e-ISSN: 2710-2122, p-ISSN: 2710-2114
2024: Vol 6 (S1) pp 1-14. https://doi.org/10.38140/ijer-2024.vol6.s1.06
Interdisciplinary Journal of Education Research

The Role of Artificial Intelligence in Decolonising Academic Writing for Inclusive Knowledge Production

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EDITORIAL DATES
Received: 12 May 2024
Revised: 04 September 2024
Accepted: 30 September 2024
Published: 22 October 2024

DOI: 10.38140/ijer-2024.vol6.s1.06

Abstract: This conceptual article delves into the integration of Artificial Intelligence (AI) in academia, focusing on its potential to decolonise academic writing for inclusive knowledge production. The paper begins with an overview of decolonisation in academic discourse and introduces AI's emerging role in this field. It then reviews the literature on decolonial perspectives in academia, the challenges faced by non-native English speakers in academic writing, and previous AI research in education, highlighting gaps that necessitate a decolonial and critical approach. The theoretical framework combines decoloniality and critical theory, linking these to empower non-native English-speaking academics. Using a theory synthesis design, the discussion explores this group's unique challenges in academic writing and how AI, specifically applications like ChatGPT, can be a transformative tool for inclusivity in publication spaces. It critically examines how AI can contribute to decolonising academic knowledge writing. However, it also addresses potential challenges and ethical considerations in merging AI with decolonial perspectives. The article forecasts future AI developments and their implications for decolonising academic experiences, emphasising the need for inclusive technological advancements. In conclusion, the article stresses AI's potential role in decolonising academic practices and calls for further interdisciplinary dialogue and exploration. Recommendations for universities, academics, policymakers, and curriculum designers, as well as implications for decolonial and critical discourses, are provided.

Keywords: Decolonisation, artificial intelligence, academic writing, non-English speakers.

1. Introduction

The movement for decolonisation in academic discourse has recently gained significant momentum, directly challenging the Eurocentric perspectives that have traditionally dominated the educational landscape (Ndlovu-Gatsheni, 2015). This movement is driven by a critical need to recognise and incorporate a wide array of cultural perspectives, particularly emphasising the voices and experiences of regions and communities that have historically been marginalised in academic contexts (Almeida & Kumalo, 2018; Ndimande, 2018). It is a movement that transcends the mere diversification of knowledge sources; it represents a profound commitment to reevaluating and transforming the underlying power structures and methodological approaches that have long governed academic discourse (Ndlovu-Gatsheni, 2015). By doing so, it aims to establish more equitable and inclusive academic environments. These newly shaped spaces seek to amplify and value various voices, with a particular focus on those emerging from post-colonial backgrounds, thereby creating a more inclusive and genuinely representative global intellectual community. This shift encompasses more than the inclusion of diverse voices; it is about redefining what constitutes knowledge and determining who has the authority to define it (Afolabi, 2020), fundamentally altering how academia understands and engages with different cultures and perspectives.

As the academic community engages in the process of decolonisation, there is a parallel and rapid evolution in the role of Artificial Intelligence (AI) within the educational sphere. AI is increasingly

acknowledged for its potential to revolutionise various aspects of education. This encompasses more visible facets such as personalised learning pathways, automated grading systems, and the provision of data-driven insights into student performance, while also extending into more areas. According to Challapalli et al. (2020), AI's advanced language processing capabilities, for instance, stand at the forefront of this technological revolution. These capabilities offer the potential to serve as a bridge across linguistic and cultural divides that have traditionally impeded academic writing and research, particularly for non-native English speakers. In this context, AI is not merely about overcoming language barriers but about enabling a more effective articulation of ideas by those who might otherwise be marginalised due to linguistic limitations (Park et al., 2020). In doing so, AI acts as a democratising force in academic discourse, opening avenues for a richer and more diverse exchange of ideas and ensuring that voices from different linguistic backgrounds are heard and understood in their full complexity and depth. This technological intervention could play a crucial role in levelling the playing field, allowing students and scholars from varied linguistic backgrounds to contribute more meaningfully to academic conversations. Therefore, AI is not solely an operational tool in the academic environment; it is potentially a transformative agent that can help realise a more inclusive and diverse academic world, reflective of multiple perspectives and experiences (Balta, 2023).

