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THE ARTIFICIAL INTELLIGENCE IDEOLOGEME IN THE MULTIMODAL IT MARKETING DISCOURSE: A CORPUS-ASSISTED STUDY

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Abstract. The article focuses on investigating the specifics of the Artificial Intelligence (AI) ideologeme in the website discourse of software vendors. The material of the study is the website discourse of *Microsoft*. The linguo-conceptual and discursive analyses have resulted in identifying the most frequent lexemes in dictionary entries and constructing the nominative field of the AI concept. We have carried out a corpus-assisted study of the linguistic representation of the AI ideologeme in the *Microsoft* discourse using *AntConc* and extracted keywords and collocations, including metaphorical ones, which make the ideologeme explicit through keywords such as *responsible, businesses, change*, etc., collocations: *AI-ready culture, AI-human partnership*, etc., metaphors based on the actions of living beings such as *drive, dive*, etc. The keywords and collocations create the intention-driven positive ideologeme of AI as a phenomenon regulated by competent bodies and empowering businesses to drive the positive change, along with amplifying the capabilities of human beings. The nonverbal means of the AI ideologeme have been described within the representative and interactive dimensions such as pictures of living beings, colors of nature such as green and blue, and metaphorical perspectives contributing to the discursive affinity of AI and nature. The corpus-assisted study has resulted in identifying the discursive representation of the AI ideologeme which is different from that of the dictionary entries describing AI as a machine capability to copy the human behavior.

Key words: ideologeme, concept, artificial intelligence, multimodal discourse, corpus-assisted study.

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ИДЕОЛОГЕМА *ARTIFICIAL INTELLIGENCE* В МУЛЬТИМОДАЛЬНОМ МАРКЕТИНГОВОМ ДИСКУРСЕ СФЕРЫ ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ: КОРПУСНО-ОРИЕНТИРОВАННОЕ ИССЛЕДОВАНИЕ

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 Аннотация. Статья посвящена изучению идеологемы «искусственный интеллект» (ИИ) в дискурсе вебсайтов производителей программных продуктов. Исследование проведено на материале дискурса веб-сайта компании Microsoft. С применением лингвоконцептуального и дискурсивного анализа установлены наиболее употребительные лексемы, использованные в словарных толкованиях ИИ, для построения номинативного поля концепта ИИ. Проведен корпусный анализ лингвистической репрезентации идеологемы ИИ в дискурсе веб-сайта Microsoft с помощью инструмента AntConc, и определены ключевые слова и коллокации, в том
числе метафорические, которые эксплицируют идеологему ИИ: среди них ключевые *responsible, businesses*, *change* и др., коллокации *AI-ready culture, AI-human partnership* и др., метафоры, основанные на сходстве с действиями живых существ: *drive, dive* и др. Выявлены ключевые слова и коллокации, употребление которых способствует формированию согласно интенции адресанта положительной идеологемы ИИ как явления, регулируемого компетентными органами и позволяющего компаниям добиться позитивных изменений, расширяя возможности человека. Охарактеризованы невербальные средства представления идеологемы ИИ в рамках репрезентативного и интерактивного измерений: к таким средствам построения идеологемы отнесены изображения живых существ, оттенки природных цветов (зеленого и синего), перспектива на фотографиях, формирующие дискурсивную связь ИИ и природы. В результате корпусно-ориентированного исследования дискурса описаны особенности идеологемы ИИ, отличающие ее от представлений, отраженных в словарных дефинициях, согласно которым ИИ определяется как способность компьютера имитировать человеческое поведение.

Ключевые слова: идеологема, концепт, искусственный интеллект, мультимодальный дискурс, корпусноориентированное исследование.

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Introduction

These days, Artificial Intelligence (hereinafter – AI) is an undeniably important phenomenon. It has an impact on the minds of people concerned with its influence on every aspect of our life.

The term *AI* is fixed in dictionaries. However, software vendors are making every effort to formulate and make public new principles regulating the use of AI-powered products via their websites transcending an image of AI that may extend far beyond descriptions of its technical features and capabilities.

As compared to dictionaries, such discourses are supposed to play a meaningful role in building a qualitatively different, evolving vision of AI while corpus-assisted studies could contribute to extracting quantitatively significant outcomes. To construct this new image of AI, modern websites employ both verbal and nonverbal means as opposed to dictionaries focusing on linguistic aspects.

