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# LINGUOCULTURAL SPECIFICS OF ARTIFICIAL INTELLIGENCE REPRESENTATION IN THE ENGLISH LANGUAGE MEDIA DISCOURSE: CORPUS-BASED APPROACH [1]

**Larisa A. Kochetova**
Volgograd State University, Volgograd, Russia

**Abstract.** The article deals with the discursive construction of artificial intelligence (AI) in the English-language media discourse. Corpus methods establish semantic, figurative-perceptual and axiological specificity in the media representation of AI in various media segments, such as tabloids and broadsheet papers. Corpus-assisted discourse analysis includes: 1) identification of unique semantic domains that determine discourse interpretations of this socially significant phenomenon, followed by an analysis of their dispersion in narratives about AI; 2) analysis of the figurative-evaluative and value content of its media representation; 3) investigation of the specifics of broadsheet media and tabloid media representations of the AI concept. It was found that AI receives multiple media representations, in which its conceptual features represented by the lexical items of the semantic fields “Knowledge”, “Ability”, “Information and Computer Technologies” are supplemented and enriched by the lexical units of the semantic fields “Safety/Danger”, “Transformation”, “Ethics”. In media narratives about AI, the concept of “imitation of human abilities” is often associated with fake news, plagiarism, warfare, crime, climate change, and unemployment. Corpus data revealed that in the narratives about AI in broadsheet media, the lexical items of the semantic field “Robots” emphasize the similarity of AI with anthropomorphic entities; the semantic field “Competition” represents the idea of a rivalry between a human and a machine, as well as between countries, governments and companies; the semantic field “Warfare” actualizes the pragmatics of warning related to collective security and expressing public concern about the possible negative consequences of the development of AI. Popular media emphasize the androgenic nature of AI, its entertainment potential (“Games”), practical values related to health care (“Medicines and Treatment”); and the pragmatics of warning related to individual safety (“Crime”). The evaluative media representation of AI is formed mainly by ethical and practical, often negative, evaluative features transmitted through metaphoric images, intertextual references, and cultural models that determine the behavioural patterns of the discursive community members.

**Key words:** corpus-assisted discourse analysis, keyword analysis, artificial intelligence, concept, metaphoric model, evaluation, cultural specifics.

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# ЛИНГВОКУЛЬТУРНАЯ СПЕЦИФИКА РЕПРЕЗЕНТАЦИИ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА В АНГЛОЯЗЫЧНОМ МЕДИАДИСКУРСЕ: КОРПУСНЫЙ ПОДХОД[1]

**Лариса Анатольевна Кочетова**

Волгоградский государственный университет, г. Волгоград, Россия

**Аннотация.** В статье дискурсивное конструирование искусственного интеллекта (ИИ) в англоязычном медиадискурсе рассматривается в лингвокультурном аспекте. Методами корпусной лингвистики проанализирована семантическая, образно-перцептивная и аксиологическая специфика медиарепрезентации ИИ в различных сегментах СМИ: таблоидах и широкоформатных изданиях. В результате корпусного дискурсивного анализа установлены ключевые семантические домены, определяющие дискурсивную интерпретацию ИИ как социально значимого феномена; образно-оценочное и ценностное содержание медиарепрезентации ИИ; особенности способов медиарепрезентации доменов концепта ИИ в исследуемых сегментах СМИ. Показано, что ИИ получает множественные медиарепрезентации, в которых его концептуальные признаки, выраженные лексическими единицами семантических полей «Знание», «Способность», «Информационные и компьютерные технологии», дополняются за счет лексических единиц семантических полей «Безопасность / Опасность», «Трансформация», «Этика» и др. Выявлено, что в медийных нарративах понятийный признак «имитация человеческих способностей» ассоциируется с фейковыми новостями, плагиатом, военными действиями, преступностью, изменением климата и безработицей; в нарративах об ИИ широкоформатных СМИ доминируют единицы: семантического поля «Роботы», акцентирующие сходство ИИ с антропоморфными сущностями; семантического поля «Конкуренция», репрезентирующие идею соперничества между человеком и машиной, а также между странами и компаниями; семантического поля «Война», актуализирующие прагматику предупреждения, связанную с коллективной безопасностью и выражающую общественную обеспокоенность возможными негативными последствиями развития ИИ. Популярные СМИ подчеркивают андрогенную природу ИИ, его развлекательный потенциал («Игры»), утилитарные ценности, относящиеся к заботе о здоровье («Лекарства и лечение»), и содержат прагматику предупреждения, относящуюся к сфере индивидуальной безопасности («Преступление»). Оценочная медиарепрезентация ИИ формируется в основном этическими и утилитарными, чаще негативными оценочными, характеристиками, которые выражаются посредством метафорических образов, интертекстуальных отсылок, культурных моделей, обусловливающих поведенческие паттерны членов дискурсивного сообщества.