The core argument of this article is to present the potential role of Artificial Intelligence (AI) in revolutionising academic writing for non-native English speakers, emphasising a shift beyond basic linguistic translations and grammar corrections. This exploration centres on envisioning AI as a transformative tool that redefines the realms of academic writing to be more accessible and inclusive. The focus is on leveraging AI's advanced capabilities in language processing and cultural understanding, not merely as a technological aid but as a powerful catalyst for change. This approach aims to elevate and empower traditionally underrepresented voices in academia, fostering an equitable platform for diverse knowledge exchange and creation. The envisioned paradigm shift is profound; it transforms AI into an indispensable ally in academia, capable of appreciating and incorporating the richness of diverse intellectual traditions, thereby contributing to a more democratised and culturally inclusive academic landscape.

1.1 Decolonial perspectives in academia

The literature on decolonial perspectives in academia is extensive and diverse, with scholars from various regions and academic disciplines contributing to the discourse. This body of work critically examines the complexities and challenges inherent in integrating decolonial perspectives within academic settings. Rai and Campion (2022) and Almeida and Kumalo (2018) explore the intricacies of the decolonial turn, particularly focusing on the contexts of British and South African academia. They illuminate the inherent tensions and contradictions that arise when attempting to incorporate decolonial perspectives within the established academic structures long influenced by colonial legacies. Their work highlighted the nature of this transition and the challenges encountered in reconciling traditional academic frameworks with decolonial approaches.

Oyedemi (2018) and Au (2022) contribute to the discourse by emphasising the necessity for a robust critical and theoretical dialogue. They advocate for aligning qualitative research methodologies more closely with Indigenous values and perspectives. Their work highlights the significance of rethinking research paradigms to ensure inclusivity and representation of diverse cultural and epistemological standpoints. Cortina et al. (2019) and Motshabi (2020) address the crucial aspect of decolonising knowledge and power structures within universities, particularly focusing on the Latin American and South African contexts. They investigate how colonial legacies have shaped knowledge production and dissemination in these regions, emphasising the importance of reorienting these processes to reflect a more pluralistic and equitable approach to academia.

Lastly, Lykes et al. (2018) and Behari-Leak (2019) offer practical insights into the implementation of decolonial praxis within university settings. They provide concrete examples of how curricula and

university practices can be transformed to foster a more decolonised academic environment. Their work is instrumental in demonstrating the tangible steps that can be taken towards sustained and intentional change, ensuring that academic institutions become spaces that reflect and celebrate diverse knowledge systems and cultural perspectives. Collectively, these scholars contribute to a growing body of literature that not only critiques the current state of academia but also offers pathways towards a more inclusive and decolonised future in higher education.

1.2 Challenges faced by non-English native speakers in academic writing

Non-English native speakers encounter various challenges in academic writing that are multifaceted and often deeply rooted in linguistic and cultural disparities. Morrison and Evans (2017), Hennebry and Macaro (2012), and Ma (2020) have all highlighted these difficulties, emphasising how they extend beyond mere language proficiency to encompass cultural distinctions and academic conventions that may not be intuitive for those from different linguistic backgrounds. In scientific and technical writing, these challenges are further amplified due to the necessity of precise terminology and a specific tone that is often aligned with English academic norms, as Rubens and Southard (2004) point out. Additionally, there is significant pressure to publish in English-dominated journals and platforms, which can be daunting for non-native speakers. This pressure is compounded by the fact that non-native speakers may use nonstandard forms of English, which can be unfairly scrutinised or negatively perceived by native English-speaking reviewers, a concern raised by Strauss (2019). It is also noteworthy, as Ma (2020) suggests, that some non-English native speakers perceive native English speakers as facing their own unique set of challenges in academic writing, indicating a broader complexity in academic communication.

Several strategies have been proposed to address these challenges effectively. Morrison (2017) stresses the importance of providing language enhancement support tailored to the needs of non-English native speakers. This support can range from language training to academic writing workshops focusing on the conventions and stylistic expectations of English academic writing. Furthermore, Ventola (1992) argues for the need to engage in text-linguistic research, which aims to understand and address intercultural linguistic problems that arise in academic writing. This research is crucial in identifying the specific areas where non-native speakers struggle and developing targeted interventions to bridge these gaps. Such measures are instrumental in aiding non-native speakers in navigating the complexities of academic writing in English and ensuring that the academic community becomes more inclusive and appreciative of linguistic diversity. This inclusive approach acknowledges the value of diverse perspectives and contributes to a richer, more comprehensive academic discourse.

