more than recognizing words that appear unusual or figurative. The Metaphor Identification Procedure (MIP), developed by the Pragglejaz Group (2007), provides a systematic approach by examining the contextual meaning of a lexical unit in relation to its more basic contemporary meaning. Subsequent methodological discussions have explored ways to improve metaphor identification and examine metaphorical patterns in discourse (De Backer et al., 2023; Muelas-Gil, 2023). Research on metaphor identification and annotation has also addressed the challenges of recognizing metaphorical expressions in natural language processing (Ptiček & Dobša, 2023), while Bajzát and Simon (2024) discussed the application of MIPVU to comparative metaphor analysis across languages. In addition, Johansson Falck and Okonski (2022) introduced a procedure for identifying metaphorical scenes, extending the examination of metaphor beyond individual lexical expressions. These methodological contributions provide useful considerations for identifying metaphorical language systematically before interpreting the conceptual structures underlying it. For the present study, this process is particularly important because the identification of metaphorical expressions must be followed by an examination of the conceptual mappings they realize.

Taken together, previous studies establish the importance of metaphor in cognitive processes, public communication, scientific explanation, and the representation of artificial intelligence. Nevertheless, several research gaps remain. First, although previous investigations have examined metaphorical representations of AI in journalistic discourse and discussions of AI agents (Nguyen, 2024; Beshlei, 2025; Stanič, 2025), comparatively limited attention has been directed toward the conceptualization of AI in an individual TED presentation. Second, previous studies of TED discourse have largely concentrated on religious, legal, educational, or general scientific topics (Elzahar, 2020; Matsevich et al., 2020; Gedminaitė & Urbonaitė, 2023; Jurkūnaitė & Urbonaitė, 2026), leaving AI-focused presentations as a relevant context for further conceptual metaphor research. Third, studies of figurative language in public speaking have frequently examined multiple forms of figurative expression or specific linguistic categories (Munir et al., 2023; Salahuddin et al., 2023), whereas the present study concentrates on the relationship between metaphorical linguistic expressions and the conceptual structures they represent. Finally, unlike corpus-based investigations that seek to identify broader patterns across numerous texts, this study adopts a focused examination of one presentation to explore how metaphorical expressions work together to construct particular understandings of artificial intelligence and human cognition.

Accordingly, this study investigates the metaphorical conceptualization of artificial intelligence in Yejin Choi's TED Talk *Why AI*

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Is Incredibly Smart and Shockingly Stupid through a semantic analysis informed by Conceptual Metaphor Theory. Specifically, it identifies the metaphorical linguistic expressions occurring throughout the presentation, examines the conceptual metaphors realized through those expressions, and interprets how the identified metaphors construct representations of artificial intelligence and its relationship with human cognition. The study is guided by three research questions: (1) What metaphorical linguistic expressions are found in Yejin Choi's TED Talk? (2) What conceptual metaphors are realized through these expressions? and (3) How do the identified conceptual metaphors conceptualize artificial intelligence and its relationship with human cognition?

2. METHODS

This study used a qualitative research design with a descriptive orientation. This choice fits the purpose of the study, since the focus was on identifying, interpreting, and explaining the conceptual metaphors found in Choi's TED Talk based on their context, rather than measuring anything numerically (Creswell & Creswell, 2018).

2.1. Data Sources

The primary data source was the complete transcript of Yejin Choi's TED Talk, "Why AI Is Incredibly Smart and Shockingly Stupid" (Choi, 2023). The analysis included both the main presentation and the question-and-answer segment with TED curator Chris Anderson, since this segment contained material relevant to the research questions, including a further reference to the moonshot analogy introduced earlier in the talk.

2.2. Data Collection

Data collection involved several steps. First, the transcript of the talk, including the question-and-answer segment, was obtained. This transcript was read several times while listening to the recording, so that the content and overall argument of the talk could be properly understood. While doing this, expressions whose meaning in context seemed to shift away from a more basic, concrete sense were marked and recorded along with their surrounding context. These marked expressions were then compiled into a data table to prepare them for analysis.