**Ключевые слова:** корпусный анализ дискурса, метод ключевых слов, искусственный интеллект, концепт, метафорическая модель, оценка, лингвокультурная специфика.

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## Introduction

Emerging technologies, such as artificial intelligence (hereinafter – AI), are subject to framing across multiple domains, including academic discourses, business and management, culture, politics, and governance. News media is assumed to integrate and convey different expert views to a general audience, who are affected by it, and, directly or indirectly, contribute to the acceptance of new technologies by citizens and consumers/users [Groves T., Figuerola, Groves M.A., 2015]. In addition, the media influence the consciousness of the discursive community members and shape various domains of public discourse through the so-called mediatization. As researchers point out, concepts formed in institutional discourse types, when formatted in the media discourse, significantly complicate their conceptual structure by acquiring new meanings and evaluations. They turn into media concepts, and it opens the possibility of considering the conceptual significance of the mediatization process [Klushina, 2014; Kondratyeva, Ignatova,

2021], defined as the process of qualitative changes in discourse space caused by the influence of media, which, from an institutional phenomenon that reflects excerpts of reality, is transforming into a factor that determines the essential features of societal life [Shmeleva, 2015, pp. 145-146]. Media reporting draws attention to specific aspects of its perceived impact and constructs propositions for the meaning of particular issues [Chong, Druckman, 2007; De Vreese, 2005; Entman, 1993; Nguyen, 2022]. In this way, media discourse can turn terms into media concepts that acquire new conceptual features and obtain new meanings and evaluations, which is part and parcel of the mediatization process. As a result, mass media not only communicate concepts, giving them prominence, but also make them more salient by shaping their content, modifying evaluation, and forming perceptions in the mind of the discursive community. The way in which media discursively construe emerging technology may influence perceptions, preconceptions, and judgments in public discourse and among audiences.

Earlier mass media focused its attention on novel technologies, such as nanotechnology [Cutcliffe, Pense, Zvalaren, 2012], cloning [Holliman, 2004], gene modification [Tucker, 2012], and digital technology [Guzman, Jones, 2014], playing a crucial role in commenting and interpreting facts and acting as a powerful tool of persuasion.

While AI technologies, whose fast-growing implementation has triggered discussions regarding their benefits, potentials and risks, have become the focus of media coverage, only a few studies investigate the role of news media reporting in shaping individual views on big data, AI, technology companies, and data practices. News reporting makes trends visible, influences public discourses, contributes to the discursive construction of benefits and risks [Lupton, 2017], and shapes technology perception [Pentzold, Landinez, Baaken, 2019]. Even though there is growing research on the public perception of automation, only a few studies have explored how media discursively construe and give meaning to this technology. One recent contribution, based on an array of texts retrieved from various sources across different cultures, including reports and analytical materials of UNESCO, the European Commission, the Royal Society of London, Stanford University, normative documents of the Russian Federation, public opinion polls (VCIOM, Rambler & Co), Russian, European and American media, revealed the two polar societal perceptions of the artificial intelligence concept, which is portrayed as a tool for control and (or) for development [Kolianov, 2022]. By contrast to this cross-cultural and cross-genre investigation, several media discourse studies on artificial intelligence technologies are confined to the US media [Fast, Horvitz, 2017; Garvey, Maskal, 2020]. The analysis shows a lack of research into linguistic resources employed to communicate AI technology to lay public and audiences and its semiosis in semantic and pragmatic dimensions. As media discourse influenced by the corporate policy of the publication recruits themes, images, evaluations and tones specific to media segments that address particular audiences, the specifics of the discourse representations of AI across the different sectors of media discourse require a separate study.