1.3 Previous research on the integration of AI in education

The existing literature on the integration of AI in education reveals both the potential benefits and the challenges of incorporating this technology into learning environments. Studies by scholars like Tiwari (2023) and Qian and Feng (2020) have highlighted AI's capacity to personalise and enhance the learning experience for students. AI's applications are diverse, ranging from assessing student performance to assisting in teaching methodologies, as noted by Zafari et al. (2022). These advancements suggest a promising future where AI can significantly contribute to the efficiency and effectiveness of educational processes. However, there are critical gaps in this body of research, particularly concerning the ethical and societal implications of AI in education. Issues such as privacy concerns, data security, and the potential for bias in AI algorithms are critical points raised by Tiwari (2023) and Lampou (2023). These concerns emphasise the need for a more responsible approach to AI integration in educational settings, where ethical considerations are as paramount as technological advancements.

Furthermore, the literature points to the necessity for AI tools and curricula that align with teacher values and support active learner engagement, as emphasised by Brummelen and Lin (2020). This alignment is crucial for ensuring that AI acts as an aid rather than a replacement for human educators, thereby enhancing the educational process rather than detracting from it. However, as Zhai et al. (2021) note, the inappropriate use of AI techniques and the evolving roles of teachers and students present significant challenges. These challenges highlight a gap in the current literature regarding the practical implementation of AI in education and its impact on traditional teaching and learning paradigms. There is a pressing need for a decolonial and critical approach in this domain that embraces technological innovation while critically evaluating its impact on educational equity, accessibility, and the preservation of diverse cultural and pedagogical values. Such an approach would ensure that AI in education does not perpetuate existing inequalities but contributes to a more inclusive and just educational landscape.

1.4 Objectives of the study

Based on the gap identified above, this article aims to shed light on how AI can play a key role in the movement towards a more decolonised academic landscape, particularly for non-English native speakers, as well as the steps necessary to ensure that this technology is used responsibly and effectively in this context. Specifically, the study:

- Presents the role of artificial intelligence in decolonising academic writing for non-English native speakers.
- Discusses the challenges and potential of AI in addressing linguistic and cultural diversity in academia.

2. Methodological Layout

The methodology adopted for this conceptual study, theory synthesis design, is well suited to address the research objectives pertaining to the role of Artificial Intelligence (AI) in decolonising academic writing among non-native English speakers. As Jaakkola (2020) described, theory synthesis design involves integrating multiple theories or literature streams to achieve conceptual consolidation. This approach is particularly effective for this study as it bridges various theoretical domains – AI in education, decolonial theory, linguistic diversity, and academic writing challenges. The process of theory synthesis, as outlined by MacInnis (2011), involves constructing a new or enhanced view of a concept by creatively linking previously disparate or seemingly incompatible elements. This methodology is highly applicable to the study's objective of exploring the role of AI in decolonising academic writing. By synthesising theories from different fields, such as AI technology, educational pedagogy, decolonial studies, and linguistics, the study aims to develop a novel perspective that reimagines the integration of AI in academic settings. This new perspective is not merely about technological implementation but also involves understanding the cultural, linguistic, and ethical dimensions of AI application in academia.

The study involves an extensive literature review and analysis to implement this methodology effectively. The goal is to identify key concepts, theories, and findings that can be integrated into a cohesive framework. This approach is similar to the method used by Vargo and Lusch (2004) in their formulation of service-dominant logic, where they amalgamated elements from various disciplines to create a more streamlined and comprehensive framework. In the context of this study, such an integrative narrative would involve combining insights from AI development, educational theory, decolonial practice, and language studies to construct a new understanding of how AI can support and enhance decolonising efforts in academic writing for non-native English speakers. The outcome of this synthesis aims to be a higher-order perspective that not only links these diverse phenomena but also offers practical and theoretical implications for the implementation of AI in educational settings. This perspective will help to understand the potential of AI as a tool for inclusivity and

equity in academia, providing a comprehensive view of its benefits and challenges in linguistic and cultural diversity.