First and foremost, this paper aims at investigating the contemporary representation of AI in the multimodal discourse of an IT vendor with the help of the corpus analysis tools and techniques of exploring the nonverbal means. Nevertheless, to make it comprehensive, conventional dictionary concepts of AI must be considered as well.

Theoretical framework

Critical discourse analysis has been in the spotlight of linguistic studies [Chernyavskaya,

2017; 2018] due to its potential to unravel the ideology-driven social practices in the discourse [Fairclough, 2003; Wodak, 2015]. Norman Fairclough describes discourses as "different perspectives on the world" [Fairclough, 2003, p. 124] emphasizing that they "not only represent the world as it is (or rather is seen to be), they are also projective, imaginary... and tied in to projects to change the world in particular directions" [Fairclough, 2003, p. 124]. This idea is crucial when dealing with discourses since they result from the intention of the locutionary source to create some 'vision' or 'projection'.

Such assumptions fit well into the anthropocentric paradigm as the human factor turns out to be at the center of linguistic analysis of the social activity [Usmonova, 2019, p. 210; Kubryakova, 1995]. This factor is intrinsically intertwined with the persuasive, or perlocutionary, intention [Klushina, 2008] of the locutionary source.

These statements could underpin the studies of corporate discourses projecting images of products and services via websites – the marketing [Borisova, 2016, p. 140] discourse reaching out to customers to convey the idea of value [Scott, 2017] embedded in some product or service. This paper deals with the marketing discourse of the *Microsoft* website providing insights into the benefits of AI products created by one of the world's leading software vendors. Such discourses are collections of texts [Borisova, 2016, p. 140; Klushina, 2016, p. 82] delivering some ideologemes [Klushina, 2016].

This paper does not attempt to make a full review of the heterogeneous approaches to the notions of concept and ideologeme defined by a variety of scholars [Bulakhtina, 2009; Lylo, 2017; Samsitova, Tashbulatova, 2015; etc.]. Instead, it relies on the proven cognitive approach [Pavilenis, 1983; Popova, Sternin, 2005] identifying concepts as "information about the actual or possible state of things in the world" [Pavilenis, 1983, pp. 101-102]. To investigate dictionary entries, the methodology makes use of the linguistic representation of a specific mental concept – AI in this respect – and provides for identifying its nominative field [Popova, 2006, p. 46] consisting of key nominations, or frequently used lexemes.

As for the ideologeme, it is a more global discourse-related category – the key ideas to be projected through the discourse as a result of fulfilling the intention of the locutionary source [Klushina, 2012]. Such discourse-embedded ideologemes might be imaginary and projective as compared to the concepts fixed in dictionary entries and supposed to reflect the *status quo*.

Being part and parcel of cognitive linguistics, concepts are existing stereotypes within some society while ideologemes are stereotypes to be embedded in the society [Klushina, 2008]. This understanding makes the analysis of ideologemes a specific part of the communicative stylistics dealing with the intention of the locutionary source to produce some impact on the locutionary target. This paper relies on the definition of ideologemes as the representation of some key values to create a new sustainable ideology for 'propping up' the society [Klushina, 2008]. This is a viable way to differentiate between dictionary concepts and discursive ideologemes. It is crucial to focus on dictionary entries first to progress to the vendorspecific discursive representation of AI since it is the cognitive meaning that underlies it all.

The methodology for exploring discursive manifestations of ideologemes also includes investigating nominations and tonality [Klushina, 2008]. This is when quantitative lexicographic and corpus-based discourse studies could add value to the research outcomes based on massive sets of texts and their typical features. Cutting-edge software applications [Shutova, 2018, p. 22] equip linguists with tools for conducting complex corpusassisted investigations. AntConc is a freeware corpus analysis toolkit for text analysis and concordancing. It can be used to extract keywords (Keyword List) and collocations (Concordance). Keywords are particularly relevant since they are the most frequently used words that shed the light on the 'message' and can be utilized to build the nominative fields of concepts and nominations of ideologemes. As for the concordance feature, the 'keyword-in-context', or 'KWIC', option enables researchers to set limitations for exploring node word collocations. It also provides for investigating the tonality being evident from concordancing and shaping the semantic prosody [Partington, 1998, p. 68].

