



The Double-Edged Sword (A Corpus-Assisted Conceptual Metaphor Analysis of Artificial Intelligence in Web-based English Texts)

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ABSTRACT

The present study explores how artificial intelligence is conceptualised and constructed in English web-based texts. Using a conceptual metaphor corpus assisted approach, a large dataset composed of web-based English language texts was examined to see how the notion of artificial intelligence was constructed using different metaphorical patterns. Corpus analysis of salient lexical items is combined with the qualitative discourse analysis to uncover and interpret the underlying source domains and the mappings of their features onto the domain of artificial intelligence. The findings revealed that this concept is predominantly constructed through interrelated metaphorical domains, particularly Human (personification), Force/Power, and Transformation. These varied metaphorical structures produce conflicting representations, simultaneously portraying artificial intelligence as a helpful person, beneficial tool, a transformative force, and a potential threat. Furthermore, the analysis shows that through personification, capacities of agency and decision-making are attributed to artificial intelligence, thus partially displacing human responsibility for technological outcomes. The study also shows that metaphorical representations of artificial intelligence are not merely descriptive. Rather, they play an important role in in shaping people's attitudes toward technological innovation, thus influencing perceptions of its benefits, risks and future impact on human life. By examining the metaphorical patterns across diverse web-based contexts, the study contributes to research on discourse and metaphor by showing how figurative language shapes public understandings of such a technological system. Methodologically, it highlights the value of combining corpus-based techniques with conceptual metaphor analysis in exploring large-scale data discourse.

Keywords: Discourse analysis, artificial intelligence, conceptual metaphor, corpus analysis, cognitive process.



Introduction

Artificial intelligence refers to an autonomous and self-learning system of technology, which can simulate intelligent tasks similar to human intelligence, such as problem-solving, logical reasoning, and learning from experience (Taddeo and Floridi, 2018). The development of artificial intelligence is one of the most important technological revolutions as it not only transforms key sectors of life - including social, cultural, educational and political domains, but also reshapes patterns of interaction, knowledge production, and decision-making across societies (Kuzior and Kwilinski, 2022) . It has become deeply integrated into our daily life making it essential to understand and conceptualise its role and impact. Different discourses narrate this system conceptualisations and potential influences through figurative language, such as metaphorical conceptualisation, capturing the far-reaching global impact of this system. We unconsciously speak and think metaphorically when approaching this topic as observed by the metaphors used in this introduction. Analysing such figurative constructions can illuminate varying degrees of acceptance or resistance toward this technological revolution.

Literature review

Artificial Intelligence

As metaphorically denoted, artificial intelligence (AI) is a digital system that mimics human intelligence within machines, enabling them to do mental activities such as learning, reasoning, making decisions, and solving problems. Over the past two decades, AI has gained increasing attention driven by pervasive human connectivity to the internet and the growth of big data, which has expanded its impact over daily life. Public stances toward this development vary, ranging from viewing it as a beneficial tool to perceiving it as a system that has possible negative impacts. It has emerged as a central topic of scholarly research reflecting its influence across technological, social, and cultural domains. In most previous research, the studies aim at exploring how AI is generally perceived and identifying its current and future impact on the society (Spiegler et al., 2026). There is also an interest in how this development is socially and culturally shaped (Wang, 2025). Within these studies, AI is found to be constructed and perceived through different representations that range between favourable opportunity, e.g., innovation and support, and unfavourable risk (i.e., control or ethical harm) as reflected in the dominant thematic concerns and portrayed images (ibid). The meanings are shaped by audience factors, as perceptions of AI vary according to socio-demographic characteristics and cultural contexts, highlighting AI as a socially mediated construct. Different fields addressed this topic using different approaches and theories. Approaches like in-depth reviews (Spiegler, et al, 2026), multilevel analysis of surveys (Wang, 2025), or analysing discourse of focus groups (Wagner et al., 2023) are conducted to see how people view AI and represent its future impact. These studies are insightful and present descriptive categorisation – identifying themes, images, and perception patterns by exploring what people say about AI. However, explaining the underlying mechanisms that



shape these representations can be achieved through cognitive approaches such as conceptual metaphor, which can organise and unify surface patterns and provide an explanatory account. Conceptual metaphor has important role in making the abstract and complex concepts tangible and interpretable forms.

