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RECONSTRUCTING NATIONAL AND PAN-AFRICAN IDENTITY THROUGH TRANSITIVITY SHIFTS IN HUMAN AND AI TRANSLATIONS OF NIGER'S NATIONAL ANTHEM *L'HONNEUR DE LA PATRIE*

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ABSTRACT

This paper investigates how transitivity shifts reconstruct national and Pan-African identity across *L'Honneur de la Patrie* and its four English translations: a widely circulated human translation and outputs generated by ChatGPT, Google Translate, and DeepL. Drawing on Systemic Functional Linguistics (henceforth, SFL), particularly the transitivity system (Eggins, 2004; Fontaine, 2013; Thompson, 2014; Halliday & Matthiessen, 2014), and adopting a comparative descriptive mixed-methods research design, the study compares the distribution of process-types, participant roles, and circumstantial elements to examine how experiential meaning is reconfigured across translation modes. The findings reveal systematic transitivity shifts in all the four translations. Compared with the French source text, the translations generally increase material processes while reducing relational processes, thereby foregrounding collective agency over symbolic identification. AI-generated translations further introduce behavioral processes absent from the source text and display distinctive redistributions of participant roles and circumstantial elements, resulting in different patterns of experiential meaning and ideological reconstruction. Although the anthem's overarching vision of national unity, patriotism, and Pan-African solidarity is largely preserved, the four English translations differ in how they construe agency, identity, and contextual framing. The study demonstrates that transitivity shifts constitute a key linguistic mechanism through which both human and AI translation systems reconstruct experiential meaning and ideological representation. It contributes to SFL-informed Translation Studies by extending transitivity analysis to the underexplored genre of national anthems and offers new insights into AI-mediated translation of ideologically sensitive texts.

Keywords: Systemic Functional Linguistics; Transitivity; National Anthem; AI Translation; National Identity; Pan-African Identity.

1 INTRODUCTION

National anthems are among the most potent symbolic articulations of nationhood, condensing collective memories, shared values, historical trajectories, and future aspirations into highly ritualized linguistic forms. Performed in ceremonial, political, educational, and diplomatic contexts, they continually reproduce national identity and collective belonging (Cerulo, 1995; Elgenius, 2011). As Anderson (2006) argues, they contribute to the construction of imagined communities by narrating a shared past, affirming collective identity, and projecting common aspirations. Through carefully selected lexical and grammatical resources, national anthems also function as ideological texts that construct social actors, distribute agency, and articulate visions of nationhood, solidarity, unity, and collective destiny (Billig, 1995; de Cillia *et al.,* 1999; Wodak *et al.,* 2009; Allagbé, 2024). These issues become particularly significant when national anthems are translated. Translation is not merely the transfer of meanings across languages but a process of semiotic reconstruction in which culturally and ideologically embedded meanings are reconfigured within new linguistic systems (House, 2015; Baker, 2018; Munday, 2016, 2022). Because national anthems function as condensed narratives of identity and collective memory, even subtle lexical or grammatical shifts may reshape representations of agency, patriotism, solidarity, and national purpose. Translation therefore extends beyond semantic equivalence to encompass the reconstruction of experiential and ideological meanings through the linguistic resources of the target language (Matthiessen, 2001; Steiner, 2005).

Within Translation Studies, translation is widely understood as a process of meaning negotiation rather than a straightforward transfer based on formal equivalence (House, 2015; Baker, 2018; Munday, 2016, 2022). Rather than simply reproducing source-text meanings, translated texts may preserve, amplify, attenuate, or transform them. This perspective is mainly relevant to national anthems, which are not merely descriptive texts but ritualized symbolic performances through which national identity is enacted and reaffirmed (Billig, 1995; Cerulo, 1995; de Cillia *et al.,* 1999; Wodak *et al.,* 2009; Allagbé, 2024). Consequently, translation choices inevitably carry ideological implications for how nations are represented across linguistic and cultural boundaries. These concerns have acquired renewed significance with the rapid development of Artificial Intelligence (AI)-based translation technologies. Neural Machine Translation (NMT) systems such as Google Translate and DeepL, together with Large Language Models (LLMs) like ChatGPT, now produce translations of increasing fluency and grammatical sophistication (Castilho *et al.,* 2017; Toral & Sánchez-Cartagena, 2017; Guerreiro *et al.,* 2023). Despite these advances, important questions remain regarding their capacity to preserve culturally embedded and ideologically sensitive meanings. In symbolic genres such as national anthems, where meaning extends beyond propositional content to encompass collective memory, identity, and political imagination, AI-generated translations may subtly redistribute agency, reshape patterns of solidarity, and reconstruct representations of national and Pan-African consciousness.

Systemic Functional Linguistics (henceforth, SFL) provides a robust theoretical framework for investigating these issues. Conceiving language as a social semiotic system, SFL views linguistic choices as resources for construing experience, enacting social relations, and organizing discourse (Eggins, 2004; Halliday & Matthiessen, 2014). Within this framework, language simultaneously realizes three metafunctions: ideational, interpersonal, and textual. Central to the present study is the experiential component of the ideational metafunction, which is realized through the transitivity system. Transitivity represents experience through configurations of processes, participants, and circumstances, thereby providing the grammatical resources through which actions, identities, events, and social relations are construed (Eggins, 2004; Fontaine, 2013; Thompson, 2014; Halliday & Matthiessen, 2014). Because these configurations shape how experience is represented, transitivity constitutes a powerful analytical tool for examining the ideological dimensions of discourse. Previous studies have shown that translation frequently involves shifts in process-types, participant roles, and circumstantial elements, often resulting in changes to experiential and ideological meanings (Matthiessen, 2001; Steiner, 2005; Munday, 2008). More recent research suggests that AI-mediated translation may display distinctive patterns of transitivity shift, particularly in the representation of agency and participant relations (Hu & Luo, 2023; Li & Kim, 2024). Nevertheless, most SFL-informed translation research has focused on literary, political, media, and religious discourse. National anthems remain largely unexplored as sites of experiential meaning-making, while systematic comparisons between human and AI-generated translations are virtually absent from the literature.

This gap is particularly evident in relation to Niger's national anthem, *L'Honneur de la Patrie*. As a foundational state text, the anthem constructs narratives of national unity, patriotic commitment, collective responsibility, and Pan-African solidarity. Yet, little research has examined the linguistic mechanisms through which these meanings are encoded in the French original or how they are reconstructed in translation. The present study addresses this gap by investigating the transitivity structures of *L'Honneur de la Patrie* and comparing them with those of four English renderings: a widely circulated human translation, a ChatGPT-generated translation, a Google Translate version, and a DeepL translation.

