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Exploring the Stories we live by in the Era of Generative AI: An Ecolinguistic Study

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Abstract

Within the domain of artificial intelligence (AI), an intriguing and frequently disregarded dichotomy emerges: a comprehensive examination of the relationship of humans and AI co-existing with a noticeable dearth of attention towards environmental factors. This study presents an in-depth ecolinguistic analysis of discourses surrounding Generative AI, humans and social structures including non-human objects. Utilizing a five-step textual analysis proposed by Altheide and Schneider (2013), this qualitative study investigates linguistic expressions in panel discussions featuring technologists, historians, and academicians from November 2022 to the present. By applying Stibbe's ecolinguistic tool of "stories" (2015), the research methodology involves analyzing transcripts to identify constructive and destructive stories. The analysis highlighted how technologists, historians and academicians contributed to the creation of three different types of stories in their panel discussions. These three stories were: *AI is beneficial, AI is extinctive,* and *AI is extractive.* This study highlights the importance of inclusive narratives in technological discussions, particularly considering the ecological impacts of AI advancements. The study's findings reveal a conspicuous erasure of environmental concerns in AI discourses, highlighting the need for greater ecological consciousness in technological development and discourse.

Keywords:
Generative AI,
stories-we-live-by,
ecolinguistics,
ecological concerns,
discourses

Introduction

Generally referred to as the machine's competence to learn from the reinforcement learning model to adjust to new inputs, Generative AI performs tasks in a more optimized manner than a normal human speed (Duan, Edwards, and Dwivedi, 2019). Historically, AI was conceptualized as a means to augment human capabilities and address complex problems unsolvable by traditional means. Early pioneers of AI harboured a vision of creating systems that could emulate human intelligence, perhaps even surpass it (McCorduck, 2004). In recent years, there has been a considerable increase in the number of practical applications and the prevalence of AI in our everyday life (Lu, 2019; Pannu, 2015). Therefore, increasing the potential of immense opportunities attached to its applicability in education (Scheepers, Lacity and Willcocks, 2018), health and well-being (Sun and Medaglia, 2019) and finance (Bahrammirzaee, 2010).

The discourses surrounding the applicability of Generative AI are diverse, reflecting a spectrum of experiences, expectations, and concerns. This vision has partially materialized in the form of advanced machine learning algorithms, neural networks, and autonomous systems, prompting both admiration and alarm. Public and academic narratives around AI often oscillate between two extremes: on one side, AI is seen as a revolutionary force capable of driving unprecedented progress (Kaplan & Haenlein, 2020); on the other, it is viewed as a potential threat

to jobs, privacy, and ethical norms (Brynjolfsson & McAfee, 2014). Additionally, there is a growing discourse on the environmental impact of AI. This involves concerns over the carbon footprint of training large AI models and the lifecycle environmental cost of AI hardware and infrastructure (Strubell, Ganesh, & McCallum, 2019). Responding to these concerns, new narratives around sustainable AI practices and "green AI" have begun to emerge, advocating for innovations that balance technological advancement with environmental stewardship (Schwartz, Dodge, Smith, & Etzioni, 2020).

These narratives are not static but evolve with the technology, influenced by media portrayal, cultural attitudes, and individual experiences with AI applications (Ouchchy, Coin, & Dubljević, 2020). It is worth noting that the media plays a significant role in shaping the narrative surrounding various topics, including AI, as evidenced by studies conducted by Chuan et al. (2019) and Yang et al. (2023). Therefore, it is reasonable to expect that the public's acceptance of AI will be driven by the stories crafted by media and social media content. Therefore, this research hypothesizes that the proliferation of Generative AI prompts critical discourse across various spheres, significantly impacting the stories individuals construct about Generative AI and its intersection with human life. To uphold an inquiry into the existing narratives manifested on social media platforms, particularly on *YouTube*. This study is strategically designed to investigate the ongoing debates to decipher whether the predominant stories manifested by individuals around AI and humans include environmental consciousness or not. Therefore, an ecolinguistic study of the linguistic expressions uttered by technologists, historians and academicians in the selected panel discussions has been analysed to answer these research questions:

1. How are the predominant stories manifested by individuals when discussing Generative AI?
2. How do individuals create new stories around environmental consciousness when discussing Generative AI?

