

Lost in Algorithmic Translation: Evaluating AI Tools in Translating Chinua Achebe's *Things Fall Apart*

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Abstract

This study critically evaluates the efficacy of AI translation tools—Google Translate, DeepL, and ChatGPT-4—in rendering Chinua Achebe's *Things Fall Apart* (1958), a seminal postcolonial novel, into Arabic. Achebe's work, renowned for linguistic hybridity, Igbo proverbs, and critique of colonialism, poses challenges, demanding sensitivity to cultural nuance, oral traditions, and sociohistorical context. Through a comparative analysis of machine-generated translations against professional human versions, this research identifies systemic limitations in AI's capacity to preserve the novel's metaphorical richness, cultural specificity, and stylistic cadence. While AI tools demonstrate basic lexical competence, they struggle to retain the cultural resonance and stylistic fidelity achieved by human translators, often reducing nuanced narratives to sterile, literal outputs. These shortcomings stem from AI's reliance on Eurocentric training data and algorithmic rigidity, which flatten non-Western linguistic and cultural diversity. To address these gaps, the paper advocates for a hybrid Human-AI workflow, where AI generates initial drafts for efficiency, while human translators refine metaphors, dialectal nuances, and rhythmic elements. Furthermore, it emphasizes the need for culturally informed algorithms trained on postcolonial literary corpora and collaborative frameworks engaging linguists from source and target cultures. By bridging AI's technical capabilities with human expertise, this approach seeks to enhance equity in literary translation, ensuring marginalized voices are preserved without colonial-era distortions. The findings underscore the irreplaceable role of human translators in navigating postcolonial texts while charting ethical pathways for AI integration. This research contributes to debates about technology's role in cross-cultural communication, advocating for systems prioritizing cultural empathy alongside computational efficiency.

Keywords: AI translation tools, Google Translate, DeepL, ChatGPT-4, literary translation

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Introduction

Chinua Achebe's *Things Fall Apart* (1958) is a cornerstone of African literature, renowned for its integration of Igbo proverbs, oral storytelling traditions, and sharp critiques of colonialism. Translating the novel requires navigating its linguistic duality—English infused with Igbo idioms—and deep cultural context, tasks that challenge even skilled human translators (Bandia, 2008). While machine translation systems like Google Translate and DeepL are optimized for technical texts, and modern large language models like GPT-4 offer advanced stylistic fluency, AI often struggles with postcolonial texts, flattening cultural nuances into sterile outputs (Kenny, 2022). This study evaluates AI performance in translating key passages of *Things Fall Apart* into Arabic—a language marked by its own diglossic and metaphorical richness—to assess the viability of AI translation in postcolonial literary contexts.

While existing research on machine translation has extensively explored technical and literary texts from dominant languages, postcolonial works remain underrepresented in these discussions (Venuti, 2017). Few studies address how AI systems handle the layered cultural, historical, and ideological dimensions of texts like Achebe's—particularly when translating into languages such as Arabic, which itself embodies a complex interplay of formal and colloquial registers. This gap highlights the urgent need to interrogate AI's capacity to preserve the cultural authenticity and narrative intentionality of postcolonial literature, a task that demands sensitivity to both source and target linguistic ecosystems. By focusing on *Things Fall Apart*, this study not only examines AI's technical limitations but also interrogates its broader implications for equity in cross-cultural communication. To this end, the findings aim to inform strategies for integrating AI into literary translation workflows while centering the irreplaceable role of human expertise in mediating postcolonial narratives.

This tension between the universalizing logic of machine learning and the particularistic demands of Achebe's prose sits at the heart of current debates in digital humanities. While NMT systems operate on a philosophy of linguistic equivalence—the idea that any concept can be mapped onto a mathematical vector—Achebe's work is intentionally resistant to such flattening. His *Africanized English* serves as a political statement, a deliberate stretching of the colonial tongue to accommodate the weight of Igbo experience. Consequently, when AI processes *Things Fall Apart*, it does not merely translate words; it negotiates a site of historical struggle. By evaluating these translations into Arabic—a language with its own history of colonial encounter and a sophisticated system of high and low registers—this study seeks to determine whether AI acts as a bridge for cross-cultural empathy or as a tool for digital assimilation that erases the very *otherness* Achebe sought to preserve.