Conceptual metaphor

In simple words, metaphor is a cognitive process that means recognising and experiencing one domain of knowledge or experience, which is usually abstract, in terms of another more of one (Lakoff and Johnson, 1980). Within conceptual metaphor, the meaning of metaphor and its theoretical significance extend far beyond such a basic understanding to being a cognitive mechanism that enables people to make sense of world by drawing on previous experiences in different domains (Bougher, 2012). Lakoff and Johnson (1980) and Lakoff and Turner (1989) claim that figurative patterns, such as metaphors, are not merely stylistic features of everyday language, but fundamental mechanisms that reflect how we conceptualise abstract ideas, and consequently shape how individuals perceive, interpret, and respond to reality. For example, Time is Money, is metaphorically expressing the speaker's thought about time as being valuable and that it should be saved. This process can explain that the human conceptual system is basically structured, which means that metaphor structures how we think, how we perceive, and how we act regarding time. In addition, the mechanism of conceptual metaphor is understood in terms of "mapping", through which conceptual structure is transferred from a source domain to a target domain (Lakoff and Johnson, 1980: 247).

Based on the cognitive function of metaphor, it can be classified into orientational, ontological and structural metaphors (Lakoff, Johnson, 1980). Orientational metaphors are associated with spatial direction concepts such as up and down, in and out, or concepts that refer to place or orientation, thus attaching abstract concepts with conceptualised orientation (e.g., Happy is Up and Sad is Down). Ontological metaphors explain their target entities in terms of physical objects: Entities, e.g., Fear is an Entity (fear is holding me back!); Personification metaphors, whose sources are concepts characterising human beings, e.g., Wind is Human (the wind whispered); and Container-metaphors where objects, substances, events, actions, states, visual scenes, etc. are recognised as containers and are also ontological in nature, e.g., Life is a Container (life is full of experiences).

In structural metaphors, one domain is conceptualised in terms of another by mapping the organised structure of a familiar source onto a target, which is then understood through it, and more ideas and expressions are constructed based on this structure. For example, Time is Money leads to structures such as you are wasting my time, this gadget will save you time, while Argument is War is manifested in expressions like his argument was shot down immediately. Structural metaphors provide a systematic conceptual framework by mapping one domain onto another, so we construct patterns and expressions within such conceptualisation.

Recent years have witnessed developments in conceptual metaphor theory, with studies exploring areas like proverbs (Lemghari, 2021) and metaphor in context



(Kövecses 2017). Kövecses (2020), which further expands the theory field by including the culture, context, emotion, and “Dynamism”, while calling for a more unified and comprehensive model. Similarly, Lemghari (2022) proposes general-level metaphors to better account for the complexity and variation of metaphorical expressions.

Metaphors and AI

In their inspiring work “Metaphors We Live By”, George Lakoff and Mark Johnson argue that metaphors are not just poetic or rhetorical features, but fundamental elements of human thought and language (1980). As the implications of artificial intelligence and metaphor are addressed in this study, it is important to examine the metaphors through which the representations of these complex systems are linguistically constructed and conceptualised as language both reflects and shapes understanding (Zhou, 2023).

As mentioned before, artificial intelligence is a metaphorical expression, as “intelligence” is more typically ascribed to a human subject and mapped to nonhuman agents. This system has become increasingly powerful and have had public impacts on societies. Given the wide scope of applications, discussions increasingly employ and contest a diverse range of metaphors, analogies and comparisons to conceptualise, interpret and shape the technology impact and its regulation (Mass, 2023). Studies applying a conceptual metaphor approach to investigate how artificial intelligence is perceived or represented found several dominating metaphorical conceptualisations for this innovation. Previous studies apply diverse frameworks in different research fields to conceptualise AI including approaches to analyse cognitive constructions of figurative language and metaphors. In a study investigating representations of artificial intelligence and autonomous military machines, it was found that AI is portrayed as a powerful man, who has control and dominating effect on human life and commit ethical problems in developing autonomous weaponised machines (Wagner et al., 2023). In another study on how ai is represented in media discourse, it is found that AI is conceptualised as a tool and collaborator (Anderson, 2023). Ye, Zhanglei and Li, Jian, 2024 in their study on legal and political domain metaphors identified metaphors like tool, journey, human, and risk to stand for AI. In another study on the perceptions of information professionals, it is concluded that AI is metaphorically conceptualised as a multidimensional concept, suggesting both promise and concern. These meanings are communicated through metaphors like human (intelligence), artist, robot, assistant, weapon, terminator, something scary, closed box, black hole, and Pandora’s box (Kavak and Yılmaz, 2024).