AI is regarded as a vital sociotechnical institution of the twenty-first century [Bareis, Katzenbach, 2021]. Dictionaries define AI as 1) a branch of computer science dealing with the simulation of intelligent behaviour in computers; 2) the capability of a machine to imitate intelligent human behaviour (MWOED); the study of how to make computers do intelligent things that people can do, such as think and make decisions (LDOCE); the study of how to produce machines that have some of the qualities that the human mind has, such as the ability to understand language, recognize pictures, solve problems, and learn (CDOEL) (here and below see the list of dictionaries). The definitions show that the concept under investigation includes the following sets of semantic features: 1) a set of technical devices and software; 2) imitation of human cognitive functions; 3) focus on the result, as close as possible to the human. From a cognitive-linguistic viewpoint [Lakoff, Johnson, 2003], AI is possibly a metaphorically more concrete concept than Big Data since it is often associated with robots, cyborgs, and other anthropomorphic entities [Darling, 2015].

Media can play a significant role in shaping the structuring and course of discourses, thus influencing the perception and opinions of the recipients on various issues. The way in which the media shape the news allows one to draw

different conclusions [Entman, 1993, p. 52]. Mass media recruit information and knowledge on AI derived from academic, political, business, law, and cultural discourse, to construe topical content and represent AI technology to lay audiences within a specific framework that presents an excerpt of reality using nuances and evaluations that can affect public perception of the phenomenon and generate public debate. As a result, how news media discuss artificial intelligence technologies matters to a large degree since journalists can influence public opinion; how the media cover this emerging technology may also influence recipients' attitudes towards it, creating demands, reservations, or even fear [McCombs, Shaw, 1972]. Media outlets, particularly online news articles, may help provide a framework for the debate on artificial intelligence for those who feel insecure or doubtful about this technology. To this end, the study examines the journalistic contents of widely read British newspapers regarding issues relating to artificial intelligence technology to uncover hidden interpretation patterns. Generally, AI implementation causes concerns, worries and distrust towards this emerging technology in various social groups. As a result, to reduce these barriers, it is vital to convey accurate information to the public, so how the news media cover artificial intelligence is of primary importance.

As part of this evolving research area, this study analyzes artificial intelligence news representation in British broadsheets and tabloid press. Our main objective is to reveal prevalent semantic domains in news reporting on artificial intelligence that shape its conceptual structure and to explore what journalists and experts contribute to the media discourse. Therefore, the study aims to examine different perspectives on the media portrayal of artificial intelligence technologies in British media discourse to provide insight into how it represents this emerging technology.

The question is, then, what semantic domains are used in the media coverage of AI technology across the different media segments, and how they shape the concept of this emerging technology. Since mass media are not neutral observers and articulate opinions and ideas that are politicized and ideology-oriented, the question is what evaluation AI receives in the different media segments, to which degree AI is embedded in the media discourse in terms of the expectations attached to it, functions it is supposed to perform, and future scenarios that media envision to be achieved by AI; what values these descriptions imply and what patterns of behavior they set.

## Material and methods

Discourse analysis is a complex and rigorous qualitative methodology; to make sense of our approach, we describe analytical moves with associated illustrative examples from the texts included in our study. The research interprets textual references to AI regarding contexts employed to form its situated meaning, intertextuality, evaluation, conceptual metaphors, and value characteristics. Recently, corpus linguistics has generated several research designs that attempt to trace a path from data to theory. The study employs corpus-assisted discourse analysis to identify semantic domains recruited to represent AI, explore the type of interpretation patterns and understand the structure of news stories that inform the public about artificial intelligence technologies. The study uses the corpus-assisted approach to identify how the media discourse represents and conceptually shapes the AI concept, and what evaluation AI receives through metaphoric models, intertextual references and figured worlds employed to conceptualize the technology and the specifics of the cultural representation of the technology.

For the research, we compiled a corpus comprising text samples from the websites of the national British broadsheet and tabloids, presented in Table 1.

The study used the functionalities of CQP web (CQPweb v3.3.17) [Hardie, 2012], a web-based corpus manager that enables downloading a corpus and supplying it with morphological and semantic annotation. To retrieve the semantic fields embedded in the discursive practices about AI across the different media segments, we used the keyword function to extract key semantic tags, and reveal the unique semantic classes of lexical units employed in each corpus under study. The obtained results allowed us to analyze the topical content of the texts, identify metaphoric models that draw on the semantic fields, and describe evaluation types and the pragmatic effects of discursive practices.