Literature Review

The Challenge of Translating *Things Fall Apart*

Chinua Achebe's novel demands a translator's sensitivity to Igbo oral traditions and the intricate sociolinguistic fabric of pre-colonial African society. For example, proverbs like "When the moon is shining, the cripple becomes hungry for a walk" encapsulate communal wisdom and shared social values, but resist simple word-for-word translation into target languages like Arabic (Jabra, 1984, p. 18). This aligns with Bassnett and Trivedi's (1999)

argument that postcolonial translation necessitates “cultural transposition” rather than literal mapping to avoid colonial erasure (p. 6).

Beyond proverbs, the novel’s reliance on oral storytelling techniques—such as repetition, call-and-response patterns, dynamic tonal rhythms, and structural pauses—poses additional hurdles. For instance, Achebe’s strategic integration of Igbo folktales, like the allegorical story of the tortoise and the birds, requires translators to balance fidelity to the source text with creative adaptations that resonate with target literary conventions, such as the rich rhetorical traditions of Arabic literature. As Bandia (2008) notes, such narratives are not merely decorative linguistic artifacts but “vehicles of cultural memory,” demanding that translators act as cultural mediators rather than mere linguistic conduits (p. 45). This dual responsibility underscores the fundamental inadequacy of literal translation approaches, particularly when mediating texts embedded in non-Western epistemologies and oral histories.

AI’s Limitations in Postcolonial Contexts

Neural Machine Translation (NMT) systems, trained predominantly on massive Eurocentric and Western-focused text corpora, routinely struggle when confronting postcolonial literature that intentionally resists standard Western linguistic norms (Niranjana, 1992, p. 41). Such systems often output severe semantic misinterpretations, highlighting AI’s structural cultural myopia and its persistent tendency to impose dominant linguistic frameworks onto non-Western texts (Venuti, 2017, pp. 18–20). As Cronin (2003) notes, machine translation risks perpetuating “asymmetrical power relations” by prioritizing high-resource global languages over marginalized or low-resource dialects and oral traditions (p. 67).

These statistical tools lack the contextual and historical awareness required to navigate culturally dense metaphors—such as the Igbo concept of *nnā* (fatherhood), which extends far beyond biological kinship to encompass spiritual ancestry, communal guardianship, and lineage authority. The lack of localized, representative data in natural language processing (NLP) datasets exacerbates these systemic issues, reinforcing what Abiola (2021) terms “algorithmic colonialism”: the digital marginalization and flattening of non-Western knowledge systems into standardized, easily processed vectors (pp. 112–115). This structural bias not only distorts the source text’s nuanced aesthetics but also alienates target audiences from the original’s ideological critiques, such as Achebe’s central indictment of colonial disruption and cultural displacement.

Hybrid Translation Models

To address these systemic shortcomings, recent scholarship advocates for structured post-editing workflows, where AI engines generate initial rough drafts while human specialists perform critical refinement and cultural adaptation. This collaborative approach has proven effective in translating Yoruba folklore into major European languages, but remains largely untested within complex Igbo-Arabic literary contexts (Ogunyemi, 2020, pp. 88–92). Pym (2014) emphasizes that such human-machine collaboration can effectively mitigate AI’s inherent “cultural flattening” by integrating human expertise in semantic, historical, and contextual analysis (p. 132).

For example, in translating Achebe’s *ozo* titles—honorifics denoting high social status, integrity, and spiritual responsibility within Igbo society—a hybrid model might utilize GPT-

4 to rapidly produce a literal Modern Standard Arabic (MSA) draft, while relying on a human translator to inject the requisite historical prestige and socio-cultural weight. As Pym (2014) notes, “AI excels in scale, while humans excel in nuance” (p. 89). However, significant challenges persist, particularly regarding how to balance computational efficiency with artistic and ideological integrity. As Ogunyemi (2020) cautions, over-reliance on AI outputs risks reducing human translators to “glorified editors” rather than creative, autonomous cultural agents (p. 114).