3. Theoretical Frameworks: Decoloniality and Critical Theory

This section presents the two primary theoretical frameworks that form the lens of the study: decoloniality and critical theory. Decoloniality challenges traditional power structures and epistemologies within academia, emphasising the importance of incorporating and valuing diverse knowledge systems. Meanwhile, critical theory provides a foundation for scrutinising and understanding the societal and power dynamics that shape academic discourse, advocating for transformative approaches that promote equity and inclusivity in the academic sphere.

2.1 Decoloniality

The theoretical foundation for integrating decolonisation and Artificial Intelligence (AI) in academic discourse is rooted in a blend of decolonial theory and AI ethics, drawing insights from notable scholars in these fields. As Walter Mignolo and Aníbal Quijano expound, decolonial theory provides a framework for understanding and challenging the effects of colonialism in knowledge production and dissemination (Mignolo, 2007; Quijano, 2007). It emphasises the importance of recognising and valuing diverse epistemologies and cultural perspectives, particularly those from historically marginalised communities. In parallel, the integration of AI in this context is guided by ethical considerations that address issues of bias, fairness, and inclusivity, as championed by Safiya Noble and Jackson Longworth. These considerations highlight the need for AI systems to be designed and implemented in ways that do not perpetuate existing inequalities but rather contribute to a more equitable academic landscape (Noble, 2018; Jackson Longworth, 2021). The intersection of these two fields offers a unique perspective on how AI can advance technological innovation and foster a more inclusive and decolonised academic environment. This theoretical foundation sets the stage for exploring how AI can empower non-English native speakers in academic writing, potentially transforming the academic landscape into a space that is more representative of diverse global voices.

Building upon the foundational theories of decoloniality and AI ethics, the study is further guided by key concepts such as 'algorithmic fairness' and 'epistemic justice'. Algorithmic fairness, a concept explored by Barocas et al. (2019), addresses the challenges of mitigating biases in AI algorithms. This concept is critical in ensuring that AI tools used in academic writing do not inadvertently reinforce existing biases against non-English native speakers. Additionally, Fricker's (2007) notion of 'epistemic justice' and Omodan's (2023) notion of 'epistemic injustice' provide a framework for understanding the importance of giving equal credibility to diverse voices in academic discourse. This concept features the importance of recognising and rectifying the exclusion or devaluation of knowledge from marginalised groups. Together, these frameworks contribute to a comprehensive understanding of how AI can be ethically and effectively integrated into academic writing, promoting equity and inclusivity in the dissemination of knowledge.

The theoretical frameworks of decoloniality, AI ethics, algorithmic fairness, and epistemic justice collectively forge a path towards the empowerment of non-English native speakers in academic writing. The decolonial perspective, advocated by Mignolo (2007), emphasises the importance of decentring dominant knowledge systems and valuing diverse epistemologies, which is particularly relevant for non-English native speakers who often navigate academic environments dominated by Western paradigms. Complementing this, the principles of algorithmic fairness, as championed by Barocas et al. (2019), ensure that AI tools used in academic writing are designed to be free from biases that might disadvantage non-native speakers. This approach aligns with the concept of epistemic justice, which advocates for the equal treatment and representation of all knowledge sources (Fricker, 2007; Omodan, 2023), thereby amplifying the voices and perspectives of non-English native speakers. By integrating these theoretical frameworks, the study aims to establish AI as a tool not only for

linguistic assistance but also to ensure that academic discourse becomes more inclusive and representative of a multiplicity of linguistic and cultural backgrounds.

2.2 Critical theory

Critical theory provides a complementary framework to decoloniality, addressing its limitations and broadening the scope of analysis in academic writing and AI integration. Rooted in the works of scholars like Jürgen Habermas and Max Horkheimer, critical theory focuses on critiquing and changing society rather than merely understanding it (Habermas, 1984; Horkheimer, 1972). Habermas's concept of the 'public sphere' and communicative action, as elaborated in *The Theory of Communicative Action* (Habermas, 1984), offers a lens through which the role of AI in facilitating democratic, inclusive dialogues in academic settings can be examined. This perspective is valuable for understanding how AI can create equitable platforms for academic discourse, transcending linguistic and cultural barriers. Additionally, Horkheimer's foundational work in critical theory (Horkheimer, 1972) emphasises the importance of challenging existing power structures and ideologies, a principle that aligns with the goals of decoloniality in academia.