*Table 1.* **The structure of the AI corpus (2022–2023)**

| Broadsheet papers | The number of words | An average number of words | The number of texts | Tabloid papers | Number of words | An average number of words | The number of texts |
|---|---|---|---|---|---|---|---|
| Guardian | 270,725 | 1,547 | 175 | Daily Mail | 142,169 | 947 | 150 |
| Independent | 90,090 | 546 | 165 | Daily Mirror | 57,278 | 561 | 102 |
| Observer | 189,702 | 1,405 | 135 | Express | 37,653 | 436 | 86 |
| | | | | Daily Star | 41,196 | 542 | 76 |
| | | | | Sun | 41,844 | 565 | 74 |
| Total | 550,517 | 1,159 | 475 | Total | 320,140 | 656 | 488 |

## Results and discussion

A useful linguistic concept to be aware of in the analysis of discursive construing of the AI concept is that of the semantic field, defined more specifically as "a set of lexemes which cover a certain conceptual domain and which bear certain specifiable relations to one another" [Lehrer, 1985]. CQPweb allows us to supply a downloaded corpus with semantic annotation and use the keyword function to extract semantic fields, i.e. groups of semantic items, which are unique for the focus corpus compared with a reference corpus. Table 2 presents the unique semantic fields in the AI discursive construction in the British media discourse, where categories that do not coincide in the two media news outlets are printed in bold. Table 2 presents statistics on Keyness of the semantic categories, defined by comparing the focus corpus with the reference corpus *British English 2006*. The choice of the corpus was determined by its similar regional and genre variety and the availability on the CQPweb. The table contains the statistical metric Log Ratio, which is an effect-size metric available on the CQPweb. Log Ratio is the binary logarithm of the ratio of normalized frequencies of an item (in our case, a group of items). Equal normalized frequencies in the focus and reference corpora are indicated by a value of '0', whereas an increase of one indicates a doubling of the frequency differences [Gabrielatos, 2018, p. 236].

We also look at the dispersion of the semantic classes of words in the corpora, i.e. the degree to which occurrences of a word (a group of words) are distributed throughout a corpus evenly or unevenly/clumpily [Gries, 2020]. The simplest measure of dispersion is the range, i.e. the number

*Table 2.* **Unique semantic fields in the AI corpus compared to the British English 2006**

| № | Broadsheet media | | | Popular Media | | |
|---|---|---|---|---|---|---|
| | Semantic domain | Log Ratio | Range | Semantic domain | Log Ratio | Range |
| 1 | Knowledge | 10.93 | 468 | Knowledge | 11.26 | 448 |
| 2 | Transformation | 10.26 | 475 | Transformation | 9.86 | 358 |
| 3 | Importance | 9.37 | 347 | Importance | 8.86 | 258 |
| 4 | Decision | 8.48 | 238 | Decision | 8.2 | 179 |
| 5 | Safety/Danger | 6.29 | 238 | Ability | 6.48 | 378 |
| 6 | Permission | 6.15 | 296 | Safety/Danger | 6.30 | 209 |
| 7 | Ability | 6.04 | 435 | Permission | 6.07 | 248 |
| 8 | Ethics | 4.33 | 316 | Ethics | 4.43 | 239 |
| 9 | IT & Computing | 3.97 | 475 | **Crime** | 4.10 | 84 |
| 10 | Industry | 3.60 | 197 | IT & Computing | 4.05 | 478 |
| 11 | Science & Technology | 3.13 | 445 | Work & Employment | 3.63 | 79 |
| 12 | Measurement: Size | 2.93 | 405 | Science & Technology | 3.05 | 408 |
| 13 | **Robots** | 2.83 | 257 | **Games** | 2.90 | 39 |
| 14 | Work & Employment | 2.65 | 197 | **Time: Future** | 2.70 | 110 |
| 15 | **Warfare** | 2.55 | 110 | Business | 2.68 | 308 |
| 16 | Measurement: Speed | 2.43 | 286 | Measurement: Speed | 2.28 | 258 |
| 17 | **Competition** | 2.36 | 178 | Business | 2.23 | 176 |
| 18 | Business | 2.21 | 356 | Health and Disease | 2.14 | 169 |
| 19 | **Time: early/late** | 4.32 | 158 | **Medicines and medical treatment** | 1.87 | 179 |
| 20 | Health and Disease | 1.88 | 197 | | | |
| | Total number of texts | | 475 | Total number of texts | | 488 |

of corpus parts in which the element in question, here *a*, is attested, which is computed as in (1): (1) range: number of parts containing *a* = 5.