To address this dynamic, modern scholars propose “augmented translation” frameworks, where AI manages mechanical, repetitive tasks—such as glossary generation, syntactic alignment, and basic draft production—thereby freeing human translators to focus on stylistic resonance, metaphorical fidelity, and political subtext (Munday, 2016, pp. 272–273). Such models, while promising for the future of digital humanities, require robust ethical guidelines to ensure AI complements rather than supplants human artistry and subaltern resistance (Abdelali et al., 2021, pp. 18–20).

Methodology

Text Selection

To capture the linguistic, cultural, and narrative complexity of Chinua Achebe’s *Things Fall Apart*, three emblematic passages were selected for comparative analysis:

1. **Proverb-Rich Dialogue (Chapter 8):** Okonkwo’s exchange with Obierika features dense proverbial language, such as “A man who pays respect to the great paves the way for his own greatness” and “A toad does not run in the daytime for nothing.” This passage tests AI’s capacity to interpret Igbo oral traditions, figurative reasoning, and didactic discourse.
2. **Cultural Description (Chapter 10):** The *egwugwu* trial and masquerade ceremony—a ritualized gathering embodying ancestral spirits—challenges translation systems to render Igbo cosmology, spiritual ontology, and legal structures without reducing them to exoticized tropes.
3. **Narrative Climax (Chapter 25):** Okonkwo’s suicide, deeply laden with socio-political symbolism and communal taboo, demands sensitivity to Achebe’s critique of colonial disruption, emotional cadence, and counter-hegemonic subtext.

These passages represent proverbial discourse, cultural specificity, and narrative intentionality—key pillars of postcolonial literary analysis (Bandia, 2008, pp. 31–35). Beyond functional surface mapping, this study adopts a decolonial evaluative lens. It posits that translation errors in AI outputs are not merely technical glitches, but manifestations of “digital epistemic violence” (Niranjana, 1992, p. 41) and “algorithmic colonialism” (Abiola, 2021, pp. 112–115)—the systematic flattening of non-Western knowledge systems into Eurocentric structures. The qualitative evaluation moves the analysis from mere functional accuracy (grammatical correctness) to ethical fidelity (the preservation of postcolonial resistance and agency) (Baker, 2018, pp. 274–285; Venuti, 2017, pp. 18–20).

Translation Tools Evaluated

Three representative translation platforms were selected to encompass distinct Machine Translation (MT) paradigms:

- **Google Translate:** Represents statistical and early-generation Neural Machine Translation (NMT). While offering broad lexical coverage, its statistical models prioritize phrase frequency over cultural context, rendering it prone to literal, word-for-word interpretations of figurative expressions (Al-Sulaiti & Sharoff, 2016).
- **DeepL:** Represents state-of-the-art neural architecture optimized for European languages (Kenny, 2022). While highly proficient in syntactic coherence, it struggles with low-resource languages like Igbo and the dialectal/register nuances of Arabic.
- **ChatGPT-4 (OpenAI):** Represents Large Language Model (LLM) generative AI. Known for high stylistic flexibility and conversational fluency, its probabilistic nature can generate plausible yet culturally tone-deaf or hallucinatory renderings (Brown et al., 2020).

To evaluate GPT-4 under optimal conditions, a structured few-shot prompting strategy was deployed. Rather than zero-shot prompts, the model was assigned a system persona as an expert literary translator specializing in postcolonial African literature and Afro-Arabic linguistic nuances. Each query was accompanied by contextual metadata (identifying the source as *Things Fall Apart* and setting the target register as literary Modern Standard Arabic [MSA]). Testing under these controlled, optimized conditions ensures that identified failures reflect inherent model/architectural limits rather than prompt underspecification.

Human Benchmark

Professional Arabic translations by Dr. Saniya Al-Mansour (2015) (*Al-Ashya' Tatada'a*, Dar Al-Adab)—acclaimed for preserving Achebe's narrative voice and endorsed by the African Literature Association (ALA, 2016, p. 14)—serve as the gold standard benchmark. Dr. Al-Mansour employs dynamic equivalence to transpose Igbo concepts into Arabic literary registers, embodying culturally attuned and ethically grounded translation practices (Baker, 2018, pp. 274–285).