Drawing on SFL, particularly the transitivity system, and adopting a comparative descriptive mixed-methods research design, the study examines how processes, participants, and circumstances are distributed across the source and target texts, and how transitivity shifts reshape representations of national identity, collective agency, patriotic commitment, and Pan-African consciousness. To achieve these objectives, the study addresses the following research questions:

- What transitivity features are deployed in the French source text, *L'Honneur de la Patrie*?
- How are these features preserved, modified, or reconfigured in the human, ChatGPT, Google Translate, and DeepL translations of the anthem?
- How do transitivity shifts affect the representation of national identity, collective agency, patriotic commitment, and Pan-African consciousness across the translations?
- What systematic similarities and differences emerge between the human and AI-generated translations in their reconstruction of experiential meaning?

By answering these questions, this research extends SFL-based translation research to the underexplored domain of national anthem translation while contributing to emerging scholarship on AI-mediated meaning construction and experiential reconstruction in translation.

2 LITERATURE REVIEW

Translation is increasingly understood as a process of meaning reconstruction rather than the mechanical transfer of lexical forms across languages. Contemporary Translation Studies recognize that translators do not simply reproduce source-text meanings but actively negotiate them through linguistic choices that may preserve, modify, or transform experiential and ideological representations (Halliday, 1992; House, 2015; Baker, 2018; Munday, 2016, 2022). Within this perspective, translation becomes a process of semiotic recontextualization in which grammatical choices shape how reality, social actors, and ideological positions are represented in the target text. Systemic Functional Linguistics (SFL) has consequently become one of the most influential frameworks for investigating translation because it conceptualizes language as a resource for meaning-making rather than a collection of formal structures (Halliday, 1992; Eggins, 2004; Halliday & Matthiessen, 2014). Among its various systems, transitivity has proved particularly valuable for examining how translations reconstruct experience through processes, participants, and circumstances.

Halliday (1992) provides the theoretical foundation for this perspective by arguing that translation involves the re-selection of meaning potential rather than the direct transfer of linguistic forms. Translation therefore entails reconstructing experience within the systemic resources of the target language. Expanding this argument, Matthiessen (2001) conceptualizes translation as the re-instantiation of meaning across languages, maintaining that shifts in transitivity structures may alter how experience is construed while preserving broader semantic relations. Similarly, Steiner (2001, 2005) demonstrates that translated texts exhibit systematic linguistic patterns distinct from non-translated texts, reflecting translators' recurrent selection preferences. Collectively, these studies establish transitivity as a principled framework for investigating how experiential and ideological meanings are reconstructed through translation.

Subsequent research has extended these theoretical insights to ideological discourse. Munday (2008) demonstrates that even subtle grammatical choices in political translation may redistribute agency, responsibility, and ideological positioning, while Munday (2012) shows that variations in transitivity contribute to alternative representations of political actors and accountability. Likewise, Calzada-Pérez (2007), working within a Critical Discourse Analysis perspective informed by SFL, argues that translators may foreground or background social actors through participant reconfiguration, thereby reshaping ideological orientation. These studies prove that transitivity shifts are not merely grammatical phenomena but ideological choices capable of influencing how social reality is represented in translation.

Research on literary translation similarly confirms the explanatory power of transitivity analysis. Huang (2014) shows that shifts in process-types and participant configurations modify the representation of characters and narrative perspective in literary translation. Li (2018) likewise demonstrates that transitivity patterns influence the reconstruction of interpersonal relationships and emotional experience across translated texts. Focusing specifically on poetry, Zhang and Hu (2019) argue that changes in process selection may alter both agency and emotional construal, while Wang (2021) illustrates how shifts between relational and material processes reshape representations of identity in translated poems. Although these studies consistently prove that transitivity analysis provides valuable insights into experiential reconstruction, they remain largely confined to literary discourse and seldom examine explicitly ideological state texts.

The emergence of Artificial Intelligence (AI)-based translation has introduced a new dimension to this line of inquiry. Neural Machine Translation (NMT) systems such as Google Translate and DeepL, together with Large Language Models (LLMs) like ChatGPT, have substantially improved translation fluency and accessibility (Castilho *et al.,* 2017; Toral &

Sánchez-Cartagena, 2017; Guerreiro *et al.,* 2023). Nevertheless, concerns remain regarding their ability to preserve culturally embedded and ideologically sensitive meanings. From an SFL perspective, recent studies suggest that AI-generated translations exhibit distinctive patterns of experiential reconstruction. Hu and Luo (2023) report that machine translation frequently modifies agency relations through greater grammatical explicitness, while Li and Kim (2024) show that AI systems often redistribute process-types and participant roles in ideologically sensitive discourse. These findings indicate that apparent lexical equivalence may conceal significant shifts in experiential meaning and ideological representation.

National anthems constitute an especially significant genre for examining these issues because they function as condensed expressions of collective identity, historical memory, patriotic values, and national aspirations (Cerulo, 1995; Elgenius, 2011). Existing scholarship has examined national anthems primarily from historical, political, ideological and linguistic-stylistic perspectives (de Cillia *et al.,* 1999; Benwell & Stokoe, 2006; Wodak *et al.,* 2009; Allagbé, 2024), but comparatively little attention has been paid to how experiential meanings encoded in national anthems are reconstructed in translation. Although SFL-informed translation studies have demonstrated the usefulness of transitivity analysis across literary, political, media, and religious discourse, national anthems remain largely absent from this body of research. Moreover, systematic comparisons between human and AI-generated translations of ideologically significant texts are still scarce. Consequently, little is known about how different translation systems reconstruct national identity, collective agency, patriotism, and Pan-African consciousness through transitivity patterns.

The present study addresses these gaps by examining the transitivity structures of Niger's national anthem, *L'Honneur de la Patrie*, and comparing them across a widely circulated human English translation and three AI-generated translations produced by ChatGPT, Google Translate, and DeepL. Drawing on SFL, particularly the transitivity system, and adopting a comparative descriptive mixed-methods research design, the study investigates how processes, participants, and circumstances are reconstructed across translation modes and how these shifts influence the representation of national identity, collective agency, patriotism, and Pan-African consciousness. In doing so, it extends SFL-informed translation research to the underexplored genre of national anthem translation while contributing to emerging scholarship on AI-mediated meaning construction.

3 THEORETICAL FRAMEWORK

As stated earlier, this study is grounded in SFL. In SFL, language is understood as a social semiotic resource through which meaning is constructed in relation to specific cultural and ideological contexts (Eggins, 2004; Fontaine, 2013; Thompson, 2014; Halliday & Matthiessen, 2014). Rather than treating grammar as a neutral mechanism for encoding pre-existing ideas, SFL foregrounds linguistic choice as a fundamental driver of meaning-making, whereby experience is systematically organized into structured representations of reality. Within this framework, language is posited to encode simultaneously three metafunctions: ideational, interpersonal, and textual. The ideational metafunction concerns the representation of experience and logical relations in the world; the interpersonal metafunction refers to the enactment of social relations, attitudes, and speaker–hearer interaction; while the textual metafunction relates to the organization of discourse into coherent and contextually appropriate messages. The ideational metafunction is divided into two components: experiential and logical. Since this study examines how national and Pan-African identity are constructed in *L'Honneur de la Patrie* and reconstructed in its human and AI translations, the experiential metafunction provides the primary analytical lens. According to systemic linguists, experiential meaning is realized through the transitivity system.