Literature Review

Within the domain of philosophical assertions around technology, the issue surrounding technology ethics has gained significant prominence. The issues concerning technology ethics imply whether technological progress has positive or negative ramifications for society. The introduction of the empirical turn within the philosophy of technology marks a significant paradigm shift, focusing on real-world impacts and practical applications of technology. This shift, characterized by a departure from abstract theorizing to grounded, empirical analysis, has brought about profound insights and redefined philosophical inquiry. Central to this empirical approach is Peter-Paul Verbeek, whose work highlights the complex dynamics between technology and society. Verbeek (2022) explores how technologies act not merely as tools but as active mediators in the human experience, influencing societal norms and individual behaviours. His theory on technological mediation, situated within the post-phenomenological framework, advocates for a deeper understanding of how technologies shape human perceptions and actions. Building on Verbeek's foundations, scholars like Bas de Boer (2018) and Robert Rosenberger (1982) have extended post-phenomenological analysis to various philosophical subdisciplines. They examine the intermediary roles of technology in fields ranging from neuroscience to political philosophy, highlighting the pervasive influence of technology across different sectors of human engagement. The empirical turn in the domain of the philosophy of technology ethics has also given rise to "Guidance Ethics," a framework proposed by Verbeek and Tijink (2020) that shifts the focus from passive ethical evaluations to active guidance of technology through its lifecycle. This approach demands a proactive role from developers and stakeholders in ensuring that technologies are designed and implemented with consideration of their contextual impacts, actor interactions, and ethical implications.

However, not all philosophers embraced the empirical turn wholeheartedly. Critical theorists like Langdon Winner (1986) argue that the focus on individual technologies within the empirical turn neglects the larger societal forces at play. Winner contends that technologies can be inherently political, designed and implemented in ways that reinforce existing power structures. He emphasizes the importance of critically examining how technologies are designed and deployed, questioning their neutrality and potential biases. The rise of "philosophy from technology" is a novel development within this empirical context. Nolen Gertz (2018) exemplifies this trend by delving into the nihilistic implications of modern technology, arguing that technological advancements can lead to a detachment from traditional values and a sense of meaninglessness. This perspective, contrasting with the focus on practical

applications, prompts a reevaluation of fundamental philosophical questions, emphasizing the inextricable link between human existence and technological integration. Therefore, the empirical turn in the philosophy of technology ethics offers a valuable lens to examine how stories around Generative AI are constructed. Aligned with Verbeek's ideas on technological mediation, an optimistic narrative of progress is attached to AI whereas the critical perspectives echo Winner's concerns about potential biases. However, these contrasting narratives can inform the creation of new stories around Generative AI and environmental consciousness.

Language is the key to envisioning and creating a better future, even in times of social decay. Berardi argues that by breaking free from the repetitive narratives of financial capitalism, new narratives and stories about the world can be forged (2012). Therefore, a linguist is equipped with tools to dissect the everyday discussions and debates that shape our society. By analysing these narratives, underlying stories can be unveiled. According to Stibbe (2015) "Ecolinguistics can play a valuable role in exposing and questioning the stories we live by and contribute to the search for new ones" (p.2). Ecological linguistics, also known as 'okologische Sprachwissenschaft,' extends ecological concepts to language world systems and cultural systems (Fill and Muhlhausler, 2001). Ecolinguistics as a discipline began with the construction of an ecological metaphor by Haugen (1987). Einar Haugen's comparison of "interactions between any given language and its environment" to ecological relations between species inspired new discussions in the field of literature and linguistics. Thus, the field of ecolinguistics has garnered attention due to its utilization of ecological concepts, borrowed from the natural sciences, in the examination of language (Li, Steffenson and Huang, 2020). Halliday's influential lecture in 2001, is often credited with establishing ecolinguistics within the ecological humanities. He highlighted the role of language in framing perceptions of environmental issues, particularly critiquing how economic growth and expansion are positively portrayed in media, suggesting an underlying narrative that "growth is good".