2.3. Data Analysis

Each identified expression was checked following the logic of the Metaphor Identification Procedure (Pragglejaz Group, 2007): its meaning in the context of the talk was compared with its more basic, concrete meaning, and only expressions where these two meanings differed were treated as metaphorical. For every expression confirmed this way, the source domain and target domain were worked out, along with the specific mapping connecting elements across the two domains. Expressions that shared the same source domain and mapping were grouped as one conceptual metaphor rather than counted separately, and expressions that were only weakly figurative, highly conventionalized, or better explained as personification, idiom, or literal language were noted as such. The resulting conceptual metaphors were then interpreted for what they suggest about how artificial intelligence and human cognition are represented, discussed alongside relevant previous studies, and linked back to the study's three research questions.

3. RESULTS AND DISCUSSION

3.1. Conceptual Metaphor Analysis

The analysis of the complete transcript, including the question-and-answer segment, identified twelve conceptual metaphors realized through a range of metaphorical linguistic expressions. Not every figurative-sounding expression in the talk was treated as evidence of a distinct conceptual metaphor. Several expressions that share the same source domain and the same underlying correspondence were grouped together under a single conceptual metaphor rather than counted separately. A small number of highly conventionalized expressions, such as the idiom "garbage in and garbage out" and the collocation "acquire knowledge," were retained with an explicit note on their conventionality rather than being presented as

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equally novel evidence. Table 1 presents the twelve conceptual metaphors identified, together with representative evidence from the transcript and their associated source and target domains.

Table 1. Conceptual Metaphors Identified in Yejin Choi's TED Talk

Conceptual Metaphor	Evidences	Source Domain	Target Domain
AI IS A GIANT	"AI today is like a Goliath. It is literally very, very large."	Legendary giant (Goliath)	Extreme-scale AI models
AI DEVELOPMENT IS WARFARE	"…know your enemy, choose your battles, and innovate your weapons"	Warfare / military strategy	AI research strategy and priorities
AI EVALUATION IS PHYSICAL INSPECTION	"…evaluate AI with scrutiny"; "…inspect and dissect these models"	Physical examination	Research access to and assessment of AI systems
AI RESEARCH IS A JOURNEY	"an alternative path or path yet to be found...a path that can build on the advancements of the deep neural networks"	Journey / path	Direction and strategy of AI research
COMMON SENSE IS DARK MATTER	"…the dark matter is the unspoken rules about how the world works,"	Dark matter (astrophysics)	Common sense / implicit knowledge
ACHIEVING COMMONSENSE AI IS A MOONSHOT	"...giving true...common sense to AI is still moonshot. And you don't reach to the Moon by making the tallest building in the world one inch taller at a time."	Space travel (moonshot) vs. incremental construction	Goal of human-like commonsense AI vs. incremental scaling
COMMON SENSE IS A PUZZLE	"…this seemingly impossible giant puzzle of common sense"	Puzzle-solving	The multipart, difficult structure of common sense
HUMAN EXPERIENCE IS A TAPESTRY	"…these pieces weave together into a tapestry that we call human experience and common sense"	Weaving / textile-craft	The integrated structure of human experience and common sense
AI LEARNING IS HUMAN EDUCATION	"…writing specialized textbooks for AI to study from and then hiring human tutors to give constant feedback to AI"; "Maybe AI should be taught that way as well"	Human schooling	Training AI with curated data and human feedback
AI CAPABILITY IS HUMAN INTELLECTUAL PERFORMANCE	"…AI lawyer that aced the bar exam"; "AI today is unbelievably	Human professional / intellectual competence	AI system performance and its evaluation

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	intelligent and then shockingly stupid"		
AI IS A NEW INTELLECTUAL SPECIES	"…AI is almost like a new intellectual species"	Biological species	AI as an emerging category of intelligence
LOW-QUALITY DATA IS GARBAGE	"…garbage in and garbage out"	Physical waste	Poor-quality training data and its effects

(Source: Choi, 2023)

Discussion

AI as a Powerful and Unfamiliar Entity

The first pattern concerns Choi's representation of AI as a powerful and unfamiliar entity. In the expression "AI today is like a Goliath. It is literally very, very large," the figure of Goliath represents the enormous scale of contemporary AI models. The marker "like" indicates an explicit comparison, through which the physical size of the legendary giant is mapped onto the models' computational scale and resource demands. This association becomes more meaningful when Choi later introduces the contrast between David and Goliath to emphasize the potential of smaller and more efficient AI systems. Similarly, describing AI as "almost like a new intellectual species" presents it as something beyond an ordinary technological tool. These expressions realize the conceptual metaphors AI IS A GIANT and AI IS A NEW SPECIES. Such representations illustrate how unfamiliar technological concepts can be explained through recognizable source domains, consistent with the cognitive principles of Conceptual Metaphor Theory (Lakoff & Johnson, 1980; Kövecses, 2017, 2020). Recent discussions of AI discourse have also highlighted the role of metaphor in shaping public understandings of artificial intelligence (Nguyen, 2024; Beshlei, 2025; Stanič, 2025).