Nonverbal means of creating discourses attract an ever-growing interest due to their role and potential [Bi, 2019]. The discourse under study is multimodal. It demonstrates the presence of both verbal, or textual, means and nonverbal ones such as videos, photos, and colors [Kress, Leeuven, 2006; Bateman, 2016].

Relying on the visual grammar methodology [Kress, Leeuwen, 2006], this paper will also focus on images and colors. The scholars [Kress, Leeuwen, 2006] identify the representative and the interactive visual dimensions. The former one is represented by people, places, and things in images while the latter deals with meanings encoded into such images via the gaze of the represented participant, the distance from the viewer, and the angle from which the participant is seen, along with the modality involving colors [Kress, Leeuwen, 2002; Leeuwen, 2013]. Colors play an important role in building multimodal discourses and contribute to a textual cohesion [Kress, Leeuwen, 2002, pp. 348-349].

Material and research methodology

The material under study is the multimodal marketing discourse of *Microsoft* website in the amount of 29,140 characters and 40 images. To analyze the nominative field of the AI concept, several online dictionary entries have been selected from *Cambridge*, *Dictionary.com*, *Macmillan*, *Merriam-Webster*, and *Oxford* in the amount of nearly 9,000 characters.

The research relies on the methodologies spanning the domains of critical discourse analysis [Chernyavskaya, 2017; Fairclough, 2003; Klushina, 2008], marketing discourse [Borisova, 2016], corpus-assisted discourse studies [Chernyavskaya, 2017], concepts and nominative fields within the framework of cognitive linguistics [Popova, Sternin, 2005] and ideologeme-related provisions of the communicative stylistics [Klushina, 2008] as well as visual semiotics [Kress, Leeuwen, 2006].

The anthropocentric paradigm provides for relying on the qualitatively-oriented critical discourse analysis exploring discourses as the reflection of the social life [Fairclough, 2003] by the locutionary source, or an IT vendor in this respect. The quantitative techniques of corpusassisted studies will be used to build the nominative field of the AI concept fixed in dictionaries and to extract the dominant nominations and KWIC collocations demonstrating the tonality when it comes to the discursive AI ideologeme. The visual grammar [Kress, Leeuwen, 2006] is used to deal with the visual material.

The website discourse is aimed at potential customers who may or may not be IT professionals. The function is not only to inform of IT products but also to convey their value. The comprehensive methodology of the linguo-conceptual and discursive analysis involves the following steps: creating a corpus of dictionary entries to identify the nominative field of the AI concept; creating a corpus of *Microsoft* website texts highlighting AI benefits; conducting the

AntConc-powered corpus-assisted study to extract keywords (Keyword List), collocations and metaphorical expressions shaping the discourse tonality (Concordance) in line with the intention of the locutionary source; analyzing the nonverbal material in terms of the visual grammar, that is: the representative dimension of portraying living beings and settings and the interactive dimension involving the gaze, distance, and angle from which the participant is seen, along with colors; formulating the *Microsoft*-specific discursive representations of the AI ideologeme.

Results

The AI concept in dictionaries

This section focuses on identifying the nominative field of the AI concept in the dictionaries since any discursive ideologemes are originally built on information about the actual or possible state of things [Pavilenis, 1983].

The Word List feature of AntConc demonstrates words such as computer(s), human, capacity, intelligent, mechanical, programmed, behavior, etc. as shown in Figure 1.

AI is linked to computers or other programmed devices, including mechanical ones, which have the capacity to copy the intelligent



Fig. 1. Dictionary entries: Word List results

human behavior. Similar definitions are typical of all the dictionaries analyzed:

(1) ... The study and development of computer systems that can copy intelligent human behaviour (Oxford); the use of computer technology to make computers and other machines think and do things in the way that people can (Macmillan); the capability of a machine to imitate intelligent human behavior (Merriam-Webster); the capacity of a computer, robot, or other programmed mechanical device to perform operations and tasks analogous to learning and decision making in humans, as speech recognition or question answering; a computer, robot, or other programmed mechanical device having this humanlike capacity (Dictionary.com).

Some entries also mention the study or the branch of knowledge:

(2) ... The study of how to make computers that have some of the qualities of the human mind, for example, the ability to understand language, recognize pictures, solve problems, and learn (Cambridge); a branch of computer science dealing with the simulation of intelligent behavior in computers (Merriam-Webster).