According to Stibbe (2015), the narrative of "growth is good" embedded in the positive story of progress is structured around a straightforward concept: it has a direction (either forward or backward), an evaluative framework (where moving forward is deemed positive and moving backwards negative), specific components associated with moving forward (such as technological advancements and industrialization), elements linked to moving backwards (like a lifestyle more attuned to nature), and an underlying belief in the inevitability and relentless advance of progress. Identifying four prevailing stories within Western imperial civilization, David Korten (2006) includes the *prosperity narrative*, which idolizes material wealth and monetary gain; the *biblical narrative*, which prioritizes concerns of the afterlife over present environmental stewardship; the *security narrative*, which emphasizes military and police strength to maintain systems of domination; and the *secular meaning narrative*, which portrays life in purely material and mechanistic terms. According to Korten, these dominant stories contribute to social injustices and environmental degradation by fostering detachment from both communal and ecological well-being. Moreover, Paul Kingsnorth and Dougald Hine (2009) also highlighted the most life-threatening story we live by is that of anthropocentrism and human centrality. Therefore, this study has utilised Stibbe's ecolinguistic tool of "story" to unveil the "mental model within the mind of an individual" (p.10). By employing Stibbe's ecolinguistic framework of "story", this study aims to reveal the underlying mental models that shape individual perceptions and discussions about AI in the media (2015). Providing insights into how new, either ecologically destructive or ecologically constructive stories might emerge in the context of the emergence of Generative AI. This approach not only uncovers the prevalent stories that people live by but also facilitates the exploration of how these narratives could evolve in response to increasing awareness of environmental issues and sustainability.

Research Methodology

This study employs a qualitative research design of qualitative textual analysis. As asserted by Deetz (1977), qualitative textual analysis falls under the research paradigm of interpretivism and draws upon other theoretical paradigms like symbolism, phenomenology, critical theory and ethnography. While emphasizing meaning-making and phenomenological essences, textual analysis is a significant qualitative research design to interpret texts, analyze critical debates and situate social structures within them (McKee, 2003). Moreover, Altheide and Schneider (2013) have suggested a five-step process for conducting a qualitative text including selection of a research problem,

familiarization with the text's source, identification of codes and categories, refinement of codes, analysis of themes and reporting the findings.

Therefore, in line with the recommendations of Altheide and Schneider (2013), the research design for this study unfolds through a systematic five-step process:

(a) Selection of a Research Problem

The study focuses on how prevailing narratives embedded within discussions of AI influence societal and ecological outcomes. Specifically, it examines how these narratives either perpetuate traditional views of technology and progress or facilitate the emergence of new stories that promote environmental sustainability.

(b) Familiarization with Text's Source

Textual sources for this study comprise transcripts from recent panel discussions centred on the transcripts of selected panel discussions on the themes including issues concerning the intersection of Generative AI, human life, and societal structures, including non-human elements and objects. The rationale for this purposive sampling aligns also with Guattari's three ecologies—environmental, social, and mental (2000). Offering a multidimensional framework for interpreting these panel discussions, Guattari's notion of three ecologies is suitable, for instance, the debates centring upon the future of civilization and democracy, as discussed in these panel discussions, serves as an exemplar of social ecology, influencing and interacting with mental ecologies, such as public perceptions and individual cognitive responses of panellists towards Generative AI. Moreover, the panel discussions were selected based on emerging debates surrounding AI spanning from November 2022 to the present date. The rationale for the selection of this timeline is embedded in the release of a well-known AI chatbot, ChatGPT around November 2022 which stirred the intensity of academic discourses around AI as an emerging technology. The sample selection along with the names of selected panel discussions, names of speakers, time frame and dates are presented in Table 1 below:

Table 1 Presentation of Data Sample

Sr. No.	Name of the Talk	Name of Speakers	Date	Time Frame
1.	Digital Talk: "Living with Artificial Intelligence	Kate Crawford and Guy Hoffmann	26th January, 2023	57:31 minutes
2.	Artificial Intelligence, Democracy and the Future of Civilization	Yoshua Bengio and Yuval Noah Harari	1st June, 2023	46:32 minutes
3.	AI Roundtable	Benjamin Netanyahu, Elon Musk, Max Tegmark and George Brockman	18th September, 2023	1 hour 46 minutes

The transcripts of the identified panel discussions and talks serve as the primary data source for analysis. These transcripts capture the linguistic utterances of the participants (technologists, historians, academicians), including discussions, responses to questions, and any relevant discussions surrounding environmental consciousness when discussing AI and its impact on humans.

c) Identification of Codes and Categories

Initial coding in the form of linguistic utterances has been drawn from Arran Stibbe's ecolinguistic framework to categorize language that shapes and reflects the "stories we live by"—specifically those that either uphold or challenge the dominant narratives of progress and anthropocentrism.

(d) Refinement of Codes and Analysis of Themes

Codes will be continuously refined as the analysis progresses, allowing for the emergence of themes related to how Generative AI is discussed concerning human centrality and ecological impacts. This step involves a critical examination of how these stories construed by technologists, historians and academicians are either constructive or destructive implying the future they hold for environmental and societal well-being.

(e) Reporting the Findings

The final step involves synthesizing the insights gained from the thematic analysis highlighting how dominant and emerging narratives within AI discussions either contribute to or detract from efforts to foster a more ecologically aware and socially equitable world.

By applying this methodological framework, the study aims to reveal the underlying mental models that shape discussions about AI in the media, as guided by Stibbe's ecolinguistic tool of "story" (2015). The data analysis has highlighted how dominant and emerging narratives within AI discussions contribute to or detract from efforts to foster a more ecologically aware and socially equitable world.

Data Analysis

In order to conduct a meticulous examination and comprehensive linguistic examination of transcripts from specific panel discussions and debates, participants (technologists, historians, and academicians) were subjected to isolated analysis. This analysis sought to identify linguistic utterances guided by Stibbe's ecolinguistic tool of "story" (2015). The principal aim of this analysis is to acquire an in-depth comprehension of how individuals engaged in panel discussions and debates to create stories and articulate their opinions on the issue of Generative AI, human life, and societal structures, including non-human elements and objects.

AI is Beneficial

Widely recognised as the co-founder of Open AI, Greg Brockman's discourse at the *AI Roundtable* showcases a narrative influenced by optimism and a forward-thinking approach to AI, as revealed through an ecolinguistic analysis using Stibbe's framework of "stories we live by" (2015). His language, marked by linguistic utterances such as "transformative," "excited," and "benefit everyone," illustrated a story imbued with positivity and a hopeful vision for Generative AI's role in society. These linguistic terms not only expressed emotional engagement but also constructed a story of AI as a universally beneficial force, enhancing human capabilities and societal functions. Brockman's use of pragmatic expressions like "really foundational" and "very important" signalled a strong commitment to AI's development, highlighting its perceived critical role in future societal advancements. His language conveyed a sense of urgency and necessity, framing AI not merely as a technological evolution but as a pivotal element of progress.

Furthermore, his use of awe-inspiring phrases such as "surprising," "creative aspect of creation," and "fundamental changes" painted AI as a powerful agent of change capable of redefining boundaries and expectations in various domains. Brockman's portrayal of AI, particularly with references to its "maximum velocity efforts towards a good future" and as a "personalized tutor for everyone," illustrated a narrative that is deeply embedded in the story of progress, where technological advancements are synonymous with societal and educational improvements. However, through the lens of ecolinguistics, Brockman's narrative exhibited a crucial omission: it aligns closely with the story of "Economic Growth is Good," focusing predominantly on the benefits and transformative potential of AI without a corresponding emphasis on ethical considerations or environmental impacts. This narrative, while promoting the positive aspects of AI, inadvertently supported a techno-optimistic view that may overlook the complex ecological and social ramifications of unchecked technological expansion.