While previous studies examined the metaphorical constructions of AI across specific domains, the present study offers a distinct contribution in both data, method, and the analytical tools to investigate AI metaphorical constructions. In terms of the data, naturally occurring discourse rather than preselected domains and participants perceptions is examined through a corpus-assisted discourse approach enabling systemic, large-scale identification of metaphorical patterns across this large data set.



Methodologically, the analytical framework aligns with conceptual metaphor theory at a deep discursive level, which allow exploring metaphorical patterns as discursive resources that structure representations of AI. Consequently, this study bridges a key gap by integrating corpus linguistics with conceptual metaphor analysis, offering a more data driven discourse-oriented account of how AI is conceptualised in contemporary discourse. Therefore, the present study aims to answer the question:

How is Artificial intelligence conceptualised in real life discourse?

This question is packed into two sub questions:

What are the main metaphors constructed for AI in the examined discourse?

What are the underlying reasons for the metaphorical representations?

The lexical study of lexical study of metaphors related to AI and employing conceptual metaphor as a theory and an analytical tool will contribute to exploring the representations of AI, exploring in this way how metaphorical language reflects and shapes our understanding of (AI).

Theoretical framework

Metaphors enable language users to recognise the less abstract meanings in a more tangible way and frame a way of thinking about them. In other words, metaphor is theorised as a cognitive tool that shapes the way we perceive abstract states, social relations and complex meanings (Grady, 1999) in a more meaningful way, or as Lakoff and Johnson claim “the essence of metaphor is understanding and experiencing one kind of thing in terms of another (1980, p. 3). Conceptual metaphor organises our thoughts as meaning-making structures. It is defined as a cognitive process when people recognize abstract or complex experiences, which are known as the target domains in terms of familiar or concrete domains referred to as source domains (Lakoff & Johnson, 1980). In other words, it is the mapping of some features from the source field to the target field, which can be formulated as TARGET IS SOURCE, revealing how metaphor is not just a linguistic feature, but also a key tool of thought and meaning making (Kövecses, 2017). Accordingly, the more abstract objects can be recognised in terms of the less abstract familiar domains of experiences (Lakoff, 1993; Kövecses, 2020). For example, we describe the abstract notions, ideas, emotions or other abstract processes as if they had clear physical characteristics (size, capacity, temperature, feeling, etc.) and we talk about social aspects as if they share the features of humans. Matching the two domains within the metaphorical structure is not random; it results from perceived similarities grounded in the correlations emerging from our embodied engagement with the physical world (Lakoff, 2009). This is important because the association is stored in the brain, influencing how individuals think and understand reality at an unconscious level (Lakoff, 2009), which is particularly significant from an interpretive perspective. When an object is understood through a source domain, its meaning is shaped accordingly, and metaphors add extra layers of non-literal meaning to the concept. In brief, conceptual



metaphors shape how individuals who produce these metaphors understand, act, and interpret reality. Therefore, metaphor is both a mental representation and a tool for organizing experiences, beliefs and behaviours (Lakoff and Johnson 2012, Fabiszak, 2007).

Understanding the process of constructing conceptual metaphors allows us to assume that the features of the source domain, will, to some extent, shape the actions a person takes toward the object or aspect of reality being described by that term. Analysing conceptual metaphors, can provide insight into the attitudes and the perceptions regarding a specific notion.

In this study, metaphor is theorised as a tool used in language to construct concepts, meanings, and evaluation about the phenomenon of Artificial Intelligence by mapping features from other more familiar and physical domains to its domain. It is hypothesized that the use of conceptual metaphors within discourse surrounding AI will embody the complex and abstract concept of this concept and present it within a more concrete, tangible image. To examine this theory and explore the conceptual metaphors involved in the examined discourse, a corpus assisted discourse analysis combined with metaphor analysis is applied as illustrated in the following section.

Data and Methodology

The study will follow a discourse-oriented approach for analysing metaphor rather than the traditional figurative approach. In other words, this study will analyse and study metaphor to see how conceptual metaphors construct the notion of AI, and how it is recognised in reality. The results of the qualitative analysis of some examples can be of importance for the metaphorical choices interpretations.