The cognitive layers of the AI nominative field could be differentiated between as follows: connections with computers or other programmed machines and devices; such devices are incapacitated or programmed; and, finally, such devices are programmed to imitate the human behavior. One more layer can be linked to the branch of knowledge exploring AI. It is obvious that such dictionary entries are devoid of any positive or negative connotations.

The verbal aspects of the AI ideologeme in the marketing discourse of the Microsoft website: keywords

This section will attempt to construct the representation of the AI ideologeme in the marketing discourse of the Microsoft website. The AntConc keyword threshold was specified to be Top 100 out of the available Top 100 - Top 1000 range. The first 40 relevant keywords are given below: AI, Microsoft, responsible, systems, business, organizations fall within the range of 1-10; earth and health within the range of 10–20; culture, era, accountability, intelligent, safety, change within the span of 20-30; and partner, partnership, safely, transformation, etc. within the ranks of 30 up to 40. Prepositions, pronouns, and articles have not been considered in this respect. Derivatives are also present such as leaders, leadership; partner, partnership; safety, safely; organization, organizations.

To narrow down the research focus, 20 most frequent keywords are shown in Figure 2. *AI*, *Microsoft, responsible, systems,* and *business* are in the top five.

ous Files	Concordance Concordance Plot File View Clusters/N-Grams Collocates Word List						
osoft.bd	Keyword Types: 40 Keyword Tokens: 679 Search Hits: 0						
	Rank	Freq	Keyness	Effect	Keyword		
	1	224	+ 65.28	0.0331	ai		
	2	41	+ 57.86	0.0099	microsoft		
	3	41	+ 17.46	0.0071	responsible		
	4	31	+ 24.27	0.0066	systems		
	5	25	+ 23.7	0.0056	business		
	6	21	+ 10.94	0.0039	should		
	7	19	+ 7.39	0.0032	organizations		
	8	19	+ 16.28	0.0041	practices		
	9	18	+ 8.08	0.0032	their		
	10	18	+ 12.22	0.0036	working		
	11	17	+ 17.58	0.0039	organization		
	12	14	+ 10.38	0.0029	they		
	13	13	+ 18.3	0.0031	aether		
	14	11	+ 15.48	0.0027	committee		
	15	11	+ 9.96	0.0024	strategy		
	16	10	+ 8.74	0.0022	leaders		
	17	9	+ 12.67	0.0022	empower		
	18	9	+ 12.67	0.0022	those		
	19	8	+ 11.26	0.0019	earth		
	20	8	+ 11.26	0.0019	health		
	21	7	+ 9.85	0.0017	create		
	22	7	+ 9.85	0.0017	culture		
	23	7	+ 9.85	0.0017	ora		
	24	6	+ 844	0.0015	accountability		
	Search	Term 🖂		Reney	Hit location		
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Fig. 2. Top 20 keywords

The most frequently used keyword *AI* is followed by the brand name *Microsoft* and the adjective *responsible* which makes it evident that AI-powered solutions and systems follow the principles of responsibility outlined in the excerpts below:

(3) Our approach to **responsible AI**. We believe that, when designed with people at the center, AI can extend your capabilities, free you up for more creative and strategic endeavors, and help you or your organization achieve more (AISS);

(4) **Responsible AI**. We are committed to the advancement of AI driven by ethical principles that put people first (RAIP).

The keywords *practice(s)* and *committee* are also within the Top 20 rank conveying the vision of AI as a phenomenon diligently regulated by competent committees, in particular, the *AETHER Committee* abbreviated from *AI*, *Ethics, and Effects in Engineering and Research* – the 13th most frequent keyword:

(5) Microsoft AI principles. We put our **responsible AI** principles into **practice** through the Office of Responsible AI (ORA) and **the AI**, **Ethics**, **and Effects in Engineering and Research (Aether)** Committee. The Aether Committee advises our leadership on the challenges and opportunities presented by AI innovations (RAIP).

The principles of responsible AI are to be implemented, and modality comes to the foreground. The verb *should* is the 6th most frequent keyword repeated in the six core principles developed by *Microsoft* to guide their approach to Responsible AI:

(6) Fairness. AI systems **should** treat all people fairly.

Reliability & Safety. AI systems **should** perform reliably and safely.

Privacy & Security. AI systems **should** be secure and respect privacy.