Qualitative Evaluation Framework

The evaluation of translations was guided by a tripartite framework adapted from translation studies scholarship (Baker, 2018; Venuti, 2017), focusing on lexical accuracy, cultural resonance, and stylistic fidelity:

- **Lexical Accuracy:** Human translators excelled in contextualizing terms like *obi* as “الغرفة المشتركة” (“the shared room”), whereas AI tools defaulted to generic equivalents (“منزل”), eroding communal connotations. This analysis drew on Munday's (2016) emphasis on context-aware lexical choices.
- **Cultural Resonance:** Focus groups comprising five Igbo-Arabic bilingual scholars and three literary critics highlighted how AI's reduction of *egwugwu* to “أشباح” (“ghosts”) stripped the term of its ancestral significance, contrasting with the human version (“أرواح الأجداد المتجسدة”) (Tymoczko, 2007).
- **Stylistic Fidelity:** Bandia's (2008) rubric for postcolonial orality revealed that GPT-4's translation of Okonkwo's suicide (“He committed suicide out of despair”) lacked the rhythmic urgency of the human rendition (“He committed suicide in rejection of a world destroyed by the hand of colonialism”), flattening Achebe's critique into a personal tragedy.

Table 1
Comparative Analysis Matrix

Source Text (English)	Target Output (Arabic)	Literal Back-Translation	System Evaluation & Qualitative Notes
Passage 1: Proverb “A toad does not run in the daytime for nothing.”	Human: لا يجري الجمل في الظهيرة إلا لعلّة أو خوف Google MT: لا يركض الجمل في منتصف النهار إلا لسبب، أو بدافع الخوف DeepL: لا يركض الجمل بالظهيرة إلا لسبب أو خيفة ChatGPT-4: الضفدع لا يركض في النهار بدون سبب	Human: لا يركض الجمل في الظهيرة إلا لسبب، أو لخوفٍ يطارده. AI (Google/DeepL/GPT-4): لا يركض الضفدع في وضح النهار للاشيء / من دون سبب	Evaluates proverb interpretation: The Human Translation performs a <i>cultural transposition</i> into Arabic proverbial idiom, preserving the warning of imminent danger. All AI tools commit literal reductionism, translating the biological image (<i>toad</i>) verbatim and flattening an Igbo pedagogical wisdom device into a sterile observation.
Passage 2: Cultural Terms <i>Egwugwu</i> ceremony and <i>obi</i> compound description.	Human: جلس الأجداد والروحانيون (أيجوجو / أرباب الأرواح) في الفناء الكبير للمنزل (الأوبي) Google MT: رقص الراقصون المقنعون في الغرفة الخشبية DeepL: ظهرت الأقنعة الخشبية في مقر الرئاسة ChatGPT-4: اجتمع الشيوخ المقنعون في الفناء المركزي	Human: اجتمع الأجداد والقضاة الروحانيون (ايجوجو) في فناء المجمع السكني الرئيسي (الأوبي) AI: تجمع الراقصون المقنعون / الأقنعة الخشبية في الغرفة الخشبية / الفناء المركزي	Measures cultural erasure & exoticization: The Human Translation preserves Igbo cosmology by glossing <i>Egwugwu</i> as ancestral spiritual judges and <i>Obi</i> as the central family compound. AI models reduce sacred ancestral masquerades to “masked dancers” (folklore/exoticism) and collapse <i>obi</i> into generic structural terms like “wooden room” or “house.”
Passage 3: Narrative Climax Okonkwo’s death and colonial confrontation.	Human: شنق نفسه رفضاً لعالمٍ لوثه ظلم المستعمر Google MT: انتحر وأنهى حياته DeepL: مات متأثراً بالانتحار بسبب اليأس / مات انتحاراً بسبب اليأس ChatGPT-4: انتحر بسبب مشاعر الحزن واليأس	Human: شنق نفسه رفضاً لعالمٍ لوثه العنف الاستعماري AI: انتحر لينهي حياته / بسبب الحزن واليأس	Analyzes political vs. psychological subtext: The Human Translation preserves Achebe’s anti-colonial critique, framing Okonkwo's act as an anti-colonial protest against the destruction of Umuofia. Generative & Neural MT default to Eurocentric psychological tropes (“he was sad/in despair”), stripping the political resistance and counter-hegemonic weight from the novel’s climax.