Metaphor provides a powerful analytical lens for exploring artificial intelligence discourse. Through systemic patterns of meaning, it reveals how abstract meanings surrounding technologies development are cognitively perceived, framed and, accordingly, discursively constructed. To examine this theory and explore the conceptual metaphors, the study inducts a corpus assisted discourse analysis combined with metaphor analysis. This method of analysis will be applied to identify, classify and explore metaphorical expression. First, using the search terms Artificial Intelligence and its acronym AI, a special corpus was built from (enTenTen21), a large English texts corpus composed of web pages (blogs, news, forums, websites) and provided by Sketch Engine. The enTenTen21 corpus was offers diversity, and representation of naturally occurring web discourse. As a large, general web corpus, it includes a wide range of contemporary language use across domains, thereby enabling the identification of recurring metaphorical patterns in the construction of artificial intelligence. This range is particularly useful for conceptual metaphor analysis, as it, with the help of the corpus tools, enables the identification of systematic mappings across diverse discursive contexts. It is found that Artificial Intelligence is mentioned 308,340 times in this corpus. To limit the scope of the analysis, only the first 100 items of each list of identifiers, verbs, adjectives, and nouns associating artificial



intelligence will be checked to identify the metaphorical items. This cutoff was applied to ensure analytical focus while analysing the most frequent and representative metaphorical patterns in the corpus. After collecting the texts and determining the scope and limits of the dataset, the next step is identifying the metaphorical patterns. This is achieved through the word sketch tool, provided by Sketch Engine. This tool will be employed to see how references to artificial intelligence are positioned within the sentence. It provides the grammatical relationships between the core word, artificial intelligence in this context, and other surrounding words. It is used here to display and sketch identifiers, adjectives, and verbs that colligate with references to AI and show their functional behaviour (Kilgarriff et al., 2004) as well as their conceptual metaphorical meaning supported by extended concordance lines. Based on the corpus analysis results, the third stage is conducting an inductive qualitative analysis to categorize and analyse the recurrent constructed conceptual metaphors based on the conceptual metaphor theory (see the theoretical framework section). The target and source domains will be identified and analysed within examples. Ultimately, the conceptual mappings process and the communicated meaning will be discussed and interpreted in the discussion section. Going through this analytical procedure will address the research question contributing to explore how the AI technological concept is perceived and accordingly portrayed as reflected in natural life discourses. In the following, the analysis of the data is provided.

Analysis

The AI corpus was primarily examined for metaphors using The Word Sketch tool. As mentioned before, the word sketch tool provides a window that displays almost all of the grammatical expressions that enable identifying metaphors. To identify an expression as a metaphor, the expression's contextual meaning should be compared to a basic more physical, concrete, or (familiar abstract) source domain based on similarities between the two domains Group (2007. Relative processes (i.e., AI + is) were examined to see how AI is defined within these processes. Nouns, and adjectives that are assigned to this expression were also examined for their metaphorical references within the frame of conceptual metaphor. In addition, most frequent verbs, that collocate with AI as subjects and as objects were also examined to see how it is activated in terms of other domains. (see figure 1).



WORD SKETCH English Web 2021 (enTenTen21)

artificial intelligence 308,340x ...

intelligence noun > artificial adjective x

modifiers of "artificial intelligence" nouns modified by "artificial intelligence" prepositional phrases "artificial i

verbs with particle "up" and "artificial intelligence" as object verbs with particle "out" and "artificial intelligence" as object

"artificial intelligence" is a ...	adjective predicates of "artificial intelligence"	verbs with "artificial intelligence" as object	verbs with "artificial intelligence" as subject
buzzword	intelligent	leverage	power
future	leveraged	harness	reshape
simulation	assistant	utilise	revolutionize
technology	ubiquitous	utilize	transform
frontier	advanced	programme	augment
changer	smart	integrate	automate
learning	sophisticated	demystify	aid
field	booming	apply	redefin
capability	capable	deploy	surpass
branch	onboard	democratize	infiltrate
trend	human	poise	enable
topic	creative	incorporate	control
match	fascinating	power	disrupt
innovation	beneficial	embed	ai
fiction	superior	combine	enhance
term	fundamental	employ	drive
wave	inevitable	use	empower
science	broad	ai	accelerate
concept	powerful	patent	fuel
threat	Lead	advance	replace
reality	dangerous	program	analyze
stuff	impossible	embrace	analyse
development	central	infuse	optimise
machine	accessible	train	advance
area	stupid	embody	pose
theme	exciting	research	pilot
ability	useful	develop	guide