Therefore, on the surface, the story narrated by Brockman was constructive in nature but on a deeper level, it revealed a destructive story of absence and erasure of ecological consciousness. It prioritized the role of AI in enhancing human endeavours and societal functions but failed to address how these advancements might harmonize with or disrupt ecological and ethical boundaries. This narrative, as analysed through Stibbe's ecolinguistic tools, highlighted the need for integrating stories that not only celebrate technological progress but also critically engage with the broader implications of such technologies on the environment and society. In essence, Brockman's optimistic view of AI needs to be balanced with a narrative that is equally attentive to the sustainable and ethical dimensions of technological advancement, fostering a more holistic view of progress that includes ecological well-being and ethical integrity.

Similarly, Elon Musk, renowned for his pioneering ventures across multiple sectors, also presented an optimistic vision of Generative AI during the *AI Roundtable* discussion. Through his language, he constructed a

positive narrative of AI as a transformative force capable of creating a utopian reality. Musk's use of phrases like "blessing than a curse," "the description of Heaven," and envisioning a world without scarcity, presented AI in an almost celestial light, suggestive of its potential to radically enhance human existence. His language, laden with linguistic expressions such as "superintelligence," and "cyborg," reflected a deep fascination with the potential of Generative AI. These terms not only demonstrated his appreciation for AI's potential but also framed it as a key agent in driving forward human progress and solving fundamental societal issues. Musk's evaluative language, including "good intentions" and "actions to ensure that the future of humanity is good," positioned AI as inherently beneficial, reinforcing the narrative that AI will act as a harbinger of a better future for humanity.

From an ecolinguistic lens of Stibbe's "stories we live by", Musk's story can be seen as promoting a dominant narrative that aligned with the "Technological Salvation" story. This story was characterized by a belief that technology, particularly AI, will solve all human problems and lead to a utopian future. It echoed the wider cultural narrative of progress and technological determinism, where technological advancement was equated with social and moral improvement. However, this narrative omitted critical ecological and ethical considerations. It overlooked the complex interdependencies between technology, society, and the environment, failing to address how AI's integration affected ecological systems and social equity. Musk's vision, while inspiring, does not engage with the potential environmental impacts of widespread AI deployment, such as energy consumption, electronic waste, and the displacement of traditional industries, which can have profound ecological consequences. In conclusion, while Elon Musk's portrayal of AI champions its potential to transform society positively, an ecolinguistic analysis reveals a need for more constructive stories. These dominant stories should not only celebrate AI's capabilities but also critically examine its role within larger ecological and social contexts.

AI is Extinctive

Yuval Noah Harari, a philosopher and historian, presented a critical narrative on artificial intelligence during his panel discussion *Artificial Intelligence, Democracy and the Future of Civilization.* His discourse was permeated with a tone of caution and scepticism, contrasting sharply with more optimistic narratives about AI. Harari used phrases such as "the end of human history," "Oppenheimer moment," and "profound shift," to evoke a deep sense of apprehension about the potential negative impacts of AI. While drawing a comparison of AI advancements to an "alien invasion," his speculative language highlighted a destructive story towards the transformative potential of Generative AI. Harari's narrative, through the lens of ecolinguistics, can be viewed as a critical examination of the "progress is good" story that often accompanied discussions of technological advancement. He articulated a profound scepticism about the unchecked development of AI, suggesting that such advancements might not lead to a better future for humanity but rather to significant existential threats. This story challenges the dominant story of technological salvation and highlights the ethical, social, and ecological risks that could accompany AI's integration into society.

In his panel discussion, Harari also made poignant judgments about human capabilities and the ethical implications of creating entities more intelligent than ourselves. He described humans as potentially the "most destructive entity," reflecting on our capacity to invent technologies that could lead to our extinction. His emphasis on phrases like "AI can create completely new ideas" and "something more intelligent than you" highlighted the autonomy and potential superiority of AI over human intelligence, raising concerns about control and agency. Therefore, from an ecolinguistic perspective, Harari's story can be interpreted as a cautionary tale, one that invites reflection on the narratives individuals accept about progress and intelligence. By questioning the inherent goodness of "more intelligence" and "technological progress," Harari encouraged a reevaluation of how these narratives influence our ethical decisions and our relationship with the natural world. His approach aligned with Stibbe's ecolinguistic aim to uncover and challenge the stories that shape our interactions with the environment and technology.