Inclusiveness. AI systems **should** empower everyone and engage people.

Transparency. AI systems **should** be understandable.

Accountability. People **should** be accountable for AI systems (RAIP).

The responsible solutions are envisaged to empower *businesses* and *organization(s)*, with these keywords and their word forms holding the ranks of 5,7, and 11 respectively.

(7) **Responsible AI** at **your organization**. Find resources to build principles and a governance model in your **organization**, as well as resources, best practices, and tools (ARAI).

AI is envisaged to be beneficial in a variety of sectors – the words *health* and *culture* hold the ranks of 20 and 22 – while the word *earth* is number 21 since *AI for Health*, *Earth*, *etc.* are parts of the *Responsible AI initiatives*:

(8) AI for **Health**. AI for **Health empowers** researchers and **organizations** with AI to improve the **health** of people and communities around the world (AIFG);

(9) AI for **Earth**. AI for **Earth** puts AI technology and cloud software in the hands of those working to solve global climate issues (AIFG).

While most of the keywords are nouns, the Top 20 list also includes the verb *create* to emphasize the potential of AI in creating a better world, along with the verb *empower*:

(10) AI for Good. Providing technology, resources, and expertise to **empower** those working to solve humanitarian issues and **create** a more sustainable and accessible world (AIFG).

The verbal aspects of the AI ideologeme: concordance

To investigate the use of *AI* in the context, the KWIC feature has been utilized. The KWIC sort settings are enabled to highlight the two words to the left and one word to the right of the keyword as shown in Figure 3 demonstrating the first 24 results.

The KWIC study has helped us to identify the following types of collocations:

- AI + nouns such as AI adoption, AI development, AI innovations, AI models, AI principles, AI reliability and safety, AI strategy, AI systems, AI success, AI tools, AI transformation, AI trends, AI vision, etc.;

- adjective + AI + noun such as holistic AI strategy, intelligent-edge AI, responsible AI advocates and teams, responsible AI-ready culture, responsible AI practices, responsible AI solution, responsible AI principles,

orpus Files /licrosoft.txt	Concordance Concordance Plot File View Clusters/N-Grams Collocates Word List Keyword List							
	Concordance Hits 224							
	1	All news and events Find outling-edge examples	Microsoft.txt					
	2	an organization. How to define a holistic Al strategy Dean Pater Zemoky (INSEA)'s Fil	Microsoft txt					
	3	are beloing organizations cultivate a response he detactly outure throughout heir businesses and put	Microsoft.txt					
	4	that will belo you create a responsible Al solution. Partner and customer stories Learn h	Microsoft.txt					
	5	proach to responsible ALEstablish a responsible ALEstatery Learn how to develop our own	Microsoft txt					
	6	implement or responsible AL Establish a responsible AL strategy Learn how to develop your own	Microsoft bit					
	7	enefit your business. Learn more about Microsoft Al Continue evolution the possibilities that Al offe	Microsoft txt					
	8	informed predictions and decisions about expende all systems must comply with privacy laws that	Microsoft txt					
	9	and promote human rights. Even in a distance in a specific mark comparison in the product with	Microsoft tyt					
	10	create a more sustainable and accessible world. All for Good Providing technology resources and em	Microsoft tyt					
	11	create a more sustainable and accessible world. All for Earth All for Earth puts All	Microsoft txt					
	12	a quernance system assigning accountability for Al and overseeing the development of Al solutions	Microsoft tyt					
	13	fithe rest transparency and accountability when Alsystems are used to be inform decisions	Microsoft.txt					
	14	Accountability People should be accountable for Alsystems. Lead with confidence in the ace	Microsoft.txt					
	15	Team enablement Readiness to adopt responsible Al practices both within our company and among	Microsoft txt					
	16	olobe in an effort to advance responsible. All practices and technologies Visit our research on	Microsoft txt					
	17	give are committed to the advancement of Al driven by ethical principles that our boole	Microsoft bt					
	18	leaders Dive into the latest advancements in Altools products and services that can be	Microsoft.txt					
	19	inside look at the latest advancements in Altools, products, and services. Evolore machine I	Microsoft txt					
	20	Lead with confidence in the are of ALALIS chapping how business works across	Microsoft tyt					
	21	diversity of society. They should also design Al models in ways that allow them to	Microsoft tyt					
	22	that affect others. When designing and building Al systems, developers should understand how bias ca	Microsoft.txt					
	23	Janation Human-Al Interaction and Collaboration. Al Reliability and Safety and Al Engineering Best	Microsoft txt					
	24	Accountability The people who design and deploy Al systems must be accountable for how their	Microsoft txt					
	c > c							
	Search Term 🖉 Words 🗌 Case 🗌 Regex Search Window Size							
	AI	Advanced 50 💠						
NO.	Start Stop	Sort Show Every Nth Row 1 @						

Fig. 3. AI concordance analysis results

responsible AI practices. These collocations are positively charged and yield the positive tonality.