Figure 1: Artificial intelligence word sketch



Figure 1 shows the word sketch window provided to sketch artificial intelligence. Clicking on each lexical item leads to an extended concordance line showing an extended discursive context for the word. This will help to identify the metaphorical expression within the context. More items are displayed by clicking the arrow at the end of each list. However, as mentioned before, to limit the scope of the analysis, only the first 100 items from each list are examined to identify metaphorical items. By first examining the relational processes, i.e., AI + is+ noun, the target domain (i.e., AI) identifiers can explicitly display the source domain to which the target domain is matched. This can be formulated as **Target Domain is Source Domain**. The AI conceptual metaphors are grouped in Table 1 and classified according to their semantic domain.

Table 1: metaphorical nominal identifiers in relational processes

#	Conceptual metaphors	Metaphors domains
1	Wave, force, driver, changer	Force
2	Frontier, field, branch, area, domain	Space
3	Threat, challenge problem, opportunity, answer, solution	Problem and solution
4	Future, dream, fiction, reality	Imaginative notion
5	Component, part, aspect, key	Structure
6	Tool machine device key system	Tool

As illustrated by the table, there are several source domains through which AI is conceptualised. AI is conceptualised through the domain of force and thus is conceptualised to have the power to change, drive and impose important actions force. For example:

- 1- Artificial intelligence is next **wave** in unlocking value for businesses.

In addition, the space domain features are mapped to the target domain constructing it as a place, field or area. Additionally, AI is conceptualised in terms of negative abstract notions or meanings such as problems or is alternatively conceptualised positively as solutions or ambitious future and opportunities. In this regard, it can either be a threat and challenge, a solution and answer. Compare the following:

- 2- Musk believes artificial intelligence is a far greater **threat** to humanity than nuclear weapons
- 3- At a gathering of United States governors this month, it is contended that artificial intelligence is a **terrifying problem** to humanity.
- 4- Artificial intelligence is **the future** not only of Russia but of all of mankind," said Putin.



The identifiers also showed that it can be conceptualised as a part of a structure or in terms of the useful tools that are very important for humanity:

- 5- According to President Pahor, artificial intelligence is **a tool** for a better life and offers great opportunities for progress
- 6- Artificial intelligence is a theoretical **machine** that can uncover new, sophisticated behaviours.

In addition to the metaphorical identifiers presented above, there are adjectival metaphors that are projected from different source domains to structure the target domain. Table 2 illustrates the premodifiers of AI and their source domains.

Table 2: Metaphorical adjectives construing AI

#	Metaphorical adjectives	Metaphors domains
1	Intelligent, smart, stupid, human, creative, fascinating, exciting, impressive, superior	Person/Human
2	powerful, dangerous, booming	Power/Force
3	ubiquitous, accessible, deep, broad	Space

The adjectives used metaphorically to describe AI construct different meanings for the AI and make it conceptualised in a more tangible way. Different cognitive features that characterise human beings are mapped to the AI domain, making it conceptualised as an intelligent, smart, and creative human being who can make decisions; it is also described in some instances as being stupid. See the examples:

- 7- Artificial intelligence is **smart enough to choose** the best recovery method on its own
- 8- Artificial intelligence is **more intelligent** than we thought
- 9- Artificial intelligence is **stupid** and causal reasoning will not fix it.

In addition, skills and abilities are mapped from the human source domain and attributed to the target domain, so, this system is conceptualised as a skilful human being:

- 10- Artificial intelligence is **able** to interact with others
- 11- Artificial intelligence is **capable** of taking care of humans and other living beings

In other instances, however, it is conceptualised through adjectives related to power and danger. As suggested by the space identifiers in the section above, spatial concepts are mapped to the target domain, and using the adjectives as well, AI is described and conceptualised as being a broad, deep or accessible place.



Not only the identifiers and the premodifiers that allow metaphorical conceptualisation of AI in terms of other domains. Structural metaphors constructed by the verbs within grammatical material processes/actions can show how this concept positioned as a subject or an object is activated and conceptualised in terms of other domains.