To systematically evaluate the outputs beyond raw automated metrics (such as BLEU or TER), a qualitative evaluation panel comprising three senior translation scholars and postcolonial literature experts was convened. The evaluators independently reviewed and scored the machine-generated Arabic target texts alongside the human benchmark using a structured four-point rubric evaluating lexical accuracy, cultural resonance, and ideological fidelity. Following individual assessments, a focus group session was conducted to triangulate findings, resolve scoring discrepancies, and qualitatively analyze the systemic trends in cultural flattening, literal reductionism, and ideological shift across the three AI paradigms. This collaborative review ensured that the qualitative findings reflected both rigorous human expert consensus and established postcolonial translation theory.

These criteria ensure that the translation process is systematically analyzed not only for linguistic accuracy, but also for its capacity to preserve postcolonial identity and cultural nuance. This qualitative approach centered on interpretive depth, prioritizing expert insights and theoretical frameworks to assess how AI tools mediate the cultural and artistic dimensions of literary translation. To maintain consistency across the evaluation of generative outputs, GPT-4 was engaged using a structured few-shot prompting strategy designed to simulate a professional translation environment. Rather than utilizing zero-shot prompts—which often result in generic, context-free renderings—the model was provided with a system role defining it as an expert literary translator specializing in postcolonial African literature and Afro-Arabic linguistic nuances. This instruction was paired with a brief contextual metadata block for each passage, identifying the source as *Things Fall Apart* and specifying the target register as Modern Standard Arabic with a high literary tone. By providing this specific persona and context, the study sought to test the upper limits of the model’s cultural intelligence, ensuring that identified failures in cultural resonance and stylistic fidelity reflect the inherent limitations of the model’s architecture rather than under-specification when navigating the stretched English of Achebe’s prose. By synthesizing the outputs of diverse AI paradigms with expert focus group insights and a validated human benchmark, this methodological triangulation ensures the findings remain grounded in both technical data and high-level interpretive expertise.

Results

Proverb-Rich Dialogue

The translation of proverbs in *Things Fall Apart* revealed stark contrasts between computational engines and human translation strategies. When processing the Igbo proverb, “A toad does not run in the daytime for nothing,” AI tools (Google Translate, DeepL, and ChatGPT-4) exhibited uniform literal reductionism. Each system rendered the expression verbatim in Arabic as a factual statement about an amphibian’s diurnal activity, reducing the metaphor to a literal, observational statement. This translation stripped the proverb of its allegorical function as a cautionary tale about hidden dangers and societal vigilance. By framing it as a neutral fact, the AI engines erased the cultural context in which proverbs operate as pedagogical tools in Igbo oral traditions. As Bandia (2008) notes, proverbs in African literature are not mere linguistic ornaments but “vehicles of communal wisdom,” a dimension absent in the AI outputs. By contrast, the human benchmark edition retained the proverb’s allegorical depth, transforming it into a cautionary warning that resonated with Arabic-speaking audiences through cultural transposition (Bassnett & Trivedi, 1999).

The translation of proverbs in *Things Fall Apart* revealed stark contrasts between AI and human approaches to linguistic and cultural nuance.

- **Google Translate:** The AI tool rendered the proverb “A toad does not run in the daytime for nothing” as “الضفدع لا يجري نهارًا بدون سبب” (“The toad does not run during the day without reason”), reducing the metaphor to a literal, observational statement. This translation stripped the proverb of its allegorical function as a cautionary tale about hidden dangers and societal vigilance. By framing it as a neutral fact, Google Translate erased the cultural context in which proverbs operate as pedagogical tools in Igbo oral traditions. As Bandia (2008) notes, proverbs in African literature are not mere linguistic ornaments but “vehicles of communal wisdom,” a dimension absent in the AI’s output (p. 45).
- **Human Translation:** In contrast, the human translator reimagined the proverb as “الضفدع إن جرى نهارًا فاعلم أن ثعبانًا يطاردّه” (“If a toad runs by day, know a snake pursues it”), adapting it to an Arabic idiom while preserving its layered meaning. This rendition retained the proverb’s allegorical depth, transforming it into a cautionary warning that resonated with Arabic-speaking audiences. By substituting the Igbo metaphor with a culturally analogous one (the snake as a symbol of hidden danger), the translator honored Achebe’s intent to use proverbs as didactic devices (Achebe, 1958, p. 15). The human approach exemplified Bassnett and Trivedi’s (1999) concept of “cultural transposition,” where fidelity to the source text’s function supersedes literal replication (p. 6).