In addition to that, Max Tegmark, a physicist, and computer science researcher voiced significant concerns about artificial intelligence in his participation in the *AI Roundtable*. His discourse was characterized by an urgent tone, highlighting the profound implications and challenges AI poses to society, particularly in ethical and socio-economic realms. Through an ecolinguistic analysis based on Stibbe's framework, Tegmark's language revealed a story steeped in caution and critical awareness, reflecting deep concerns about the trajectory of AI development.

Tegmark used phrases like "depressed competition," "coming very fast," and "heading straight for the curse" to express a sense of immediacy and potential peril associated with AI advancements. His mention of "humans will go extinct" evoked a stark narrative that AI might lead humanity towards an existential crisis similar to historical natural selection events, as implied in his comparison to the extinction of Neanderthals. This narrative served as an existential warning, framing AI not just as a technological development but as a force capable of fundamentally altering human destiny.

In his discourse, Tegmark also critiqued the distribution of wealth and power that AI might exacerbate, noting how AI could lead to "enormous wealth and power with a smaller and smaller number of people" and might "cannibalize a lot more jobs than you create." Such statements challenged the dominant narrative of technological progress equating to broad societal benefit, highlighting instead the risks of increased inequality and social disruption. Further, Tegmark's comments about nations gaining a "profound concentration of power" through advancements in AI reflected concerns about geopolitical imbalances and the potential for monopolistic control over global resources and influence. His narrative suggested a world where AI not only reshapes economies and labour markets but also redefines power structures on a global scale.

Through an ecolinguistics lens, Tegmark's narrative emphasized the need for a critical re-evaluation of the "stories we live by" concerning technological progress. His critical stance on AI calls into question the prevailing optimism surrounding AI technologies and stresses the need for narratives that more comprehensively address the ethical, ecological, and socio-political dimensions of AI development. This approach advocates for integrating considerations of justice, equity, and sustainability into the discourse on AI, promoting a story that recognizes both the potential benefits and the profound challenges posed by AI.

In conclusion, Max Tegmark's story about Generative AI analyzed through Stibbe's ecolinguistic tool of "stories-we-live-by", reveals a narrative that is both cautionary and critical, urging a reassessment of how AI is integrated into our ecological and social systems. His perspective enriches the discourse by advocating for greater ethical scrutiny and proactive measures to ensure that AI development aligns with broader human values and ecological sustainability, thereby fostering a more balanced and thoughtful approach to technological advancement.

AI is Extractive

Kate Crawford, a prominent scholar in the field of artificial intelligence, used her expertise to critically examine the social and political ramifications of AI in her panel discussion, *Digital Talk: Living with Artificial Intelligence.* Through Stibbe's ecolinguistic analysis (2015), it can be analysed that Crawford's linguistic expressions constructed a narrative that is markedly critical of the prevailing optimistic narratives about AI's role in society. Crawford emphasized linguistic terms such as "profoundly material technology," "enormous impacts," and "extractive" to express her deep concerns about the tangible, often negative, and overlooked aspects of AI. These expressions suggested a narrative that counters the dominant story of technological neutrality and beneficence, highlighting the substantial material and ecological footprints of AI technologies. Her use of phrases like "abstraction and extraction," "profit-making," and "commodity" further critiqued the commodification inherent in the AI industry, suggesting an extractive and manipulative dimension to these technologies that prioritizes profit over ethical considerations.