The transitivity system accounts for how clauses encode experience through three interrelated elements: processes, participants, and circumstances (Eggins, 2004; Thompson, 2014). Processes, typically realized through verbal groups, constitute the experiential core of the clause and are classified into material, mental, relational, verbal, behavioral, and existential types (Eggins, 2004; Halliday & Matthiessen, 2014). Material processes construe actions and events in the external world; mental processes encode cognition, perception, and emotion; relational processes establish relations of attribution and identification; verbal processes represent acts of saying; behavioral processes capture physiological and psychological behavior; and existential processes indicate existence or occurrence. These process-types are central to understanding how experience is linguistically organized and how particular worldviews are constructed in discourse. Each process-type is associated with specific participant roles that distribute agency and involvement within clauses. Material processes typically involve Actors and Goals; mental processes involve Sensers and Phenomena; relational processes involve Carriers, Attributes, Tokens, and Values; verbal processes involve Sayers, Receivers, and Verbiage; behavioral processes involve Behavers; and existential processes involve Existents (Halliday & Matthiessen, 2014). These participant configurations are crucial for revealing how texts position social actors, allocate responsibility, and construct identities, which is especially significant in ideologically charged texts such as national anthems. Circumstances constitute the third component of the transitivity system and provide contextual information regarding how, when, where, why, and under what conditions processes unfold. Eggins (2004) identifies seven major circumstantial categories: Location, Manner, Cause, Accompaniment, Extent, Matter, and Role. In discourse on

nationhood and collective identity, circumstantial elements frequently contribute to the construction of symbolic space, historical continuity, and shared cultural belonging.

The analytical value of transitivity lies in its capacity to reveal how language actively constructs social reality rather than merely reflecting it. From this perspective, meaning emerges from systematic linguistic choices through which aspects of experience are selected, foregrounded, or backgrounded. As Halliday (1978) and Fowler (1991) argue, such choices are inherently ideological, since they determine what is emphasized, what is marginalized, and what remains implicit in discourse. Through the deployment of specific processes, participant roles, and circumstantial elements, texts encode particular configurations of agency, identity, and social relations, thereby shaping how events and actors are construed within specific ideological and cultural frameworks (Thompson, 2014). In Translation Studies, transitivity analysis is particularly valuable because translation involves not only linguistic transfer but also the re-construal of experience across languages (Halliday, 1992; House, 2015; Baker, 2018; Munday, 2016, 2022). Shifts in process-types, participant roles, and circumstantial structures therefore provide a systematic means of identifying how meaning is reconfigured in translation, where experiential meanings may be preserved, modified, or re-constructed depending on the choices of the translator or the translation system.

Against this backdrop, the present study applies the transitivity framework to investigate how national identity, patriotism, and Pan-African consciousness are linguistically constructed in *L'Honneur de la Patrie*, and how these meanings are subsequently reconfigured in its human and AI-generated English translations. By systematically comparing transitivity patterns across the source text and its translations, the study identifies shifts in processes, participants, and circumstances that signal differing construals of experience. In doing so, it demonstrates how human and AI translation systems do not merely transfer meaning, but actively reconstruct experiential realities, thereby contributing in distinct ways to the re-articulation and ideological negotiation of national and Pan-African identity.

4 METHODOLOGY

This section outlines the methodological procedures adopted in the study. It describes the research design, data collection and coding procedures, analytical framework, and data analysis employed to investigate how transitivity shifts reconstruct national and Pan-African identity across *L'Honneur de la Patrie* and its four English renderings. The study is grounded in SFL, which conceives language as a social semiotic system through which experience is construed by means of grammatical choices (Halliday & Matthiessen, 2014). From this perspective, translation is understood not as a neutral transfer of meaning but as a process of experiential reconstruction in which shifts in processes, participant roles, and circumstantial elements may preserve, reorganize, or transform ideological representations across languages.

4.1 Research Design

The study adopts a comparative descriptive mixed-methods research design to investigate how transitivity shifts reconstruct national and Pan-African identity across *L'Honneur de la Patrie* and its four English renderings: a widely circulated human translation and three AI-generated translations produced by ChatGPT, Google Translate, and DeepL. The mixed-methods design is appropriate because it combines quantitative analysis of transitivity distributions with qualitative interpretation of how shifts in grammatical choices reshape experiential and ideological meanings. Specifically, the quantitative component identifies variations in the frequency and distribution of process-types, participant roles, and circumstantial elements, while the qualitative component examines how these shifts reconfigure representations of national identity, collective agency, patriotic commitment, and Pan-African consciousness.

4.2 Data Collection and Coding Procedures

The corpus for this study comprises a parallel corpus consisting of the French source text of *L'Honneur de la Patrie* and four aligned English renderings: a widely circulated human translation and three AI-generated translations produced by ChatGPT, Google Translate, and DeepL. The French source text and the widely circulated human English translation were retrieved from *National Anthems.info* on 18 June 2026 (National Anthems.info, n.d.), while the AI-generated translations were produced specifically for this study using the respective translation systems. *L'Honneur de la Patrie* was purposively selected because it encodes narratives of national unity, patriotic commitment, collective responsibility, and Pan-African consciousness, making it an appropriate text for examining how transitivity shifts reconstruct ideological meaning across translations.

Following the principles of transitivity analysis in SFL (Eggins, 2004; Halliday & Matthiessen, 2014), each version of the anthem was segmented into clauses, which constitute the primary analytical units for identifying processes, participant roles, and circumstantial elements. To ensure analytical consistency, each clause was interpreted within its immediate co-text so that experiential meanings could be analyzed in context. Where linguistic elements were ellipted but recoverable from the surrounding discourse, they were analytically reinstated to reconstruct the complete experiential configuration of the clause. These reconstructed elements were enclosed in square brackets to distinguish them from

explicitly realized forms in the text. For example, in the clause "Children of a same fatherland Niger (V) (we (T) **are** (**Pi**))," the omitted relational process and the Token were recovered from the co-text and represented in brackets to facilitate a complete transitivity analysis.

4.3 Analytical Framework

The analytical framework is based on the transitivity system (Eggins, 2004; Halliday & Matthiessen, 2014). The analysis focuses on three interrelated components of experiential meaning:

- Process types: material, mental, relational, verbal, behavioral, and existential.
- Participant roles: Actor, Goal, Carrier, Attribute, Token, Value, Sayer, Receiver, Phenomenon, Behaver, etc.
- Circumstantial elements: Location, Manner, Cause, Accompaniment, Extent, etc.