We have identified 20 and 19 semantic classes across the two media outlets. As statistics show, these semantic classes of words are dispersed unevenly across the corpora, they occur in particular combinations to shape the imageries of AI and ascribe evaluations and metaphorical implications to it.

The discourse analysis examines textual references for specific meanings ascribed to AI within the context of the focus corpus to highlight their situated meanings. Media texts under study construe AI technology as *a large language model*, *machine*, *machine-based*, *self-aware*, *goal-directed*, *generative*, *digital*, *software*, *program*, *dataset*, *neural network*, and ascribe mental abilities to it that are typical of humans, such as decision-making ability. A group of lexemes used to describe AI's ability include *outsmart*, *master*, *capability*, *capable*, *skills*, etc. The retrieved data show that across the corpus AI was variously associated with the semantic domain "Knowledge" comprising lexemes *know*, *expert*, *data*, *information*, *news*, *identify*, *recognize*, *database*, *warn*, *knowledge*, *recognition*.

It is noteworthy that all of the texts in our corpus, regardless of the media segment, contain the semantic domain of "Transformation" that includes the lexemes *become*, *change*, *adapt*, *affect*, *modify*, *replace*, *develop*, *dynamic*, *development*, *evolution*, etc. The lexemes highlight diversification of societal domains affected by AI transformations, such as industry, business, media, education, healthcare system, and labour market, e.g.,

(1) There'll be none more important than that devised by Sheffield University scientists to speed up the diagnosis of heart disease. Astonishingly, they've got it down to one minute (The Daily Mirror, 02.03.2023).

The media accentuates speed, scale and importance of changes through the use of lexemes belonging to the semantic field of "Speed", such as *unprecedented*, *radical*, *fast*, *fast-moving*, *rapid* and the semantic field of "Importance", which is formed by the lexical items and phrases *major turning point*, *important shift*, *groundbreaking*, *monumental*, *prominence*, etc., and "Size" that include the lexemes *at scale*, *big*, *huge*, *large*, *vast*, *enormous*, *tremendous*, *massive*, *exponential*, *gigantic* and etc. The idea of societal transformation allows two perspectives, positive outcomes of AI implementation and less optimistic pictures. However, most of these change-associated meanings are dystopian and negative in tone, e.g.,

(2) In many cases, we have wiped out species just because we wanted resources. We chopped down rainforests because we wanted palm oil; our goals didn't align with the other species, but because we were smarter they couldn't stop us. That could easily happen to us (The Guardian, 07.07.2023).

Utilitarian evaluation of the idea of transformation qualifies it as bearing risk and danger (the semantic field "Safety/Danger"), on the one hand, and providing benefits for economy, health care etc., on the other, e.g.,

(3) Generative AI is already being used to design products much more quickly, test them virtually as a "digital twin", and manufacture them more quickly (The Guardian, 18.02.2023a).

Interestingly, texts from the two media segments employ different strategies to accentuate change and transformation. Broadsheet media often contrast past and present, where automation of the past receives favourable evaluation when it brought liberation from mundane tasks, whereas, at present, automated decision-making bears risks for humans, e.g.,

(4) **Previously**, machines replaced manual labour, leaving jobs that required cognitive skills to humans (The Guardian, 18.02.2023b).

The implications of this utterance is that now machines can replace people in high-paid jobs that require decision-making and other cognitive abilities, which takes a negative stance. Several texts accentuate the idea that over time, machines have acquired resemblance to humans, e.g.,

(5) **Early** voice-activated booking systems for restaurants are **now** in widespread use and at least some of them can be difficult to distinguish from a human operator (The Independent, 15.09.2022).

However, the fact that machines can produce things undistinguishable from human products seems to receive negative evaluation, e.g.,

(6) ChatGPT is a large language model that is trained on a huge amount of text data. This allows it to generate **eerily** human-like text in response to a given prompt. These were my first, lofty thoughts last week when buzz began building about ChatGPT, a newly released artificial intelligence chatbot that is **causing panic** in academia due to its ability to generate text that looks like it had been produced by a human (The Daily Mail, 09.12.2022).

By contrast, tabloids employ the strategy of predicting the future and constructing scenarios that sometimes include concrete dates and figures, e.g.,

(7) A new report has found that 38 percent of US jobs will be replaced by robots and artificial intelligence by the early 2030s (The Daily Mail, 24.03.2017).