Critical theory addresses some limitations in complementing decoloniality by providing a more comprehensive critique of societal structures and power dynamics. For instance, Axel Honneth's work on recognition and respect in *The Struggle for Recognition* (Honneth, 1996) offers insights into how societal structures can be transformed to acknowledge and value diverse cultural identities and knowledge systems. This aspect is crucial in AI integration in academic writing, ensuring the technology supports diverse voices and perspectives. Moreover, Fraser (2009) provides a framework for understanding how AI can be used to foster equitable participation in academic discourse. Together, these critical theories offer valuable insights into how AI can be harnessed both as a technological tool and as a means of promoting social justice and inclusivity in academic writing, addressing the gaps and limitations inherent in the decolonial approach.

Critical theory is essential to the argument for integrating AI in decolonising academic writing, as it provides a robust framework for examining and challenging the power dynamics and societal structures embedded within academic discourse. Its relevance lies in its ability to critique not only surface-level linguistic and cultural barriers but also the deeper systemic inequalities and ideological constructs that shape academic knowledge production. The study can assess how AI tools could potentially reinforce or dismantle these entrenched structures by applying critical theory. This approach enables a critical evaluation of AI's role in either perpetuating existing academic hierarchies or facilitating a more egalitarian and inclusive academic environment. This perspective is crucial for ensuring that the implementation of AI in academia aligns with broader goals of social justice, equity, and the recognition of diverse voices and perspectives. Thus, critical theory provides the necessary depth and rigour to the argument, ensuring that the study's approach to AI integration in academia is both technologically sound and socially and ethically conscientious.

Combining decoloniality and critical theory provides a robust framework for examining the impact of AI on academia. This approach enables a comprehensive critique of the colonial legacies present in knowledge production and the broader power structures that contribute to inequality. By using these theories together, we can conduct a sophisticated analysis to assess how AI may either perpetuate or challenge existing academic hierarchies. As a result, integrating AI into academia should aim to cultivate a more inclusive, equitable, and culturally diverse environment. This synthesis emphasises the need to decentre dominant epistemologies while critically evaluating AI's potential to democratise academic discourse.

3. Decolonising Academic Experiences

Non-native English speakers face distinct academic writing challenges beyond mere language proficiency. These challenges are often rooted in the degrees of academic discourse and cultural

differences in communication styles. According to Sibomana (2016), non-native speakers struggle to understand the conventions of academic English, which often differ significantly from both their native language and general English. This difficulty is not just about grammar or vocabulary but extends to grasping the rhetorical structures and argumentation styles prevalent in English academic writing. Furthermore, Chang and Schleppegrell (2011) highlight the challenge of expressing complex ideas and arguments in a second language, which can impede the clarity and persuasiveness of academic writing. This issue is compounded by the pressure to conform to the standards of English academic publishing, where non-standard forms of English or differing rhetorical styles are often viewed less favourably, as noted by Lillis and Curry (2010).

In addition to linguistic barriers, there are also challenges related to cultural and epistemological diversity. Nasiri (2012) points out that academic writing in English often reflects Western norms and values, which can be alienating for scholars from different cultural backgrounds. This cultural mismatch can lead to misunderstandings and misinterpretations in how ideas are expressed, as well as in the underlying assumptions and forms of knowledge valued in academic discourse. Hyland (2016) further elaborates on this, noting that non-native English speakers may face implicit biases in peer review processes, where their work might be scrutinised more rigorously or dismissed due to perceived linguistic shortcomings. These challenges underline the need for a more inclusive and understanding approach to academic writing that acknowledges and values the diversity of voices and perspectives within the global academic community. However, it is necessary to establish some existing strategies for decolonising academic writing.

3.1 Existing strategies for decolonising academic writing

Exploring strategies for decolonising academic writing has been a significant area of focus, with various scholars proposing innovative approaches to address the challenges faced by non-English native speakers. One such strategy highlighted by Canagarajah (2013) is the encouragement of "translingual practices" in academic writing. This approach advocates for a relaxation of the stringent norms of standard academic English to embrace diverse linguistic and rhetorical styles, thereby valuing the unique contributions of different cultural and linguistic backgrounds. Additionally, scholars such as Thiong'o (1986) have emphasised the importance of writing and publishing in one's native language, which can then be translated into English. This method fosters linguistic diversity and ensures that the original context and cultural shades are preserved. Similarly, Grosfoguel (2013) argues for the epistemic decolonisation of academia, which involves challenging the Eurocentric epistemologies and methodologies that dominate academic discourse and creating spaces for diverse knowledge systems.