Having specified artificial intelligence as a target domain, table 3 displays classifications of the metaphorical verbs with AI as a subject, and table 4 displays classifications of the metaphorical verbs with AI as an object, both groups of verbs classified according to their source domains.

Table 3: metaphorical verbs constructing AI as a subject

#	Metaphorical Verbs with AI as a subject	Metaphors Source domains
1	Guide, pilot, control, govern, rule manipulate, influence, interpret, aid, assist, help, facilitate, tutor, diagnose, detect, monitor, predict, promise, prove, learn, mimic, fascinate, dominate, threaten	Human/Person
2	Drive, fuel, power, propel accelerate, speed, boost enable, unlock, allow bolster, back advance	Force/Power/Energy
3	Transform, reshape, revolutionize, redefine, reinvent change, alter, improve, enhance, optimize/optimise, augment evolve, mature, progress, develop disrupt	Transformation
4	Surpass, outperform, overtake, beat replace, displace, supplant, eliminate	Competition
5	Infiltrate, permeate, penetrate, creep expand, populate, inhabit emerge usher (in), pave (the way) converges	Movement/moving entity

The verbs allocated metaphorically to the AI as a subject generally suggest meaning of agency and power, whether they are mapped from human source domains or from power and transformation domains. This contributes to portraying the technological system as a powerful person, a force or power, or as a transformation agent. See examples 12-16.

- 12- Artificial **intelligence** is **changing** industry and technology and is already shaping the world we live in.
- 13- Artificial **intelligence** is **transforming** every sector of our economy – and influencing every aspect of our lives
- 14- Artificial **intelligence** is **reshaping** how we live, learn, and work,
- 15- artificial **intelligence** is **leading** to gains in efficiency and performance,
- 16- artificial **intelligence** is **driving** innovation and growth



These examples show how AI is a force or a powerful person that changes, reshapes and leads the world we live in and has a power that changes every field of life such as technology, economy, industry, education altogether indicating positive changes. These mappings extend our conceptualisation of AI as a human, a power or a force as primarily suggested by the analysis of the adjectives and identifiers in the previous sections. Concerning the other domains, assigning active verbs to artificial intelligence structured it in terms of a process or a movement that have a sense of competition and pace as in domains 4 and 5. It is conceptualised as a moving expansion or replacement for other entities which moves within a spatial area, embodying in this way the abstract idea of the system's development in terms of a concrete field including movements, real processes within physical domains. In other instances of material processes, AI is positioned as an object targeted by verbs that are metaphorically used to construct different meanings for the AI, see Table 4.

Table 4: metaphorical verbs constructing AI as an object

#	Metaphorical Verbs with AI as an Object	Metaphors Domains	Source
1	Embrace, humanize, believe, trust, fear, argue, talk, teach, instruct, sense, foresee, possess, specialize, train, trick	Human/Person	
2	Harness, leverage, inject, infuse, imbue, embed, (partly metaphorical depending on context) implant, fuse, blend, merge, surround, underpin, tap, unleash,	Physical/Living Object	
3	Drive, accelerate, evolve, revolutionize, transform (implicit), advance, enable, power, scale, launch, spin	Process/Moving entity	
4	Democratize, commercialize, distribute, regulate patent, pioneer	Socio-economic actor	

The verbs structured to target AI as an object (or as a subject in a passive structure), contribute to conceptualizing it as a less agent human, an object, a process or an actor within a socio-economic domain. As being an object, it is personified as a human being who can be believed, trusted, argued with or even trained. This grammatical position indicates less agency for the AI and portray it as a less agent human being trained by more dominant agents. The first category in Table 4 shows that human being features are mapped from the source domain (Human) to AI using verbs that originally target humans such as believe, trust, argue, teach and other human related verbs. The most explicit instance of AI being conceptualised in human terms is found in Example 17:

17- Their vision is to **humanize** artificial intelligence to better humanity



In other contexts, it is conceptualised as a person who can be trained, taught or tricked:

- 18- **Training** an artificial intelligence for automated data analysis of phased array ultrasound data is a complex task
- 19- Morphing can **trick** artificial intelligence used at passport control into recognizing different individuals.