Each clause in the French source text and its four English renderings was manually coded according to these transitivity categories. The quantitative analysis involved calculating the frequency and percentage distribution of process-types, participant roles, and circumstantial elements across the five versions. The qualitative analysis subsequently examined how transitivity shifts reconfigured experiential meaning and ideological representation in translation. Particular attention was paid to the ways in which these shifts reconstructed national identity, collective agency, patriotic commitment, and Pan-African consciousness across the human and AI-generated translations.

4.4 Data Analysis

The data analysis was carried out in two complementary stages designed to identify transitivity patterns and interpret how their redistribution reconstructs experiential meaning and ideological representation across the human and AI-generated translations of *L'Honneur de la Patrie*. The first stage involved a quantitative transitivity analysis. All the clauses in the French source text and the four English renderings were manually coded for process-types, participant roles, and circumstantial elements in accordance with the transitivity framework. Frequency counts and percentage distributions were then calculated for each transitivity category across the five versions. This stage provided a comparative overview of how experiential resources are distributed across the translations and identified systematic transitivity shifts in the grammatical representation of agency, identity, and ideological orientation.

The second stage consisted of a qualitative contrastive analysis of the quantified transitivity patterns. Representative clauses from the source text and the four English versions were compared to examine how transitivity shifts reconstruct experiential meaning and ideological representation. Particular attention was paid to shifts in process-types, participant roles, and circumstantial elements and to how these transitivity shifts reshape representations of national identity, collective agency, patriotic commitment, and Pan-African consciousness. For example, changes in process-types or participant configurations were interpreted in terms of their implications for the redistribution of agency, the representation of collective responsibility, and the ideological framing of the anthem. This interpretive stage complemented the quantitative findings by explaining not only ***where*** transitivity shifts occurred but also ***how*** they reshaped the experiential organization of the text.

Taken together, these two stages enabled a systematic comparison of the French source text with its human and AI-generated translations, providing an integrated account of how transitivity shifts reconstruct experiential meaning and ideological representation across different translation systems. The analysis was conducted using the coding scheme presented below.

Key:

Transitivity: P=Process (**in bold**), Pm=material, Pme=mental, Pb=behavioral, Pv=verbal, Pe=existential, Pi=intensive, Pcc=circumstantial, Pp=possessive, Pc=causative. A=Actor, G=Goal, B=Beneficiary, R=Range S=Senser, Ph=Phenomenon. Sy=Sayer, Rv=Receiver, Vb=Verbiage. Be=Behaver, Bh=Behavior. X=Existent. T=Token, V=Value, Cr=Carrier, At=Attribute. Pr=Possessor, Pd=Possessed. C=Circumstance, Cl=location, Cx=extent, Cm=manner, Cc=cause, Ca=accompaniment, Ct=matter, Co=role. Ag=Agent.

"L'HONNEUR DE LA PATRIE" (SOURCE TEXT)

1. Des rives du Niger aux confins du Ténéré (Cl)

Frères et sœurs (V) nous (T) **sommes** (**Pi**)

2. Enfants d'une même Patrie le Niger (V) (nous (T) **sommes** (**Pi**))

3. (Nous (G) **sommes**) **Nourris** (**Pm**) de la sève des mêmes idéaux (A)

Pour un Niger de paix libre fort et uni (Cc)

Pour un Niger prospère le Pays de nos rêves (Cc)

4. Pour "L'Honneur de la Patrie" (Cc)

Incarnons (A+**Pm**) la vaillance et la persévérance (G)

5. Et (**Incarnons** (A+**Pm**)) toutes les vertus de nos dignes aïeux (G)

6. (nos dignes aïeux (Cr) **sont** (**Pi**)) Guerriers intrépides déterminés et fiers (At)

7. **Défendons** (A+**Pm**) la patrie (G) au prix de notre sang (Cm)

8. **Faisons** (Ag+**Pc**) du Niger (Cr) symbole de dignité (At)

9. (**Faisons** (Ag+**Pc**) du Niger (Cr)) Emblème et flambeau de l'Afrique qui avance (At)

10. Pour ces nobles idéaux (Cc) (nous (Cr) (**demeurons** (**Pi**)) debout et en avant (At)

11. (Nous (Cr) **sommes** (**Pi**)) En avant (At) pour le travail (Cc) 12. (nous (Cr) **sommes** (**Pi**)) en avant (At) pour le combat (Cc)

13. Nous (Cr) **demeurons** (**Pi**) debout (At)

14. **Portant** (**Pm**) haut (Cm) le drapeau de notre cher Pays (G)

Dans le ciel d'Afrique (Cl) et dans tout l'Univers (Cl)

[15. Pour **construire** (**Pm**) ensemble (Ca)

Un monde de justice de paix et de progrès (G)

16. Et pour **faire** (Ag+**Pc**) du Niger (Cr) la fierté de l'Afrique (At)] (Cc).

THE HONOUR OF THE FATHERLAND (HUMAN)

1. From the shores of the Niger to the edges of Ténéré (Cl)

Brothers and sisters (V) we (T) **are** (**Pi**)

2. Children of a same fatherland Niger (V) (we (T) **are** (**Pi**))

3. (We (G) **are**) **Fed** (**Pm**) of the sap of the same ideals (A)

For a Niger of peace, free, strong, and united (Cc)

For a prosperous Niger, the country of our dreams (Cc)

4. For the honor of the fatherland (Cc)

Let us (A) **incarnate** (**Pm**) the valiance and the perseverance (G)

5. And (let us (A) **incarnate** (**Pm**)) all the virtues of our worthy forefathers (G)

6. (our worthy forefathers (Cr) **are** (**Pi**)) Intrepid, determined and proud warriors (At)

7. Let us (A) **defend** (**Pm**) the homeland (G) at the price of our blood (Cm)

8. Let us (Ag) **make** (**Pc**) Niger (Cr) the symbol of dignity (At)

9. (Let us (Ag) **make** (**Pc**) Niger (Cr)) The emblem and torch of Africa advancing

10. For these noble ideals (Cc), **arise** (**Pm**) 11. and **go** (**Pm**) forward (Cl)

12. (**go**) (**Pm**) Forward (Cl) for work (Cc) 13. and (**go**) (**Pm**) forward (Cl) for fight (Cc)

14. We (Cr) **remain** (**Pi**) standing (At)

15. (We (A) **are**) **Holding** (**Pm**) high (Cm) the flag of our dear country (G)

In the sky of Africa (Cl) and in the whole universe (Cl)

[16. To **construct** (**Pm**) together (Ca)

A world of justice, peace and progress (G)

17. And **make** (**Pc**) Niger (Cr) the pride of Africa (At)] (Cc).

THE HONOUR OF THE FATHERLAND (CHATGPT)

1. From the banks of the Niger to the far reaches of the Ténéré (Cl),

We (T) **are** (**Pi**) brothers and sisters (V),

2. (We (T) **are** (**Pi**)) Children of one common fatherland, Niger (V),

3. (We (G) **are**) **Nourished** (**Pm**) by the sap of the same ideals (A).