Another significant strategy involves restructuring academic evaluation and peer review processes, as suggested by Mignolo (2007). This entails rethinking the criteria for academic rigour and excellence to be more inclusive of various epistemological traditions. Furthermore, Smith (2019) has proposed the incorporation of indigenous methodologies and perspectives in research, which can play a crucial role in decolonising academic writing. Collectively, these strategies aim to create a more equitable and representative academic landscape. However, implementing these strategies poses its own challenges, particularly regarding accessibility and practicality. This is where the introduction of Artificial Intelligence (AI) becomes pertinent. AI has the potential to assist in these decolonising efforts by providing linguistic and cultural translation tools, facilitating a more inclusive review process, and aiding in the dissemination of diverse academic works. AI can thus serve as a powerful tool in bridging the gap between the ideal of a decolonised academic space and the practical challenges of achieving it.

3.2 AI as a potential tool for addressing these challenges

The introduction of Artificial Intelligence (AI) as a tool in academic writing presents transformative potential to address the challenges faced by non-native English speakers and foster greater inclusivity in publication spaces. AI technologies, particularly in natural language processing and machine learning, can be instrumental in bridging linguistic barriers. For instance, AI-powered translation and language enhancement tools can assist non-native speakers in expressing their ideas more coherently and fluently in English, as explored by Hutchins and Somers (1992) in their work on machine translation. Furthermore, AI can aid in adapting academic content to different linguistic and cultural contexts, a concept examined by Dignum (2019), who stresses the importance of culturally aware AI systems. These tools can help level the playing field by providing non-native speakers with the means to participate more fully in academic discourse, ensuring their voices and perspectives are not lost in translation.

Beyond linguistic assistance, AI can contribute to the decolonisation of academic writing by challenging the dominance of certain epistemological frameworks. AI algorithms, designed with input from diverse cultural and linguistic backgrounds, can help analyse and synthesise academic content from broader perspectives. This approach aligns with the views of scholars like Balsamo (2011), who advocates for the inclusion of diverse cultural narratives in technological development. Moreover, AI can play a critical role in the peer review process, as suggested by Lee et al. (2018), by identifying and mitigating biases that might exist against non-standard forms of academic English or different rhetorical styles.

However, the integration of AI in academia must be approached with caution to avoid reinforcing existing biases and inequalities. The development and implementation of AI tools in academic settings require careful consideration of ethical and cultural factors, as emphasised by Longworth (2021) in her work on discriminatory design in technology. Ensuring that AI systems are technologically advanced, culturally sensitive, and inclusive is essential. Involving a diverse group of stakeholders in the development process can help create AI tools that are attuned to the needs of a global academic community. By doing so, AI can be a significant ally in pursuing a more inclusive and decolonised academic landscape, facilitating a more equitable platform for knowledge exchange and creation.

4. The Empowering Role of AI

The empowering role of Artificial Intelligence (AI) in academic writing, especially for non-native English speakers, is a burgeoning area of interest, with AI offering significant potential to enhance writing skills and bridge language gaps. AI-driven tools like ChatGPT, developed by OpenAI, exemplify this potential. These tools employ advanced natural language processing algorithms to assist in drafting, revising, and refining academic texts, thereby making academic writing more accessible to a broader range of scholars. For non-native speakers, AI can provide immediate assistance with grammar, vocabulary, and the stylistic tones of academic English, as Hovy and Spruit (2016) explored in their work on natural language generation. This support is crucial in helping non-native speakers articulate their thoughts more effectively and ensuring their academic contributions are evaluated on the merit of their ideas rather than their language proficiency.

Furthermore, AI applications extend beyond mere language correction; they offer the potential for cultural adaptation and contextual understanding. AI systems like ChatGPT can be trained on diverse linguistic and cultural datasets, enabling them to understand and adapt to various rhetorical styles and cultural distinctions in writing. This capability is particularly important in the context of decolonising academic writing, as it helps integrate diverse epistemological perspectives into mainstream academic discourse. As discussed by Shohamy (2006), the use of AI in language assessment and academic writing can play a pivotal role in challenging the dominance of English

and fostering a more inclusive academic environment. AI tools can help democratise knowledge production by providing non-native English speakers with the means to contribute more effectively to global scholarly conversations.