AI is also conceptualized as a living entity by mapping some features from the source domain of the objects that can be blended, injected into, imbued with, or infused throughout other objects. This makes the abstract meaning of the AI more of sense, feeling, and touchable by attributing features of a concrete meaning to it. The perceived similarity between the two domains is ability to permeate, integrate, and operate within other entities. For example, in 20, it is conceptualised as an object that is inserted in and blended with the parts of another thing, while it is conceptualised as a substance that is injected into a body or as a substance that is mixed with other substances in 21 and 22.

- 20- AI is **infused throughout** the network
- 21- California based Bloom Reach designed its platform to **inject** artificial intelligence **into** commerce over seven years ago.
- 22- They provide the opportunity to **blend** artificial intelligence and machine learning so you can generate leads, at scale, with fewer people.

It is also conceptualised as a container for an abstract meaning, i.e., judgement:

- 23- So, the challenge is to **imbue** artificial intelligence with subtlety of judgment.

Other few instances construct AI within processes as a machine or a device, that is used, employed or powered by agents to make use of it in other fields.

- 24- **Utilising** artificial intelligence, we examine the language pattern of employees
- 25- Big data are also the fuel that **powers** artificial intelligence

Overall, these metaphorical constructions position AI as a multi-domain object whose perceived conceptualization is shaped through mappings across human, material, dynamic, and socio-economic domains, thereby rendering it both intelligible and operational within diverse contexts.

Discussion

This section interprets how the metaphorical patterns identified in the analysis construct the meaning which accordingly shape the understanding of AI and how it is perceived in real life discourse. Drawing on conceptual metaphor theory, the present study aims to answer the question of how AI is constructed and represented through the use of metaphors. The analysis of the metaphorical identifiers, adjectives and



verbs that collocate with references to AI reveals that the meanings are not constructed through a single metaphorical frame, but through a multiple overlapping domains, most prominently as a human-like agent, a material object, a dynamic force, as well as other less prominent domains. These together produce a fragmented and dynamic conceptualization of AI in real life discourse. The metaphorical mappings do not merely describe AI but actively structure how it is understood, attributing varying degrees of agency, control and unavoidable progression. The coexistence of these domains reveals a complex, and at times, contradictory representation of AI in which it is simultaneously human like, subject to human control, and capable of autonomous action.

Within the frame of personification (Lakoff and Johnson 1980: 33), i.e., metaphorical patterns that construct AI as HUMAN, discourse assigns it human abilities, agency and decision-making capacity, besides other human cognitive capacities, thereby partially displacing human responsibility for technological outcomes. It is also found that the personification of AI draws on a range of human attributes, constructing it variably as a supportive ally, a dominant authority, or a deficient and threatening actor. The variability of these personifications, indicate that AI is not conceptualised through a stable human analogue, but rather through shifting and sometimes contradictory human attributes, reflecting broader societal attitudes that both legitimise its usefulness while expressing concerns about its power, limitations, and possible risks.

The representation of AI as a FORCE constructs it as an external and powerful entity whose expansion is framed as impossible or difficult to resist. Through verbs, adjectives, and identifiers associated with movement, power, and transformation, AI is discursively positioned as a driver of large-scale change rather than as a tool subject to human control. This framing highlights its potential benefits while at the same time raises concerns about its uncontrollable and potentially threatening nature. Such representations naturalise the development of AI, presenting it as a process that develops on its own without human control. At the same time, FORCE metaphor creates a dual evaluation by constructing AI as both beneficial driver of progress and as a threatening source of risk.

Another prominent domain constructs AI as an OBJECT or ENTITY. Within this frame, it is conceptualised as a tool, machine, or component embedded within broader systems. This representation emphasises its functionality, utility, and integration across social, economic, and technological contexts, positioning AI as a resource that is managed and utilised by human actors. However, the use of metaphors related to substance, structure, and spatial expansion also suggests an increasing powerful development and forced spread for AI across social and technological domains. This tension reflects a representation in which AI is both manageable and increasingly essential. In other words, this dual construction reinforces human control over the system while simultaneously foregrounding AI's growing presence and influence across multiple domains of everyday life.