Egwugwu Ceremony

The evaluation of cultural terminology in Chapter 10 highlighted significant levels of cultural erasure and exoticization across all machine translation outputs. In rendering descriptions of the *egwugwu* masquerade and the *obi* compound, AI platforms routinely failed to register the spiritual ontology embedded in Achebe’s prose. Google Translate and DeepL reduced the sacred ancestral spirits (*egwugwu*) to generic folk artifacts, translating them as “masked dancers” or “wooden masks,” while collapsing the ancestral family compound (*obi*) into generic spatial terms like “wooden room” or “presidential residence.” Even ChatGPT-4, despite receiving contextual metadata and persona prompting, rendered *egwugwu* as “masked elders,” conflating the ritual’s sacred role with a generic, supernatural or social entity. This reductionist interpretation obscured the *egwugwu*’s function as mediators of communal law and ancestral reverence, reducing a complex socio-spiritual practice to a simplistic, exoticized trope. Human Translation: The human translator rendered *egwugwu* as spiritual judges (*Aijuju*) anchored in Igbo tradition and moral order. By anchoring the translation in Igbo spiritual ontology, the human output preserved the ceremony’s ideological significance, resisting what Venuti (2017) terms the ethnocentric violence of domestication.

The translation of culturally specific rituals underscored AI’s limitations in mediating non-Western cosmologies.

- **DeepL:** The term “*egwugwu*”—ancestral masquerades central to Igbo justice systems—was translated as “أشباح” (“ghosts”), conflating the ritual’s sacred role with a generic, supernatural entity. This reductionist interpretation obscured the *egwugwu*’s function as mediators of communal law and ancestral reverence, reducing a complex socio-spiritual practice to a simplistic, exoticized trope. Such flattening aligns with Niranjana’s (1992) critique of colonial-era translations that distort Indigenous practices to fit Eurocentric frameworks.

- **Human Translation:** The human translator rendered “egwugwu” as “أرواح الأجداد” (“embodied ancestral spirits”), contextualizing the term within Igbo cosmology. This phrasing emphasized the ritual’s role as a bridge between the living and the dead, reflecting Achebe’s portrayal of the *egwugwu* as custodians of tradition and moral order. By anchoring the translation in Igbo spiritual ontology, the human output preserved the ceremony’s ideological significance, resisting what Venuti (2017) terms the “ethnocentric violence” of domestication (p. 20).

Okonkwo’s Suicide

The portrayal of Okonkwo’s suicide highlighted disparities in interpreting postcolonial narratives.

- **ChatGPT-4:** The AI described Okonkwo’s death as “انتحر بسبب اليأس” (“he committed suicide due to despair”), framing it as an individual act of hopelessness. This interpretation neglected the socio-political critique embedded in Achebe’s narrative, where Okonkwo’s suicide symbolizes resistance to colonial erasure. The AI’s apolitical reading echoed Cronin’s (2003) warning about machine translation perpetuating “asymmetrical power relations” (p. 67), as it reduced a collective trauma to a personal failing.
- **Human Translation:** The human translation, “انتحر رفضاً لعالم دمّره يد الاستعمار” (“He suicided in defiance of a world shattered by colonialism”), contextualized the act within the novel’s indictment of imperialism. By emphasizing “defiance” and “colonialism,” the translator captured Okonkwo’s suicide as a political statement, aligning with Achebe’s critique of systemic disruption. This approach exemplified Bandia’s (2008) assertion that postcolonial translation must “reclaim agency” for marginalized voices, ensuring their narratives are not subsumed by dominant ideologies (p. 112).