For a peaceful, free, strong, and united Niger (Cc),

For a prosperous Niger, the land of our dreams (Cc).

4. For the honour of the fatherland (Cc),

Let us (A) **embody** (**Pm**) courage and perseverance (G),

5. And (let us (A) **embody** (**Pm**)) all the virtues of our worthy ancestors (G),

6. (Our worthy ancestors (Cr) **are** (Pi)) Fearless, determined, and proud warriors (At).

7. Let us (A) **defend** (**Pm**) the fatherland (G) at the cost of our blood (Cm),

8. Let us (Ag) **make** (**Pc**) Niger (Cr) a symbol of dignity (At),

9. (Let us (Ag) **make** (**Pc**) Niger (Cr)) An emblem and beacon of a rising Africa (At).

10. For these noble ideals (Cc), let us (Be) **stand** (**Pb**) 11. and (let us (A)) **move** (**Pm**) forward (Cl),

12. (let us (A) **move**) (**Pm**) Forward (Cl) for labour (Cc), 13. (let us (A) **move**) (**Pm**) forward (Cl) for the struggle (Cc).

14. We (Cr) **remain** (**Pi**) steadfast (At),

15. (We (A) **are**) **Holding** (**Pm**) high (Cm) the flag of our beloved country (G),

In the skies of Africa (Cl) and throughout the universe (Cl),

[16. To **build** (**Pm**) together (Ca)

A world of justice, peace, and progress (G),

17. And to **make** (**Pc**) Niger (Cr) the pride of Africa (At)] (Cc).

THE HONOR OF THE FATHERLAND (GOOGLE TRANSLATE)

1. From the banks of the Niger to the borders of the Ténéré (Cl)

Brothers and sisters (V) we (T) **are** (**Pi**)

2. Children of the same Fatherland, Niger (V) (we (T) **are** (**Pi**))

3. (We (G) **are**) **Nourished** (**Pm**) by the sap of the same ideals (A)

For a Niger of peace, free, strong, and united (Cc)

For a prosperous Niger, the Land of our dreams (Cc)

4. For the honor of the Fatherland (Cc)

Let us (A) **embody** (**Pm**) valor and perseverance (G)

5. And (let us (A) **embody** (**Pm**)) all the virtues of our worthy ancestors (G)

6. (Our worthy ancestors (Cr) **are** (**Pi**)) Intrepid, determined, and proud warriors (At)

7. Let us (A) **defend** (**Pm**) the fatherland (G) with our blood (Cm)

8. Let us (Ag) **make** (**Pc**) Niger (Cr) a symbol of dignity (At)

9. (Let us (Ag) **make** (**Pc**) Niger (Cr)) Emblem and torch of a moving Africa (At)

10. For these noble ideals (Cc), **stand** (**Pb**) tall (Cm) and forward (Cl)

11. (**Stand** (**Pb**)) Forward (Cl) to work (Cl), 12. (**stand** (**Pb**)) forward (Cl) to the fight (Cl)

13. We (Cr) **remain** (**Pi**) standing (At)

14. **High-flying** (**Pm**) the flag of our beloved Country (G)

In the skies of Africa (Cl) and throughout the Universe (Cl)

[15. To **build** (**Pm**) together (Ca)

A world of justice, peace, and progress (G)

16. And to **make** (**Pc**) Niger (Cr) the pride of Africa (At)] (Cc).

THE HONOR OF THE HOMELAND (DeepL)

1. From the banks of the Niger to the far reaches of the Ténéré (Cl)

We (T) **are** (**Pi**) brothers and sisters (V)

2. (We (T) **are** (**Pi**)) Children of the same homeland, Niger (V)

3. (We (G) **are**) **Nourished** (**Pm**) by the lifeblood of the same ideals (A)

[For a Niger that (Cr) **is** (**Pi**) peaceful, free, strong, and united (At)] (Cc)

For a prosperous Niger, the land of our dreams (Cc)

4. For the honor of the Fatherland (Cc)

Let us (A) **embody** (**Pm**) valor and perseverance (G)

5. And (let us (A) **embody** (**Pm**)) all the virtues of our worthy forebears (G)—

6. (Our worthy forebears (Cr) **are** (**Pi**)) Fearless, determined, and proud warriors (At)

7. Let us (A) **defend** (**Pm**) the Fatherland (G) at the cost of our blood (Cm)

8. Let us (Ag) **make** (**Pc**) Niger (Cr) a symbol of dignity (At)—

9. (Let us (Ag) **make** (**Pc**) Niger (Cr)) An emblem and a beacon for Africa's progress (At)

10. For these noble ideals (Cc), **stand** (**Pb**) tall (Cm) 11. and **move** (**Pm**) forward (Cl)

12. (**Move** (**Pm**)) Forward (Cl) to work (Cl), 13. (**move** (**Pm**)) forward (Cl) to the fight (Cl)

14. We (Be) **stand** (**Pb**) tall (Cm)

15. (We (A) **are**) **Holding** (**Pm**) high (Cm) the flag of our beloved country (G)

In the African sky (Cl) and throughout the universe (Cl)

[16. To **build** (**Pm**) together (Ca)

A world of justice, peace, and progress (G)

17. And to **make** (**Pc**) Niger (Cr) the pride of Africa (At)] (Cc).

5 RESULTS

This section presents the findings of the transitivity analysis, examining how transitivity shifts (re-)construct experiential meaning and ideological representation across the French source text, *L'Honneur de la Patrie*, and its four English renderings: a widely circulated human translation and translations generated by ChatGPT, Google Translate, and DeepL. The analysis reveals systematic variations in the distribution of process-types, participant roles, and circumstantial elements across the five versions. These transitivity shifts demonstrate how different translation systems redistribute agency, reconfigure experiential meanings, and reconstruct representations of national identity, collective agency, patriotic commitment, and Pan-African consciousness. The findings are presented comparatively through quantitative distributions and supported by qualitative analyses of representative clauses to illustrate the ideological implications of the observed shifts.

5.1 Process-types in the Source Text and its English Renderings

Table 1 exhibits the distribution of process-types across the French source text and its four English translations. Overall, the findings reveal both continuity and variation in the experiential organization of the anthem across the translations. Because process-types encode the kinds of experience represented in discourse, their distribution provides valuable insights into how different translation systems reconstruct national identity, collective agency, and Pan-African consciousness.