In line with Arran Stibbe's concept of "stories we live by," Crawford's story offered a narrative that critically engages with the ethics and politics of AI. She discussed the "profound concentration of power" and "industrial concentration" within the AI field, which she argued leads to a political economy that centralizes power and diminishes democratic accountability. Additionally, her commentary on how AI technologies transform individuals from "consumers or citizens" to "commodities" reflects a deep concern about how AI is reshaping human identity and agency. Crawford's narrative as analysed through Stibbe's ecolinguistic framework revealed a story that challenges the dominant narrative of "economic-growth-is-good." By highlighting the material extraction required for AI, the waste it produces, and its overall impacts on ecological systems, she draws attention to the environmental costs of unchecked technological development. In summary, though on a surface level, her story resonates with a negative tone but on a deeper level, Kate Crawford constructed an ecologically conscientious narrative that emphasizes the ethical, political, and environmental stakes of AI development.

Table 2 Linguistic Expressions and Stories

Name	Linguistics Expressions	Stories
Greg Brockman	Transformative, Excited, Benefit everyone, Foundational, Very important	AI is good, More AI is better, AI is beneficial
Elon Musk	Blessing, Heaven, No scarcity, Singularity, Superintelligence, Cyborg	AI promises Utopia, AI is a blessing, AI is superintelligent, Superintelligence benefits humanity
Yuval Noah Harari	End of human history, Oppenheimer moment, Alien invasion, Most intelligent entity	AI is the end of human history, AI is like an Oppenheimer moment, AI is like an alien invasion, AI is the cause of human extinction, AI is more intelligent
Kate Crawford	Profoundly material technology, Extractive, Profit-making, Commodity, Profound concentration of power	AI is material technology, AI has enormous impacts, AI is extractive, Humans are a commodity, AI produces waste
Max Tegmark	Depressed competition, Coming very fast, Heading straight for the curse, Humans will go extinct	AI will cause depress competition, AI is coming fast, AI is heading for a curse, AI will cause human extinction, AI will cannibalize jobs

Discussion

The present study undertakes a comprehensive examination of the linguistic expressions of prominent figures such as Greg Brockman, Elon Musk, Yuval Noah Harari, Kate Crawford, and Max Tegmark during their panel discussions on the subject of Generative AI, human life, societal structures, including non-human elements and objects by utilising the ecolinguistic lens of Stibbe's "stories-we-live-by" (2015). By subjecting these discourses to rigorous data analysis, this research illuminated the stories constructed by these individuals when engaging in discussions on AI and its potential ramifications for humanity. Furthermore, it is worth noting that these debates serve as a platform for the exploration of how individuals construct novel stories on environmental consciousness within this particular framework. The stories put forth by the participants in the discourse exhibit a notable array of viewpoints regarding AI.

The narratives surrounding Greg Brockman and Elon Musk are primarily characterized by an overarching sense of optimism and ambition towards the advancement of AI. Brockman's narrative centres around the transformative influence of AI on the future of work processes, emphasizing its broad-ranging advantages. In a similar vein, Musk envisions a transformative future utopia for humanity wherein AI plays a pivotal role in diminishing human labour and fostering a state of abundance. These stories constructed by Greg Brockman and Elon present the view of technologists overlooking the broader ecological and societal contexts of the advancement of AI which in contrast to the philosophy of technology, the framework of Guidance Ethics (Verbeek and Tijink, 2020) which suggests a deeper engagement with context, environment and users. The stories developed by Greg Brockman and Elon Musk view technology as a neutral tool, a means to only achieve human goals. This view in the philosophy of technology is termed as an "instrumental view" (Borgmann, 1984). This implies that there is a need for more inclusive consideration of actors (both human and non-human) and a broader range of values, especially ecological ones to be considered by technologists like Greg Brockman and Elon Musk while they voice out their opinions about AI, especially on social media forums, like YouTube.