AI Development as a Strategic and Challenging Process

The second pattern represents AI development as a demanding process that requires strategic decisions and careful evaluation. Choi draws on three principles associated with *The Art of War*: "know your enemy, choose your battles, and innovate your weapons." Together, these expressions establish the conceptual metaphor AI DEVELOPMENT IS WARFARE. The "enemy" refers to the assumption that large-scale AI is necessarily safe or reliable, "battles" represent research priorities such as common-sense reasoning, and "weapons" refer to the data and algorithms used to improve AI systems. The expressions "evaluate AI with scrutiny" and "inspect and dissect these models" further frame assessment as physical examination, realizing AI EVALUATION IS PHYSICAL INSPECTION. Meanwhile, references to an "alternative path" and "a path that can build on the advancements of the deep neural networks" conceptualize research strategies as routes toward possible solutions, reflecting AI RESEARCH IS A JOURNEY.

Another aspect of this pattern appears in Choi's description of achieving common sense in AI as a "moonshot." Her comparison between reaching the Moon and gradually constructing a taller building emphasizes that major advances cannot necessarily be achieved through incremental improvements alone. This idea is reinforced in the question-and-answer session through the expression "Goldilocks Zone," which suggests an optimal balance in AI model development. These expressions collectively frame technological progress through warfare, physical inspection, journey, and space exploration. Although journey and construction metaphors have also been identified in educational discourse (Matsevich et al., 2020), Choi applies comparable source domains to technological research and development. This supports the broader view that conceptual metaphors can organize complex ideas by drawing on familiar

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experiences (Kövecses, 2017, 2020; Rasse et al., 2020).

Common Sense as a Hidden and Composite Phenomenon

The third pattern concerns the representation of common sense, the central concept in Choi's talk. In the statement "the dark matter is the unspoken rules about how the world works," dark matter serves as the source domain for common sense. The comparison emphasizes that common sense, like dark matter, is not directly visible but has an important influence on how the world is understood. Choi subsequently describes common sense as a "seemingly impossible giant puzzle," presenting it as a complex phenomenon composed of multiple elements. This representation is extended through the image of "these pieces [that] weave together into a tapestry that we call human experience and common sense." The puzzle metaphor emphasizes the fragmented nature of common sense, whereas the tapestry metaphor highlights how separate elements form an interconnected whole. Accordingly, these expressions realize three related but distinct metaphors: COMMON SENSE IS DARK MATTER, COMMON SENSE IS A PUZZLE, and COMMON SENSE IS A TAPESTRY.

Rather than functioning merely as rhetorical decoration, these metaphors provide different ways of organizing an abstract and complex concept. This interpretation is consistent with research that views metaphor as a cognitive resource for structuring experience and meaning (Rasse et al., 2020; Kravets et al., 2021). In Choi's talk, however, these representations occur within scientific communication, helping a general audience understand why common sense remains difficult to reproduce in artificial systems.

AI as a Learner and an Evaluated Performer

The fourth pattern presents AI through human learning and intellectual performance. Choi's reference to "writing specialized textbooks for AI to study from and then hiring human tutors to give constant feedback to AI" realizes AI LEARNING IS HUMAN EDUCATION. In this mapping, training materials correspond to textbooks, human feedback represents tutoring, and AI occupies the role of a student. The comparison is reinforced when Choi suggests that AI should be taught in ways that reflect human learning rather than merely predicting the next word. These expressions establish human education as a model for improving AI training.

A related representation appears in the descriptions of an "AI lawyer that aced the bar exam" and AI as "unbelievably intelligent and then shockingly stupid." By applying professional roles and human intellectual judgments to artificial systems, Choi personifies AI and evaluates its capabilities through human standards. These expressions can be understood through the conceptual metaphor AI CAPABILITY IS HUMAN INTELLECTUAL PERFORMANCE, while personification provides a more specific way of attributing human characteristics to a nonhuman entity (Lakoff & Johnson, 1980; Lakoff, 1993). Together, the education and performance metaphors suggest that human learning and judgment serve as important reference points for explaining both the potential and limitations of AI. This explanatory function differs from studies that primarily examine figurative language as a means of audience engagement in TEDx presentations (Munir et al., 2023; Salahuddin et al., 2023).