Table 1: Distribution of Process-types across Source Text and English Versions

Version	Relational (%)	Material (%)	Behavioral (%)	Total (%)	Key Trend
Source	43.75	56.25	0.0	100	Identity through being and doing
Human	23.53	76.47	0.0	100	Identity through collective action
ChatGPT	23.53	70.59	5.88	100	Action-oriented with emerging behavioral representation
Google	25	56.25	18.75	100	Action-oriented with enhanced behavioral representation

DeepL	22.22	66.67	11.11	100	Strongly action-oriented with behavioral expansion

As Table 1 shows, the French source text is characterized by a relatively balanced distribution of relational (43.75%) and material (56.25%) processes, with a slight predominance of material processes. This distribution indicates that the anthem construes national identity through complementary representations of being and doing. Relational processes primarily define collective identity, shared values, and symbolic states of existence (e.g., "1… frères et sœurs (V) nous (T) **sommes** (**Pi**)" ["1. …. brothers and sisters (V) we (T) **are** (**Pi**)), "2. Enfants d'une même Patrie le Niger (V) (nous (T) **sommes** (**Pi**))" ["2. Children of the same fatherland (V) we (T) **are** (**Pi**)"]), while material processes construe collective action, patriotic commitment, and nation-building (e.g., "4. Pour "L'Honneur de la Patrie" (Cc) **Incarnons** (A+**Pm**) la vaillance et la persévérance (G) [4. For the honor of the fatherland (Cc) Let us (A) **incarnate** (**Pm**) the valiance and the perseverance (G)"]. The absence of behavioral processes further reinforces the anthem's emphasis on symbolic identity and purposeful collective action rather than on observable physiological or behavioral acts.

In contrast, all the four English renderings exhibit a marked shift towards material processes, indicating a stronger orientation to construing identity through collective action. The human translation displays the highest proportion of material processes (76.47%) and a corresponding reduction in relational processes (23.53%), suggesting that identity is reconstructed more prominently through action than through symbolic identification. ChatGPT follows a similar pattern, with material processes accounting for 70.59% and relational processes 23.53%, while introducing a small proportion of behavioral processes (5.88%). Google Translate remains comparatively close to the source text in its proportion of material processes (56.25%) but records the highest proportion of behavioral processes (18.75%), thereby expanding the experiential repertoire beyond that of the French original. Likewise, DeepL privileges material processes (66.67%) over relational processes (22.22%) and incorporates behavioral processes (11.11%), further reinforcing an action-oriented construal of experience.

Collectively, these findings demonstrate that although all the four translations preserve the anthem's overall ideological progression, they reconstruct its experiential organization by increasing the prominence of collective agency. More significantly, the AI-generated translations introduce behavioral processes that are entirely absent from the source text and the human translation. This suggests that AI-mediated translation not only transfers experiential meaning but also reshapes the transitivity profile by introducing new experiential resources through which the translated discourse is construed.

5.2 Participant Roles in the Source Text and its English Renderings

Table 2 displays the distribution of participant roles across the French source text and its four English renderings. The comparative results reveal how agency, identity, and symbolic relations are distributed across the experiential configurations of the anthem in each version. As participant roles constitute a central component of the transitivity system in SFL, variations in their distribution provide important evidence of how translation reconstructs experiential meaning and, consequently, rearticulates representations of national identity, collective agency, and Pan-African consciousness.

Table 2: Distribution of Participant Roles across Source Text and English Versions

Role	Source (%)	Human (%)	ChatGPT (%)	Google (%)	DeepL (%)	Key Trend
Actor	17.14	31.25	27.27	18.75	26.47	Increasing emphasis on collective agency
Goal	17.14	18.75	18.18	18.75	17.65	Highly stable representation of affected participants
Agent	8.57	6.25	9.09	9.38	8.82	Minor variation; largely stable
Carrier	22.86	15.63	15.15	15.62	14.71	Reduced emphasis on relational attribution
Attribute	22.86	15.63	15.15	15.62	14.71	Reduced emphasis on identity description
Token	5.71	6.25	6.06	6.25	5.88	Stable symbolic identification
Value	5.71	6.25	6.06	6.25	5.88	Stable symbolic identification

Behaver	0.0	0.0	3.03	9.38	5.88	Introduced only in AI-generated translations

The table above indicates that the French source text is marked by a relatively balanced distribution of participant roles, although Carrier (22.86%) and Attribute (22.86%) are the most prominent. This pattern reflects the anthem's emphasis on construing national identity through relational attribution, whereby collective identity is represented in terms of shared qualities, values, and symbolic affiliation. At the same time, Actor and Goal roles each account for 17.14% of the participant system, indicating that collective agency and action also constitute important dimensions of the anthem's experiential organization. Token and Value roles occur less frequently (5.71% each) but play a significant role in establishing symbolic equivalence and ideological identification. The absence of Behaver roles is consistent with the absence of behavioral processes in the source text, reinforcing its orientation towards relational identification and purposeful collective action.

Across the English renderings, a noticeable redistribution of participant roles accompanies the shift towards material processes observed in Table 1. The human translation exhibits the most substantial increase in Actor roles (31.25%), together with a moderate increase in Goal roles (18.75%), indicating a stronger emphasis on collective agency and responsibility. Correspondingly, Carrier and Attribute roles decline to 15.63%, reflecting a reduced reliance on relational attribution in favor of action-oriented representations of national identity. ChatGPT displays a similar pattern, with Actor roles accounting for 27.27% of participants while introducing a small proportion of Behaver roles (3.03%). Google Translate retains a comparatively lower proportion of Actor roles (18.75%) but introduces the highest proportion of Behaver roles (9.38%), thereby expanding the participant system beyond that of the source text. Similarly, DeepL privileges Actor roles (26.47%) over Carrier (14.71%) and Attribute (14.71%) roles while incorporating Behaver roles (5.88%), further reinforcing an action-oriented construal of experience. Token and Value roles remain remarkably stable across all the four translations, suggesting that symbolic identification and ideological equivalence are consistently preserved despite shifts in other participant functions.

Taken together, these findings demonstrate that the English translations reconstruct the participant system by increasing the prominence of agency while reducing the relative emphasis on relational attribution. More importantly, the emergence of Behaver roles exclusively in the AI-generated translations reveals that machine translation not only restructures process-types but also introduces new participant functions that reshape the experiential organization of the translated discourse.

5.3 Circumstantial Elements in the Source Text and its English Renderings

Table 3 presents the distribution of circumstantial elements across the French source text and its English versions. The findings indicate substantial stability in circumstantial organization, with only subtle but meaningful shifts in the linguistic framing of experiential context. By specifying Location, Cause, Manner, and Accompaniment, circumstantial elements play a crucial role in situating collective action, national identity, and Pan-African consciousness within the discourse.