Table 2 shows that media raise ethical challenges related to societal and individual risks arising from AI development. Shared by the two corpora, the semantic field of ethics includes lexical items *cheating*, *misuse*, *integrity*, *ethics*, *fair*, *trick*, *fool*, *moral*, etc., which relate to education, information disorder, and algorithmic biases, e.g.,

(8) ChatGPT first attracted a lot of attention because it was being used to cheat in university essays. This also prompted some schools to consider changing homework or at-home assessments to prevent students from cheating (The Daily Mirror, 08.03.2023).

It is stressed in the texts that violation of ethics due to the growing use of AI will breach societal norms and generate disorder and chaos, e.g.,

(9) Experts fear a wave of disinformation and scams as the technology becomes more available; AI art replicated inequity at scale (The Guardian, 23.02.2023).

Among other adverse effects, broadsheet media emphasize the dangers of using AI to influence elections, e.g.,

(10) OpenAI CEO Sam Altman has sounded his fears about AI-powered election interference, telling a congressional hearing on Tuesday that the technology needs to be regulated to protect voting integrity (The Independent, 17.05.2023).

The above mentioned concerns imply the idea of AI control and regulation that is supported by the semantic field "Permission" comprised by the lexemes *allow*, *ban*, *prohibit*, *rights*, *let*, *suppress*, etc.

At the same time, the media segments differ in AI conceptualization and topics to which they give prominence. The unique semantic domains for the broadsheet media corpus include "Warfare", which contains news content specifically addressing militaristic uses of automation in novel defense systems; "Robots", which cover innovations in specific fields of application; "Competition", which highlights the idea of the unfolding contest between AI and humans in various spheres; all of them can cumulate within one text, e.g.,

(11) ...From armed robot dogs to target-seeking drones, the use of artificial intelligence in warfare presents an ethical dilemma that urgently needs addressing. <...> ...A force of hackable robot warriors would be the most obvious targets for cyber-attack by an enemy, which could turn them against their makers and scrub all ethics from their microchip race (The Guardian, 20.11.2022).

As the discourse fragments suggest, in the broadsheet media, AI is associated with anthropomorphic entities that share ethical values and are prone to being targets of cyberattacks.

Finally, AI broadsheet media representation stresses the idea that, on the one hand, there is an international contest for AI leadership which involves countries, governments, and companies, e.g.,

(12) ...There is competition between governments, universities and companies all seeking to advance the technology, meaning there is now an AI arms race (The Guardian, 08.04.2023).

On the other hand, there is a rivalry between AI and humans. The following segment highlights the notion that AI is competing with humans in multiple domains and is likely to prevail in the competition., e.g.,

(13) With machines doing all our daily mental tasks for us, our brains will become literally thoughtless, our minds a haven for endless daydreaming (The Guardian, 19.06.2023).

The unique semantic domains for the tabloid corpus are "Medicines and medical treatment", "Games", and "Crime". News content connects science-related progress in the use of AI for

medical purposes with their economic potential. Tabloids accentuate AI benefits by emphasizing potential entertaining value of the emerging technology, e.g.,

(14) The first AI-created sport: Researchers unveil six-player 'Speedgate' created by combining rules of 400 other games. AI is exercising his knowledge of sports by creating its own game. Users of GPT-4 were also able to generate games like Pong and Snake in minutes, just by describing them and specifying a coding language (The Daily Mail, 16.04.2019).

Tabloids highlight forms of cyber-crime, or cyber warfare, where AI technology becomes a tool for malicious activities or the target of digital attacks. The use of artificial intelligence is included in hacking attacks, bot-attacks, and other criminal activities, e.g.,

(15) ChatGPT could help scammers write perfect emails. ChatGPT removes language barrier for cybergangs. Badly-spelled phishing emails will be a thing of the past; This type of AI could be misused in countless ways, from furthering misinformation and hateful content to stealing the copyrighted work of published authors to upending the entire education system (The Daily Mail, 11.03.2023).

The analysis also shows the trend to anthropomorphize AI in a variety of ways, either by having robots show even the slightest recognizable human features or by giving them distinct gendered human bodies as opposed to an androgynous figure, which enables media debates. The way robots are depicted and the fact that they learn from biased material, which results in stereotype-based images, receive negative evaluations. The following media text assigns AI human features such as sexism, racism, and genderism, e.g.,

(16) Female robots were sexualised with large breasts and tiny waists. The algorithm misinterpreted "strong women" as "massive biceps". But if you ask for images of a CEO, it's generally an older white male. Nurses? Almost all female. And if you don't specify skin colour, the bots default to white people. While humans are inherently biased, technology is replicating inequity at scale. We need to master this technology before it enslaves us (The Guardian, 23.02.2023).