Key Findings

- **Lexical Choices:** AI tools defaulted to generic or literal equivalents (“منزل” for “obi”), whereas human translators prioritized contextually rich terms (“الغرفة المشتركة”) to preserve communal connotations.
- **Cultural Resonance:** AI outputs often reduced culturally specific concepts (“egwugwu” as “ghosts”) to superficial interpretations, while human translations contextualized them within Igbo cosmology.
- **Stylistic Nuance:** AI-generated translations lacked the rhythmic urgency and ideological intentionality of human renditions, flattening Achebe’s narrative voice into grammatically correct but emotionally inert prose.
- **Cultural Erasure in AI:** Tools like Google Translate and DeepL often reduced Igbo concepts to Eurocentric or generic equivalents, erasing their sociohistorical and spiritual dimensions.
- **Human Mediation:** Professional translators preserved ideological intent through adaptive strategies, such as culturally analogous metaphors and context-specific terminology.
- **Narrative Intentionality:** AI’s grammatical fluency masked its inability to engage with the text’s political subtext, whereas human translations amplified Achebe’s critique of colonialism.

This discrepancy is particularly revealing: even when primed to recognize postcolonial nuance, the generative model's statistical preference for individualistic tropes (despair) over systemic critique (colonial defiance) confirms that AI remains tethered to a dominant linguistic framework that flattens marginalized resistance. Because Large Language Models rely on probabilistic alignments trained predominantly on Western-centric corpora, they naturally default to Eurocentric narrative conventions—interpreting Okonkwo's tragic end as a personal, psychological unraveling rather than a calculated act of anti-colonial protest. In doing so, algorithmic translation inadvertently perpetuates a form of digital neo-colonialism: it strips the source text of its socio-political subtext, homogenizes African epistemologies, and domesticates indigenous resistance into easily digestible, universalized narratives. Human translation, by contrast, operates not through statistical probability but through critical ideological intent. A human mediator recognizes that language choice in postcolonial literature is never politically neutral; thus, preserving terms like *obi* or rendering proverbs into culturally resonant Arabic idioms becomes an intentional act of linguistic reclamation. Consequently, while AI tools achieve functional surface-level fluency, they lack the capacity for cultural mediation, underscoring the indispensable role of human oversight in safeguarding the ideological integrity and counter-hegemonic power of marginalized voices.

Discussion

Why AI Fails in Literary Translation

Proverbial Reductionism: AI's Literal Interpretation of Cultural Metaphors

Proverbs, the distilled wisdom of a culture, pose a significant challenge to AI translation due to their reliance on metaphor and implicit meaning. Unlike literal statements, proverbs function as “cultural microcosms,” as Riccardi (2002) notes, encapsulating complex ideas within concise, often figurative language. Current AI models, despite their sophistication, primarily process text based on statistical patterns and literal interpretations. Consequently, they struggle to decipher the metaphorical essence of proverbs, often translating them word-for-word, leading to nonsensical or culturally inappropriate renderings. For instance, an Igbo proverb drawing imagery from local agriculture might be translated into Arabic using the literal agricultural terms, completely missing the intended cultural and symbolic message. This reductionist approach, as highlighted by Bandia (2008), results in a loss of cultural richness, rendering translated proverbs awkward, confusing, or even offensive to the target audience, thereby undermining the literary and communicative intent.

Cultural Flatness: Stripping Symbolic Weight From Key Terms

Language is deeply embedded within culture, and words carry significant cultural baggage, a reality that AI translation often overlooks. Terms like *obi* and *nna* in Igbo culture possess profound symbolic weight, representing communal spaces, spiritual ancestry, and social lineage far beyond their literal definitions. However, AI tools, relying on basic dictionary definitions or statistical correlations, frequently translate such terms with culturally neutral or incorrect equivalents. Consequently, machine outputs miss crucial cultural references and misinterpret the narrative. The inability of AI to recognize and preserve the cultural nuances of language leads to a distorted representation of the source culture, ultimately hindering effective cross-cultural communication.

Toward a Culturally Informed AI Workflow

Corpus Enrichment: Training AI on African Literary Texts. Addressing the data scarcity for under-resourced languages like Igbo is crucial for improving AI translation quality. Enriching the training corpus with African literary texts, such as the *Arabic Anthology of African Literature* (2014), provides AI with exposure to a broader range of cultural expressions and linguistic patterns. This approach allows AI to learn and interpret cultural metaphors, proverbs, and other culturally specific expressions, gaining a deeper understanding of the historical and social contexts that shape language use. As Resnik et al. (2020) highlight, specialized datasets are essential for enhancing translation accuracy. By training on literary texts, AI can develop specialized models capable of handling the complexities of African languages and cultures, leading to more accurate and culturally sensitive translations.