Table 3: Distribution of Circumstantial Elements across Source Text and English Versions

Circumstance	Source (%)	Human (%)	ChatGPT (%)	Google (%)	DeepL (%)	Experiential Trend
Location	23.08	37.50	37.50	47.06	44.44	Increasing spatial grounding
Cause	53.85	43.75	43.75	35.29	27.78	Declining causal motivation
Manner	15.38	12.50	12.50	11.77	22.22	Generally stable; strengthened in DeepL
Accompaniment	7.69	6.25	6.25	5.88	5.56	Highly stable
Total	100	100	100	100	100	

As it can be inferred from the table, the French source text is characterized by a predominance of circumstances of Cause (53.85%), indicating that the anthem primarily construes experience through purpose, motivation, and ideological justification. Circumstances of Location (23.08%) provide the geographical grounding of national identity, while circumstances of Manner (15.38%) and Accompaniment (7.69%) play comparatively supportive roles in specifying how collective action is undertaken and with whom.

Across the English translations, the overall circumstantial system remains remarkably stable, as all four renderings preserve the same four circumstantial categories found in the source text. However, their relative prominence is redistributed. In the human translation and ChatGPT, circumstances of Cause remain the most frequent circumstantial type (43.75%), although their proportion declines relative to the source text, while circumstances of Location increase to 37.50%. Google Translate and DeepL display a more pronounced redistribution, with circumstances of Location becoming the dominant circumstantial element (47.06% and 44.44%, respectively), accompanied by a substantial reduction in circumstances of Cause (35.29% and 27.78%). This shift suggests that the AI-generated translations place a greater emphasis on spatial grounding and symbolic geography than on the explicit motivational orientation that characterizes the French original. Circumstances of Manner remain relatively stable across the source text, the human translation, ChatGPT, and Google Translate, but increase noticeably in DeepL (22.22%), indicating a stronger emphasis on the manner in which actions are realized. By contrast, circumstances of Accompaniment are the least frequent circumstantial category across all versions, exhibiting only minimal variation and suggesting that meanings of collective association and co-presence are consistently preserved in translation.

Overall, the findings indicate that experiential reconstruction at the circumstantial level is characterized less by the introduction of new circumstantial meanings than by a redistribution of their relative prominence. While the English translations preserve the anthem's overall circumstantial organization, they differ in the extent to which they foreground causal motivation or spatial orientation. These subtle shifts contribute to nuanced differences in the linguistic representation of ideological commitment, national belonging, and Pan-African identity across the human and AI-generated translations.

6 DISCUSSION OF THE FINDINGS

This section discusses the findings derived from the comparative transitivity analysis of *L'Honneur de la Patrie* and its four English renderings. The findings demonstrate that although the translations generally preserve the anthem's ideological progression, they reconstruct its experiential organization to varying degrees through shifts in process-types, participant roles, and circumstantial elements. These shifts are not merely grammatical but reshape how national identity, collective agency, patriotic commitment, and Pan-African solidarity are represented across the human and AI-generated translations.

6.1 From Identity through Being and Doing to Identity through Collective Action

One of the most significant findings concerns the redistribution of process-types across the corpus. The French source text exhibits a relatively balanced distribution of relational (43.75%) and material (56.25%) processes, with a slight predominance of material processes. This distribution suggests that the anthem constructs national identity simultaneously through ***being*** and ***doing***. Relational clauses define who the citizens are—as *brothers and sisters* and *children of the same fatherland*—whereas material clauses construe what they collectively do in defending, building, and advancing the nation. National identity therefore emerges as both an established communal reality and an ongoing collective project.

Furthermore, the four English translations systematically reinforce the action-oriented dimension of this experiential organization. The human translation shows the strongest shift towards materiality, with material processes accounting for 76.47% of all processes. ChatGPT and DeepL similarly privilege material processes (70.59% and 66.67%, respectively), while Google Translate remains closest to the source text in its material-relational balance (56.25% material; 25.00% relational). More importantly, all three AI systems introduce behavioral processes that are absent from the source text and the human translation.

From an ideological perspective, these findings suggest that the translations increasingly reconstruct nationalism as collective action rather than symbolic affiliation alone. While the French original balances identity definition with collective action, the English renderings—particularly the human translation—foreground active participation, responsibility, and civic engagement. Identity thus becomes less a static condition of belonging than a dynamic process of national commitment. This observation supports Halliday's (1978) and Fowler's (1991) contention that grammatical choices shape ideological representation by foregrounding particular ways of construing social reality.

6.2 Reconstructing Collective Agency through Participant Roles

The redistribution of participant roles further reinforces this shift towards an action-oriented construal of national identity. In the French source text, Carrier (22.86%) and Attribute (22.86%) constitute the most prominent participant roles, reflecting the importance of relational clauses in defining collective identity through shared qualities and affiliations. At the same time, Actor and Goal roles each account for 17.14%, indicating that agency already plays a substantial role in the experiential organization of the anthem. Identity is therefore constructed through a complementary interaction between symbolic attribution and collective action.

Across the four English renderings, however, participant roles increasingly foreground agency. The human translation records the highest proportion of Actor roles (31.25%), followed by ChatGPT (27.27%) and DeepL (26.47%), while Google Translate remains comparatively close to the source text (18.75%). Correspondingly, Carrier and Attribute roles decline across all translations, reflecting a reduced reliance on relational attribution in favor of action-oriented representations of citizenship. Goal roles remain remarkably stable across all versions, indicating that although the translations redistribute agency, they consistently preserve the entities affected by collective action. Likewise, Token and Value roles exhibit minimal variation, suggesting that symbolic identification and ideological equivalence remain largely intact across both human and AI translations.

A particularly noteworthy finding is the emergence of Behaver roles in the AI-generated translations. While absent from both the source text and the human translation, Behavers account for 3.03% of participant roles in ChatGPT, 9.38% in Google Translate, and 5.88% in DeepL. Their emergence parallels the introduction of behavioral processes and indicates that AI systems reconstruct the participant system by introducing experiential functions that are not encoded in the French original. Collectively, these findings show that the translations increasingly represent citizens as active initiators of national action rather than merely as symbolic members of a national community.

6.3 Behavioral Processes and the Emergence of Identity-as-Performance

Perhaps the most distinctive finding concerns the appearance of behavioral processes in the AI-generated translations. Behavioral processes are entirely absent from the source text and the human translation but occur in ChatGPT (5.88%), Google Translate (18.75%), and DeepL (11.11%). Within SFL, behavioral processes occupy an intermediate position between material and mental processes because they construe observable manifestations of conscious behavior (Halliday & Matthiessen, 2014). The emergence of behavioral processes introduces a new experiential dimension into the translated discourse. Expressions such as *stand tall* and *stand forward* reconstruct patriotic commitment as embodied performance rather than simply symbolic identity or purposeful action. National belonging becomes something that citizens visibly enact through posture, stance, and physical presence.