Contrary to Greg Brockman and Elon Musk, the stories constructed by Yuval Noah Harari and Max Tegmark espouse a more responsible perspective, an empirical turn focusing on technologies and their concrete contexts (Gertz, 2019). In his discussions, Tegmark undertakes a scholarly investigation into the ethical and socio-economic complexities that emerge in the wake of AI's advancement. Moreover, Harari delves into a comprehensive examination of the existential risks and ethical issues that arise from the advent of AI. By ascribing an analogy of the event of Oppenheimer with the rapid developments in the field of AI, Harari is resonating the views of Verbeek, "technologies

are constructed in networks of relations, in which human actors play a central role, with their interpretations, interests and ideas" (2020, p.120). Thus, the aforementioned stories serve as evidence that individuals possess the capacity to construct stories that are shaped by their unique perspectives, personal experiences, and specialized knowledge embedded in the negative impact of AI.

As propounded by Jacques Ellul, the empirical turn towards substantivism in the philosophy of technology suggests that technology should be interpreted in both ways; deterministic and autonomous (1962). In that way, the broader impact of technology along with its dangers affecting human-technology relations, design processes and social implications will be discussed (Heidegger, 1977). Only after realizing and understanding the agentive and expressive nature of technology, the impact of AI on humans and environment can be comprehended. This was voiced out by Crawford as she considered AI as a material and extractive technology. She directs her attention towards a thorough exploration of the social, political, and environmental ramifications that accompany the proliferation of AI technology. Her narrative is not just about the digital or abstract capabilities of AI but also its tangible, material impacts, like resource extraction and waste. The environmental consciousness in AI discussions is fostered by critically reflecting on how AI systems are developed, the resources they consume, and the waste they generate. In summary, applying an empirical philosophical and ecolinguistic lens, to these stories surrounding Generative AI highlights a critical need for more inclusive narratives that recognize and integrate the environmental and ecological implications of AI, thus fostering a more holistic understanding of AI's impact on both human and non-human worlds.

Conclusion

The findings depicted in *Figure 1* highlight a notable omission of environmental themes within the stories analysed. The study categorizes the narratives constructed by technologists, historians, and academicians into three types: *AI is beneficial, AI is extinctive, and AI is extractive.* This classification suggests that while AI is frequently discussed in terms of its potential benefits or risks to human systems, its impact on the environment remains largely unexplored. Using the ecolinguistic framework of Stibbe's "Stories We Live By" (2015), this lack of engagement with environmental issues can be seen as a failure to acknowledge the full narrative capacity of the environment within discussions on AI. In ecolinguistics, the environment is not merely a backdrop but a vital participant with its own stories and agency. The minimal discussion of environmental concerns in these panel discussions on the themes of Generative AI, humans and social structures indicated a prevailing story in which the environment's role and impact are significantly undervalued in the context of AI development, suggesting an erasure. This observation points to the necessity of integrating a more comprehensive narrative approach that includes the environmental dimensions of AI technologies. Recognizing the environment as an active agent in the stories we construct about AI could lead to a more holistic understanding of the technology's impact and the development of AI solutions that are more sustainable and ecologically aware.

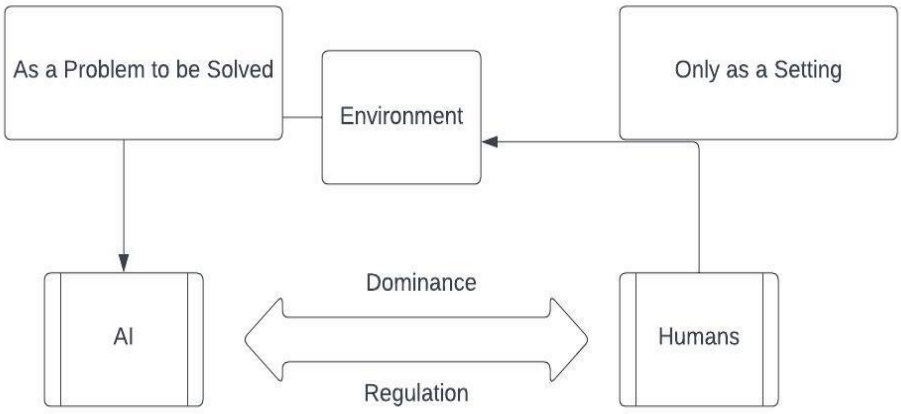

Figure 1 Environmental Erasure in AI Discourses

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