Risks brought by AI that are frequently pointed to in news reporting include environmental danger related to increased consumption of resources, e.g.,

(17) Self-driving cars, for example, are estimated to use up to 20% more energy than conventional cars. If self-driving cars and aeroplanes become commonplace, and soldiers and judges are eventually replaced by AI equivalents, the power requirements would be huge (The Daily Star, 15.03.2023).

Semiotic resources used to evaluate AI include intertextuality, which reflects the extent to which media texts relate to previous or other texts. The analysis of the positive appeal *'But new technology should be embraced, not feared'* shows that the phrase is repeatedly used in other texts where the collocation *new technology* is replaced by another social phenomenon such as *being alone*, *uncertainty*, *change*, etc. It means that the text uses a social language associated with another identity, in our case psychology, popular lore, and advertising.

In tabloids, AI receives utilitarian evaluation in terms of danger coming from AI, which is supported by the allusion to the well-known science fiction novel by Arthur Clark, e.g.,

(18) The artificial intelligence character in Arthur C. Clarke's Space Odyssey that opts to kill astronauts to save itself. When asked to open the pod bay doors to let the astronauts return to the spacecraft, Hal says 'I'm sorry Dave, I'm afraid I can't do that' (The Daily Mail, 12.02.2022).

The analysis of the projected social imaginaries and how they were evoked within the texts in the two media segments showed that in the broadsheet papers, the number of contexts with imageries that idealize the future is quite limited, e.g.,

(19) The world of tomorrow could include a friend in your pocket (The Independent, 15.09.2022).

Generally, most contexts evoke concerns by projecting less attractive and even apocalyptic imageries of the future, which vary from ethical concerns to a global existential threat to humanity, e.g.,

(20) Weaponised applications of these newly capable robots will also **harm public trust** in the technology in ways that damage the tremendous benefits they will bring to society. Advanced artificial intelligence could **pose a catastrophic risk**

to humanity and **wipe out entire civilisations**, a new study warns (The Guardian, 20.11.2022).

Several texts emphasize the dystopian technocratic future of the world where a social system is controlled by experts in science or technology, e.g.,

(21) ...A small group of people controlling powerful systems could "make AI a centralising force", leading to "value lock-in", an eternal caste system between ruled and rulers (The Guardian, 25.05.2023).

In order to quantify the effects media have on the general public, we counted the proportion of texts with a negative and positive stance. As a result, the share of texts that convey negative social imageries, raising social alertness towards the technology, comprised 85 per cent in our corpus, which reflects the prevalence of warning pragmatics in the media segment under study.

The analysis of the tabloid press shows that they tend to represent exaggerated expectations about the future and make sensational claims, e.g.,

(22) Futurist Ray Kurzweil believes immortality will be reached by 2030 and will coincide with AI reaching singularity, having previously made correct predictions about other technological advancements (The Daily Mirror, 23.03.2023).

The persuasive function is reinforced by using reference to earlier correct predictions, e.g.,

(23) ...His previously accurate predictions include saying that in 1990 that within 10 years a computer could beat the world's best chess player (The Daily Mirror, 23.03.2023).

Negative scenarios employed by tabloids also often comprise exaggerated claims with references to authorities, e.g.,

(24) Advanced artificial intelligence could one day "kill everyone" – and there would be nothing we could do to stop it, MPs have been warned (The Daily Mail, 25.01.2023).

Cultural attitudes to particular areas of human activity can often be seen in the choices of metaphor used when that activity is discussed [Carter, 2001]. Texts often draw on the semantic field "People" and use the metaphoric model "AI is human" to discuss ethical issues. The following extract metaphorically compares AI training to raising a child, e.g.,

(25) My book, Man-Made, is about stereotypical images and words in databases being used to train algorithms. These baby biases become troublesome teenagers through machine learning. AI systems can build in human biases, risking the perpetuation of stereotypes and discrimination as they [databases] often encode human biases in unforeseen ways (The Guardian, 23.02.2023).

The metaphoric model "AI is human" is employed to conceptualize the issue of climate change, e.g.,

(26) ChatGPT data centres are consuming a staggering amount of water, study warns Conversation of 20-50 questions with AI chatbot may 'drink' 500ml of water (The Independent, 13.04.2023).