Hyphenated AI collocations are typical such as *AI-ready culture, AI-ready organization, AI-ready culture content, AI-powered organization, Human-AI interaction, AI-human partnership,* etc.:

(11) Enabling an **AI-ready culture**. Drive the key changes that are necessary to become an **AI-ready organization** with solutions for finance, marketing, sales, and customer service (AIBS).

It is of particular interest that such collocations are utilized to construct affinity of AI and human beings such as *AI-human partnership*:

(12) The future as **AI-human partnership**. Microsoft Chief Scientific Officer Dr. Eric Horvitz shares his thoughts on the evolving relationship between humans and machines, and how AI trends have more to do with creating synergies than competition with humans (RAIP).

Prepositional phrases AI + for + word such as: AI for Good, AI for Earth, AI for Health, AI for Humanitarian Action, and AI for Accessibility are instrumental in shaping the discursive image of AI spanning across sectors and industries.

One of the keywords – the verb *empower* – forms the following collocations: *empower everyone*, *empower people*, *empower researchers and organizations*, *empower those working*, etc.

delivering the idea of AI benefits provided not only to organizations but also to individuals.

The verbal aspects of the AI ideologeme: metaphors

The discourse demonstrates not only cognitive but also figurative interplays of lexical means employing metaphors associated with actions of living beings. For example, the collocation *dive into the latest advancements* compares the use of AI with diving.

One more metaphor - drive - can be seen in the following excerpts:

(13) AI for business. Use AI to **drive digital transformation** with accelerators, solutions, and practices that empower your organization (AISS);

(14) Enabling an AI-ready culture. **Drive the key changes** that are necessary to become an AI-ready organization with solutions for finance, marketing, sales, and customer service (AIBS);

(15) AI drives innovation. Learn how others are using Microsoft AI technologies to transform their business (AIBS).

Metaphors associated with driving such as *fueling* can be found in the example below:

(16) In education, AI is **fueling transformation** in learning outcomes and improving student

engagement, accelerating innovation and overall effectiveness across schools and campuses (RAIP).

As for word forms used metaphorically, -ing forms are used such as unlocking, jumping off point:

(17) **Unlocking** innovations to address tough issues (AIFG);

(18) AI is driving efficiency in manufacturing and resource management. Data insights can enhance worker safety, improve efficiency, and deliver better yields-creating **a jumping off point** for more advanced AI adoption (AIBS).

Eventually, gaining AI insights and benefits is compared with a *journey*:

(19) Brad Smith, President and Chief Legal Officer at Microsoft, shares what Microsoft is learning in our own **AI journey** (AIBS).

The metaphor *game-changer* demonstrates the ultimate role of AI in contributing to positive shifts:

(20) At Microsoft, we firmly believe everyone should benefit from intelligent technology, meaning it must incorporate and address a broad range of human needs and experiences. For the 1 billion people with disabilities around the world, AI technologies can be a **game-changer** (GPRAI).

While such metaphors create the affinity of AI and positive shifts, one more metaphor – *people at the center* – seems crucial in this context:

(21) We believe that, when designed with **people at the center**, AI can extend your capabilities, free you up for more creative and strategic endeavors, and help you or your organization achieve more. We are putting our principles into practice by **taking a people-centered approach** to the research, development, and deployment of AI. To achieve this, we embrace diverse perspectives, continuous learning, and agile responsiveness as AI technology evolves (RAIP).

In the end, the verbal discourse links AI with the idea of *physically moving* towards positive transformations while people are envisaged to be at the heart of this positive shift.

The visual aspects of the AI ideologeme

The representative dimension of the visual discourse landscape is made explicit by portraying both males, females, and children of different races as seen below in Figure 4.