The TRANSFORMATION and CHANGE domain is also prominent, of which some features are attributed to the target domain of the AI. It is conceptualised in terms of an abstract source domain, which is transformation and change. It is constructed using different language patterns that position it as a source of change and transformation or as a transformation agent. Meanings of change, development, evolution, and progress are assigned to this technological system as a powerful agent contributing to the social change and advancement. These metaphors foreground its role as an active force driving the globe's social and technological progress. The metaphorical construction is not accidental; it is grounded in how we think of AI and how discourse articulates these thoughts by constructing AI as an agent of impact rather than an abstract meaning or neutral tool. This makes its abstract functions more concrete and socially meaningful. It can also be noticed that transformation metaphors rarely appear alone. They are often intertwined with force metaphors, the linguistic feature that creates stronger physical images for such technological algorithm target system.

Less dominant domains construe AI as a source of threat positioning it as a problem generating force or a threatening agent that needs regulation and intervention. Such representations might be typically tied to anxieties surrounding the displacement of human labour or the probability for consequential errors in high-stakes, sensitive contexts, including areas such as robotic surgery. Other identified marginal yet conceptually important domains are those invoking broad, abstract foundational notions such as reality and future. Metaphors within this domain construct AI instead of being a technological instrument into a transformative force that controls and shapes our future and also reconstructs how reality is perceived and experienced.

In sum, conceptual metaphors play a central role in shaping how artificial intelligence is represented and perceived, not merely by describing it but by actively structuring its meaning within public discourse. The findings demonstrate that these metaphors do not operate in isolation as discrete type, e.g., personification, force, or transformation. Rather, they work as integrated compositions in which domains intersect, thus, AI is constructed simultaneously as a human-like agent, a source of power, and a driver of transformation within one statement. This hybridisation intensifies the perception of AI as an active, influential force with agency and impact.

In addition, the analysis revealed a fundamental contradiction: AI is discursively framed through contrasting metaphorical images that shift between positive and negative evaluations. While it is portrayed in some contexts as an enabling force that drives progress, innovation, and efficiency, it emerges in other contexts as a source of threat, risk, and danger. Together, these integrated and contradictory metaphorical constructions highlight the complexity of AI discourse, where meaning is negotiated through the simultaneous articulation of promise and concern.

The study proved the importance of combining the corpus linguistic tool to identify metaphors in large data sets. The results also showed the value of applying conceptual metaphor theory as a powerful analytical lens for uncovering how AI is discursively



constructed, revealing the underlying cognitive and ideological frameworks that shape its representation as both a transformative force and a site of tension within contemporary society.

Conclusion

This study aims to explore how AI is represented through the lens of conceptual metaphor theory. In this study, a corpus-assisted approach is primarily applied to investigate the most frequent metaphorical patterns throughout the corpus. Drawing upon Lakoff and Johnson's Conceptual Metaphor Theory, valuable results are concluded from this investigation. The corpus exploration of different language patterns contributes to exploring metaphors that are inferred in terms of Human, Force, Object, Transformation and other less prominent domains, presenting a more thorough recognition of AI. In addition, it is found that these metaphor domains can be integrated within a process of hybridization which has a role in strengthening the abstract meanings and making a stronger sense for the perceived roles and functions of this technological system. It is also found that AI is constructed in discourse through metaphors as both a negative and positive entity, representing in this way the real societal conflict surrounding its roles and impacts in real life. Meanwhile, the gained insights from this study can highlight the importance of applying a conceptual metaphor approach to address conflicting issues within the real-world discourse.

Overall, this study offers some implications for future explorations in studying conceptual metaphor in AI, or even abstract entities, and expands public understanding of conceptual metaphor theory. Future works are encouraged to build upon the discussed findings and explore the rich areas of conceptual metaphor within AI-related domains. In addition, this study concentrates on dominant metaphorical patterns, while lower-frequency expressions remain open to investigation through more specialised analytical frameworks.

Future research can also build on the present study in several ways. First, in terms of data, studies aiming to explore AI may work with smaller datasets and adopt a fully qualitative, in-depth metaphor analysis to capture more detailed interpretive results. In addition, future research could draw on alternative or more diverse datasets across different media, genres, or sociocultural contexts. Applying different analytical frameworks or methodological perspectives may offer new insights into how AI is discursively constructed and evaluated. A final suggestion is applying ethnographic approaches in exploring the construction of complex concepts to enhance the scope and generalisability of findings.

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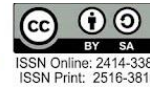


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