Lastly, from a theoretical standpoint, the integration of AI in academic writing aligns with the goals of decolonisation by challenging traditional power dynamics in knowledge production. AI can be a tool for epistemic justice, as it facilitates the expression and validation of diverse knowledge systems and perspectives, thus contributing to a more equitable academic landscape. This idea resonates with the work of de Sousa Santos (2015), who advocates for the recognition and integration of 'ecologies of knowledges' in academia. That is, AI can help dismantle the existing hierarchies that privilege certain forms of knowledge over others by enabling a more diverse range of voices to participate in academic writing. In this way, AI empowers individual writers and contributes to the broader project of transforming the structures and practices of academic knowledge production to be more inclusive and representative.

5. Challenges and Considerations

Integrating AI within a decolonial framework in academia presents several challenges and ethical considerations that must be carefully navigated. One significant challenge is ensuring that AI does not perpetuate existing biases and inequalities. AI algorithms are often trained on datasets that may contain biases, which can lead to the reinforcement of stereotypes and the marginalisation of underrepresented groups. This issue is particularly pertinent in the context of language processing applications, where biases in training data can lead to the preferential treatment of certain dialects or language styles. As highlighted by Bolukbasi et al. (2016) in their study on word embeddings, AI can inadvertently reflect societal biases, thus exacerbating rather than mitigating inequities. Another challenge is the risk of cultural homogenisation, where the dominance of Western perspectives in AI development could lead to the erasure of diverse cultural and linguistic identities, as cautioned by Ali (2014).

Therefore, the need for responsible AI development and implementation in academic settings is paramount. This involves the development of AI systems that are not only technically proficient but also ethically and culturally aware. AI tools used in academic settings should be designed with a deep understanding of the diverse contexts in which they will be applied. This requires a multidisciplinary approach to AI development involving linguists, ethicists, and representatives from diverse cultural backgrounds, as Whittaker et al. (2018) suggested in their work on AI ethics. Additionally, there is a need for ongoing monitoring and evaluation of AI tools to identify and address any emergent biases or ethical issues.

Furthermore, the implementation of AI in academia must be accompanied by a critical discourse that questions and evaluates the implications of AI on knowledge production and dissemination. As argued by Crawford (2021) in her exploration of the hidden costs of AI, it is essential to consider the broader societal and environmental impacts of AI technologies. This includes evaluating the power dynamics involved in developing and deploying AI and ensuring that these technologies do not become tools of oppression or exclusion. By addressing these challenges and considerations, AI can be effectively integrated into academic settings in a way that aligns with decolonial goals and contributes to the creation of more inclusive and equitable educational environments.

6. Future Directions

The future trajectory of AI in academia, particularly in relation to decolonising academic experiences, points towards more advanced, culturally aware, and ethically responsible technologies. As AI systems become increasingly sophisticated, there is potential for these tools to better understand and adapt to a wide range of linguistic and cultural contexts. This evolution can significantly aid in breaking down the barriers faced by non-native English speakers, allowing for more diverse voices

and perspectives to be integrated into academic discourse. The development of AI systems that can interpret and translate not just language but also cultural nuances and idiomatic expressions will be a critical step forward. This advancement could lead to a better understanding and representation of knowledge from different cultural backgrounds, aligning with decolonial objectives. As illustrated by O'Neil (2016) in her work on algorithmic bias, the key lies in developing AI technologies that are transparent, accountable, and inclusive, ensuring they serve as tools for equity rather than perpetuating existing disparities.

In addition to linguistic capabilities, emerging AI technologies hold promise in creating more inclusive academic environments through personalised learning experiences and accessible educational resources. AI can contribute to levelling the educational playing field by providing customised support and resources tailored to individual learning needs and cultural contexts. This could involve AI-powered tutoring systems, adaptive learning platforms, and virtual collaborative spaces that bridge geographical and cultural divides. As these technologies continue to evolve, their role in promoting inclusivity and diversity in academia will become increasingly significant. The challenge will be to ensure that these emerging technologies are accessible to all, regardless of socio-economic or geographical constraints, and that they are developed consciously to respect and include diverse cultural knowledge systems. This approach will be crucial in ensuring that the future of AI in academia aligns with the goals of decolonisation and inclusivity.