Utilitarian evaluation of AI recruits conceptual metaphors that highlight the benefits of AI implementation using the metaphoric model "Artificial Intelligence is Assistant/Supporter", e.g.,

(27) Almost 40% of domestic tasks could be done by robots 'within decade'. Chores such as shopping likely to have most automation, while caring for young or old least likely to be affected, says report (The Guardian, 24.02.2023).

The metaphoric model "AI is Warfare", which implies that humans have to have control, draws on the corresponding semantic field, e.g.,

(28) The philosopher Nick Bostrom, who heads the Future of Humanity Institute at the University of Oxford, says that humans trying to build AI are "like children playing with a bomb", and that the prospect of machine sentience is a greater threat to humanity than global heating. Senator tells tech boss artificial intelligence is like a 'bomb in a china shop' (The Guardian, 29.11.2021).

The metaphoric model "Artificial Intelligence is Enemy" draws on a warfare model and implies that humans have to protect themselves, e.g.,

(29) If we build something so powerful, we had better be confident it will not turn on us. For the people seriously concerned about this, the argument goes that since this is a potentially extinction-level problem, we should devote resources now to combating it (The Guardian, 29.11.2021).

As we see, as a symbol AI is evaluated from ethical point of view (it is biased) and from the utilitarian position (it is dangerous and unsafe, on

the one hand, but on the other hand, it is used in industry, medicine, business and governance). Although AI is defined as 'imitation of human abilities' in media discourse, the desired outcome often receives a negative stance as it is associated with fake news, plagiarism, warfare, crime, climate change, and unemployment.

## Conclusion

To sum up, this study focuses on the media coverage of the AI concept, building on the textual semantics to capture how the image of the emerging technology is discursively construed in media discourse. The corpus-assisted discourse analysis of the semantic domains reveals the way in which AI is described in the different segments of English-language media texts, providing an insight into how AI is represented to lay audiences. It turns out that media recruits lexemes of the semantic fields "Knowledge", "Ability", and "IT and Computing" that represent its conceptual features. They are accompanied by lexical items belonging to the semantic fields of "Safety/ Danger", "Ethics", and "Transformation", which are closely associated with speed, resemblance to humans, and scale.

The research shows that news media cover the technologies with a focus on utilitarian values that juxtapose economic benefits versus societal, environmental, and individual risks. Both news outlets portray AI as a relevant and competent solution to a range of public problems, from medical diagnosis and renewable energy to driverless cars and coffee delivery. They both discuss ethics, including discrimination, algorithmic bias and privacy, and highlight that AI technology implementation bears risk for society; they put AI in negative contexts by raising issues of crime, energy consumption and unemployment.

Media coverage of AI is being politicized: broadsheet papers highlight issues of warfare, election and competition, which imply societal values; tabloids highlight themes of entertainment, medication and crime related to individual values.

We can conclude that overemphasizing AI humanoid representation, accompanied by exaggerated expectations and fears, can affect public confidence and perceptions. Consequently, this may contribute to a misinformed debate, which could have significant implications for AI research, funding, regulation, and acceptance. Overall, the paper provides valuable insights into the public's views and attitudes towards AI, and how it is portrayed in the media. While the media often portrays AI as a tool for progress and a force for good, the public's views may be more nuanced and complex. Understanding these attitudes is essential for the adoption and use of AI technologies.

This sample contains only English-language, U.K.-based news outlets. Broader, more international sampling would reveal cultural differences in media representation and perceptions of artificial intelligence. We see the study potential in cross-cultural comparisons that would allow us to learn more about how different cultures and regions perceive the risks and benefits of artificial intelligence and how the narrative influences shaping those perceptions.

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## Information About the Author

**Larisa A. Kochetova**, Doctor of Sciences (Philology), Professor, Leading Researcher, Department of Translation Studies and Linguistics, Volgograd State University, Prosp. Universitetsky, 100, 400062 Volgograd, Russia, kochetova@volsu.ru, https://orcid.org/0000-0002-5278-7373

## Информация об авторе

**Лариса Анатольевна Кочетова**, доктор филологических наук, профессор, ведущий научный сотрудник кафедры теории и практики перевода и лингвистики, Волгоградский государственный университет, просп. Университетский, 100, 400062 г. Волгоград, Россия, kochetova@volsu.ru, https://orcid.org/0000-0002-5278-7373