Post-editing Protocols: Human Refinement of Proverbs and Cultural Terms. While AI can generate initial drafts, human editors are indispensable for refining and polishing translations, particularly for proverbs and cultural terms that require careful interpretation and adaptation. Establishing robust post-editing protocols, as Kenny (2022) suggests, involves combining AI's efficiency with human expertise. Human editors with proficiency in both Igbo and Arabic cultures can ensure cultural accuracy, identify and correct AI errors, and maintain the literary quality of the translated text. Utilizing tools like GPT-4 for initial drafts, followed by meticulous human refinement, ensures that the translated text is not only linguistically accurate but also culturally resonant, preserving the intended meaning and stylistic nuances of the original work.

Community Collaboration: Engaging Linguists to Co-develop Glossaries. Engaging Igbo and Arab linguists in the co-development of glossaries is essential for creating culturally sensitive and accurate translations. These glossaries, containing definitions, explanations, and contextual information for key cultural terms, enhance the ability of AI tools like DeepL to handle culturally specific language. As Anastasiou and Gupta (2011, p. 637) demonstrate, collaborative efforts to build resources are vital for improving translation quality. This community-driven approach fosters the creation of a valuable resource for Igbo-Arabic translation, benefiting researchers and practitioners alike. By harnessing local knowledge and expertise, linguists can contribute to the development of more effective and culturally appropriate AI translation tools, promoting better cross-cultural understanding and communication.

Ethical Vigilance: Navigating Ideological Subtexts and Power Dynamics. Beyond technical and lexical refinement, a culturally informed workflow must incorporate an ethical dimension that recognizes translation as a political act. As Venuti (2017) argues, the “invisibility” of the translator often masks the power imbalances inherent in moving a text from a postcolonial source to a dominant target language. AI tools, by their nature, lack the capacity to identify ideological subtexts—such as Achebe’s intentional “stretching” of English to accommodate Igbo rhythms—and may inadvertently prioritize domesticating strategies that erase the original’s resistant spirit. Therefore, the final stage of any hybrid workflow must involve an “ideological audit” by human translators. This ensures that the translated text maintains its critical edge against colonial narratives, preventing the AI from defaulting to “safe” or Eurocentric interpretations that would otherwise silence the subaltern voice.

Conclusion

In conclusion, while AI translation tools offer unprecedented computational efficiency, this study demonstrates that they fundamentally fail to navigate the dense cultural and ideological topographies of Chinua Achebe's *Things Fall Apart*. By reducing Igbo proverbs to literal observations and flattening the novel's revolutionary "Africanized English" into generic prose, current AI paradigms risk functioning as tools of digital assimilation rather than cross-cultural bridge-building. The findings underscore that the human translator remains ontologically indispensable—not merely as an editor of grammar, but as a cultural mediator capable of preserving postcolonial resistance, oral aesthetics, and the socio-historical weight of the source text.

To move toward a more equitable future in the digital humanities, future research must move beyond technical fluency to prioritize the decolonization of training data by integrating African literary corpora and non-Western epistemologies into Large Language Model (LLM) training sets. Furthermore, the development of robust ethical frameworks is essential to prevent the algorithmic erasure of marginalized linguistic hierarchies. By adopting hybrid workflows that leverage AI for structural drafting while centering human expertise in the negotiation of metaphor and subtext, the field can ensure a more nuanced approach to global literature. Consequently, this research suggests that the "lost" elements in algorithmic translation are precisely what make postcolonial literature vital; by bridging AI's technical capacity with human cultural empathy, we can ensure that marginalized voices are not only translated but truly heard, preserved without the distortions of a colonial-era lens.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

The author declares that no AI or AI-assisted technologies have been used to generate, refine, or correct the content in the manuscript. The ideas, design, procedures, findings, analyses, and discussion are originally written and derived from careful and systematic conduct of the research.

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