The settings range from natural to typical working environments where participants are actively involved in amicable negotiations as demonstrated in Figure 5.



Fig. 4. Visual landscape screenshots



Responsible AI at your organization

Find resources to build principles and a governance model in your organization, as well as resources, best practices, and tools.



Responsible AI at Microsoft We've developed six core principles that guide our approach to responsible AI. Learn about our AI principles > Establish a responsible AI strategy Learn how to develop our own responsible AI strategy and principles based on the values of your organization. Get started at AI Business School >

Design, build, and manage your Al solution We are developing resources to help organizations put responsible Al principles into practice. Find resources for responsible Al >

Fig. 5. Responsible AI at your organization screenshots

While the use of business settings is selfevident visualizing the keywords *business*, *organizations*, *committee*, etc., the photos in Figure 6 below feature natural settings as well as vegetation, the sky, and animals in motion.

The representative dimension intertwines Artificial Intelligence on the one part and the nature and living beings on the other part. The color modality of the interactive dimension manifests itself through shades of blue and green as seen in the figures above and considered to be the colors of nature. As for the gaze, distance, and angle, the participants in the photos above maintain the eye contract and look friendly.

The idea of amplifying the human capabilities with the power of AI also stands out in the *AI for Health* and *AI for Accessibility* sections. The *AI for Accessibility* pictures in Figure 7 below show people with disabilities holding devices.

The representative dimension of the visual landscape also shows architecture as depicted in Figure 8.



Fig. 6. AI for Good and AI for Earth screenshots



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Inslee signing landmark facial recognition legislation that the state legislature passed on March 12 Learn about the new legislation >

relationship between humans and machines, and how AI trends have more to do with creating synergies than competition with humans Learn about Al-human partnership >

Fig. 8. Perspectives on responsible AI screenshots

The perspective in the photo above captioned The future as AI-human partnership is capped with a glass dome through which the sun or some other light is shining as if symbolizing the future of this AI-human interaction. It makes us believe that it embodies the visual metaphor of positive changes and shifts.

The same metaphorical use of visual perspectives can be traced in Figure 9 below captioned Put responsible AI into action and Establish a responsible AI strategy where a moving

staircase symbolizes taking actions and heading for the AI-ready future.

Thus, the visual discourse enhances the message of responsible and regulated AI empowering organizations and humans through portraying living beings in a variety of business and natural settings. As compared to the verbal discourse, the idea of linking AI benefits and the nature stands out more prominently in the visual discourse due to the use of the techniques identified.



microsoft.com/en-us/ai/responsible-ai?activetab=pivot1:primaryr6



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Conclusion

Artificial Intelligence arouses a great number of expectations. This is the time when dictionary entries focusing on the concepts of machines copying humans are no longer sufficient in terms of providing a multi-faceted picture of AI that can be portrayed differently in corporate discourses.

Cutting-edge ways of exploring discourses via corpus analysis tools and multimodal anthropocentric paradigms have enabled us to shed the light on the picture of AI in the contemporary website discourse driven by the intention of the software vendor *Microsoft* to construct a positive and augmented ideologeme of AI using both verbal means and visualizations.

The *Microsoft* discourse delivers an evolving ideologeme of responsible AI envisioned not to emphasize conventional artificial vs. natural juxtapositions but to amplify the human abilities and assist organizations and businesses in making the world better.

The discourse features top keywords responsible, business, organizations, earth, health, culture, accountability, intelligent, safety, change, strategy, committee, etc. Responsible AI is portrayed as regulated by fully competent bodies of professionals and delivering benefits to everyone. The KWIC analysis also demonstrates a variety of hyphenated collocations such as *AI-ready culture*, *AI-human partnership*, *Human-AI interaction*, etc. The positive change associated with this vision of AI is made explicit through metaphorically used verbs of movements such as *drive*, *dive*, *jump off*, *etc*. The ideologeme of positive, people-centered responsible AI is backed up through photos, colors, and metaphorically arranged perspectives creating a sort of simile between artificial and natural things.

Ultimately, extending far beyond dictionary definitions of AI, the verbal and visual landscapes of the multimodal marketing discourse of the *Microsoft* website deliver the global discursive ideologeme of AI as a human- and societycentered phenomenon adding value to performance while the visual vistas span further to build the affinity of AI and living beings and to project a viable ideology of AI-human partnership.

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