Data Quality and Conventional Metaphors

A final, less prominent pattern concerns the quality of AI training data. The expression "garbage in and garbage out" describes how unfiltered or poor-quality data can produce unreliable AI outputs. It draws on the association between physical waste and low-quality information, realizing the conventional metaphor POOR-QUALITY DATA IS GARBAGE. However, because this expression is an established computing idiom, it is not treated as a distinctive metaphorical contribution of Choi's talk. Similarly, "acquire knowledge" and "knowledge acquisition" reflect the conventional conceptualization of KNOWLEDGE IS A POSSESSION (Lakoff

& Johnson, 1980). These expressions are acknowledged as part of the talk's metaphorical language but are not considered separate, salient findings in the analysis.

Overall, the twelve conceptual metaphors identified in the analysis reveal how Choi makes AI and its limitations understandable through familiar human, physical, and cultural experiences. AI is presented as a powerful and unfamiliar entity (GIANT and NEW SPECIES), while its development is framed as a strategic and challenging process (WARFARE, PHYSICAL INSPECTION, JOURNEY, and MOONSHOT). Common sense, in turn, is represented as something hidden and structurally complex (DARK MATTER, PUZZLE, and TAPESTRY). Finally, human education and intellectual performance provide the principal standards for explaining how AI is trained and evaluated (HUMAN EDUCATION and HUMAN INTELLECTUAL PERFORMANCE). The conventional expressions concerning data quality and knowledge further illustrate how established metaphors remain embedded in technological discourse.

These findings address the third research question by showing that Choi does not explain AI exclusively through technical terminology. Instead, she draws on human learning, judgment, strategic action, and familiar physical experiences to communicate its capabilities and limitations. The analysis therefore demonstrates how conceptual metaphors function as explanatory resources in public discussions of artificial intelligence, while also positioning human cognition as an important benchmark for understanding the development of intelligent systems (Kövecses, 2017, 2020; Nguyen, 2024; Böhmer et al., 2024; Stanič, 2025).

4. CONCLUSION

This study set out to identify the metaphorical linguistic expressions found in Yejin Choi's TED Talk *Why AI Is Incredibly Smart and Shockingly Stupid*, to establish the conceptual metaphors realized through those expressions, and to explain how the resulting conceptual metaphors represent artificial intelligence and its relationship with human cognition. Analysis of the complete transcript, including the question-and-answer segment, identified twelve conceptual metaphors, presented in full in Table 1. Together, these conceptual metaphors represent AI as an unfamiliar and powerful entity whose responsible development is a strategic and difficult undertaking, and they consistently use human experience, particularly human learning and human judgment, as the reference point through which AI's abilities and limitations are explained.

The study contributes to the growing body of Conceptual Metaphor Theory research on TED Talk discourse by extending this line of inquiry to a technology- and AI-focused talk. In doing so, it demonstrates that a close, single-talk qualitative analysis can reveal how several metaphorical expressions work together, rather than in isolation, to construct a coherent conceptual account of a complex technical subject for a general audience.

As a close analysis of a single TED Talk, however, this study's findings should not be generalized to AI-related public discourse more broadly. They describe how one speaker conceptualized artificial intelligence and its relationship to human cognition, and they should be understood as an illustrative case rather than as evidence of a stable, speaker-independent pattern.

Future research could extend this analysis to other AI-focused TED Talks or comparable presentations by different speakers, which would make it possible to examine whether the conceptual metaphors identified here, particularly the recurring reliance on human learning and human judgment as a reference point, are specific to Choi's talk or reflect a broader tendency in how artificial intelligence is conceptualized in public discourse.

Ethical Considerations

Participation in the study was entirely voluntary, and informed consent was obtained from all participants before data collection.

Participants' confidentiality and anonymity were protected throughout the research process.

Statement on the Use of Artificial Intelligence

Artificial intelligence tools were used solely to assist with language editing and manuscript refinement. All data analysis, interpretation, and conclusions were independently carried out by the researchers.

Conflict of Interest

The authors declare no conflicts of interest.

Funding

This research received no specific financial support or funding.

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