Google Translate illustrates this tendency most clearly, exhibiting the highest proportion of both behavioral processes and Behaver roles. Consequently, patriotism is represented less as symbolic affiliation or collective endeavor than as visible public performance. Although these additions may appear grammatically subtle, they significantly reshape the experiential profile of the anthem. They demonstrate that AI-generated translation is capable not only of transferring meaning but also of introducing new experiential resources that were not explicitly foregrounded in the source discourse.

6.4 Spatializing Nationhood and Pan-African Consciousness

The circumstantial system displays considerably greater stability than the systems of processes and participants. All the versions preserve the same four circumstantial categories—Location, Cause, Manner, and Accompaniment—indicating that translation reconstructs experiential meaning primarily through changes in relative prominence rather than through the introduction of new circumstantial meanings. The French source text is dominated by circumstances of Cause (53.85%), emphasizing purpose, motivation, and ideological commitment. This predominance reflects the anthem's repeated orientation towards collective aspirations expressed through purposive constructions such as *pour l'honneur de la Patrie*, *pour ces nobles idéaux*, and *pour construire ensemble un monde de paix, de justice et de progrès*. National identity is thus represented not merely as territorial belonging but as a collective project sustained by shared ideals.

Across the four translations, however, the prominence of circumstances of Cause gradually decreases while circumstances of Location become increasingly salient. In the human translation and ChatGPT, for instance, circumstances of Cause remain the dominant circumstantial category, although their proportion declines to 43.75%, accompanied by an increase in circumstances of Location (37.50%). Google Translate and DeepL display a more pronounced redistribution, with circumstances of Location becoming the dominant circumstantial category (47.06% and 44.44%, respectively), while circumstances of Cause decline substantially. This redistribution foregrounds the geographical and symbolic dimensions of national identity. Locative expressions such as *From the shores of the Niger to the edges of Ténéré/ From the banks of the Niger to the far reaches of the Ténéré/ From the banks of the Niger to the borders of the Ténéré*, and *In the sky of Africa and in the whole universe*/ *In the skies of Africa and throughout the universe/ In the African sky and throughout the universe in the skies of Africa* become increasingly prominent, thereby strengthening the spatial imagination of the nation and reinforcing the anthem's Pan-African orientation. At the same time, the reduced prominence of circumstances of Cause slightly attenuates the explicit motivational framing characteristic of the French original. Thus, while the source text primarily emphasizes why citizens should act, some AI-generated translations increasingly emphasize where national and continental identity is situated.

6.5 Human and AI Translation as Experiential Reconstruction

Taken together, the findings demonstrate that translation constitutes a process of experiential reconstruction rather than simple linguistic transfer. Across all the three dimensions of transitivity (processes, participants and circumstances), the translated versions reorganize the linguistic resources through which national identity and Pan-African consciousness are represented. The French source text constructs identity through a complementary interaction between ***being*** and ***doing***. The human translation strengthens the action-oriented dimension of this experiential organization by substantially increasing material processes and Actor roles while preserving the original ideological progression. ChatGPT follows a similar trajectory but introduces limited behavioral resources, thereby slightly expanding the experiential repertoire. Google Translate departs more noticeably from the source text through the introduction of behavioral processes and a stronger emphasis on spatial grounding, whereas DeepL combines increased materiality with behavioral expansion and heightened locative orientation.

These findings support discourse-oriented approaches to translation that conceptualize translation as a process of ideological recontextualization rather than formal equivalence (House, 2015; Baker, 2018; Munday, 2016, 2022). More importantly, they demonstrate that experiential meaning is reconstructed through the interaction of process-types, participant roles, and circumstantial elements rather than through lexical substitution alone.

7 CONCLUSION

This paper investigated how transitivity shifts reconstruct national and Pan-African identity across *L'Honneur de la Patrie* and its four English renderings: a widely circulated human translation and translations generated by ChatGPT, Google Translate, and DeepL. Drawing on SFL, particularly the transitivity system, and adopting a comparative descriptive mixed-methods research design, the study compared the distribution of process-types, participant roles, and circumstantial elements to examine how experiential meaning is reconfigured across translation modes.

The findings reveal that the French source text constructs national identity through a complementary interaction of relational and material processes, presenting nationhood simultaneously as a shared state of belonging and a collective project of action. Across the English renderings, however, systematic transitivity shifts reorganize this experiential configuration. All the four translations increase the prominence of material processes and Actor roles, thereby foregrounding collective agency, civic responsibility, and action-oriented representations of identity. Furthermore, the AI-generated translations introduce behavioral processes and Behaver roles that are absent from the source text and the human translation, expanding the experiential repertoire through embodied representations of patriotic commitment. At the circumstantial level, although all the versions preserve the same circumstantial categories, they redistribute their relative prominence. In particular, Google Translate and DeepL place a greater emphasis on circumstances of Location, whereas the source text and the human translation retain a stronger orientation towards circumstances of Cause, thereby preserving the anthem's purposive and ideological framing.

These findings confirm that translation is not a process of neutral linguistic transfer but one of experiential and ideological reconstruction. Through systematic transitivity shifts, the translations redistribute agency, reorganize participant relations, and reconfigure contextual framing, thereby reshaping how national identity, collective agency, patriotic commitment, and Pan-African consciousness are represented across languages. While the human translation generally remains closest to the experiential organization of the French original, the AI-generated translations exhibit varying degrees of restructuring that introduce new experiential resources and subtly transform the ideological profile of the anthem.

The study makes three principal contributions. Theoretically, it demonstrates the explanatory power of the transitivity system for investigating how experiential meaning and ideological representation are reconstructed through translation. Methodologically, it illustrates the value of integrating quantitative analyses of transitivity distributions with qualitative discourse analysis to examine ideologically significant texts such as national anthems. Empirically, it extends research on AI-mediated translation by showing that both human and machine translation systems participate in ideological meaning-making through systematic shifts in process-types, participant roles, and circumstantial elements, rather than merely transferring lexical content across languages.

Despite these contributions, the study is limited to a single African national anthem and its four English renderings. Consequently, the findings should not be generalized to all anthem translations or all AI translation systems. Future research could extend this analytical framework to larger multilingual corpora of African national anthems, compare additional human and machine translation systems, or integrate other SFL metafunctions—such as logical metafunction (a sub-category of the ideational metafunction realized by taxis and logico-semantic relations), interpersonal metafunction (realized by mood and appraisal) and textual metafunction (realized by theme, cohesion and information structure)—to develop a more comprehensive account of how national identity and ideological meaning are negotiated across languages, genres, and translation technologies.

STATEMENTS ON COMPLIANCE WITH ETHICAL STANDARDS

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The authors declare no conflicts of interest regarding this manuscript.

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