7. Conclusion

In conclusion, the article navigates the intricate landscape where artificial intelligence (AI) intersects with the decolonisation of academic writing. It highlights the unique challenges faced by non-native English speakers in academic contexts, emphasising how linguistic and cultural barriers can impede their full participation in global academic discourse. The exploration of AI's role in this context is multifaceted, delving into how AI can be a powerful tool for bridging these gaps. From enhancing language proficiency to addressing broader issues of epistemic injustice and cultural diversity, AI's potential for reshaping academic writing practices is emphasised. The discussion also critically examines the ethical considerations and challenges inherent in integrating AI within a decolonial framework, stressing the importance of responsible development and implementation of AI technologies.

This article concludes with an emphasis on the transformative potential of AI in contributing to the decolonisation of academic practices. AI is positioned as a technological advancement and a catalyst for a more inclusive and equitable academic environment. However, realising this potential requires ongoing dialogue, interdisciplinary collaboration, and a commitment to ethical and culturally aware AI development. The article, therefore, calls for further exploration and conversation in this interdisciplinary field, inviting academics, technologists, ethicists, and diverse stakeholders to engage in this crucial discourse. The goal is not only to harness AI's capabilities for academic enhancement but also to leverage it as a tool for social justice, ensuring that the future of academia is characterised by diversity, inclusivity, and respect for all knowledge systems.

7.1 Recommendations and implications for practice

The article offers critical recommendations for universities, academics, policymakers, and curriculum designers, aiming to optimise the integration of Artificial Intelligence (AI) in academic settings for decolonisation. The key recommendation for universities and academics is to actively incorporate AI tools in teaching and research methodologies. This involves equipping students and academics with AI-powered language assistance tools and fostering an environment where AI is used to promote critical thinking, cross-cultural understanding, and diverse epistemologies. Universities should provide training and workshops to help both students and academics understand and utilise AI responsibly and effectively in their academic work. Academics are encouraged to engage with AI as

a collaborative tool in research and teaching, exploring its potential to enhance accessibility and inclusivity in their fields.

For policymakers and curriculum designers, the article recommends developing policies and curricula that integrate AI to support decolonisation and inclusivity. Policymakers should advocate for and implement guidelines that ensure the ethical use of AI in educational settings, particularly focusing on preventing biases and promoting cultural sensitivity. Curriculum designers are urged to include AI literacy in their programmes, ensuring that students are proficient in using AI tools and understand the implications of these technologies in the context of global knowledge systems and cultural diversity. This includes designing curricula that critically examine the role of AI in perpetuating or challenging existing power structures within academia. By implementing these recommendations, the academic landscape can move towards a more inclusive and equitable future, leveraging AI to enrich and diversify academic discourse.

7.2 Contribution to knowledge

As discussed in the article, integrating Artificial Intelligence (AI) in academic writing significantly contributes to knowledge in decolonial and critical discourses. By highlighting how AI can address linguistic barriers and cultural biases, the study extends the boundaries of current understanding in these fields. It offers a novel perspective on how technology can be harnessed for operational efficiency while challenging and reshaping existing power dynamics within academic discourse. This contribution is particularly relevant to decolonial studies, as it provides practical solutions to some of the challenges of decolonising academic practices, such as inclusivity in language and recognition of diverse epistemologies. In the realm of critical theory, the study stresses the potential of AI as a tool for promoting epistemic justice and fostering a more equitable academic landscape. Thus, the research bridges the gap between theoretical discourse and practical application, offering invaluable insights for academics, technologists, and policymakers striving to create a more inclusive and representative academic environment.

8. Declarations

Authors contributions: Conceptualisation (B.I.O. & N.M.); Literature review (B.I.O. & N.M.); methodology (B.I.O. & N.M.); software (N/A.); validation (B.I.O. & N.M.); formal analysis (N/A); investigation (B.I.O. & N.M.); data curation (N/A) drafting and preparation (B.I.O. & N.M.); review and editing (B.I.O. & N.M.); supervision (N/A); project administration (B.I.O. & N.M.); funding acquisition (N/A). All authors have read and approved the published version of the article.

Funding: No external funding was received for this study.

Acknowledgements: Authors make no acknowledgement.

Conflict of Interest: The authors declare no conflict of interest.

Data Availability: Data sharing is not applicable to this article as no datasets were generated or analysed during the current study. This theoretical work is based entirely on previously published literature, which has been cited appropriately within the text.

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