

ECOLOGICAL PERSONIFICATION IN LUTSOTSO ENVIRONMENTAL DISCOURSE: A RELEVANCE-THEORETIC ANALYSIS

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Abstract

The problems of ecology have now been recognized as not only scientific but also cultural and linguistic, and conveyed through discourse in the face of ecological crisis. This study examines how ecological personification is used as a cognitive-pragmatic resource in Lutsotso discourse to construct meaning and raise awareness about the environment. The study is based on Relevance Theory (1986, 2016) developed by Dan Sperber and Deirdre Wilson. The research was designed with a qualitative discourse analytic approach. The expressions of ecological personification were selected purposively from spoken interactions, storytelling, and eco-conversations among the Lutsotso speech community, yielding a total of 15 expressions. The expressions were chosen because they often described the natural world in a way that made it seem like a person and clearly expressed environmental issues that reflected the community's lived experience with the environment. Their selection was based on how often they appeared, their context, the inferential meaning they conveyed, and their representation of human attributes assigned to environmental elements. The selected expressions were then analysed in relation to the principles of Relevance Theory to examine how interlocutors derive other contextual and ecological interpretations from them. It was found that natural persons, including rivers, forests, soil, rain, lakes, grass, earth, and others, are often attributed with human emotions, memory, speech, intentions, and moral judgment. These personifications convey inferential meanings about environmental degradation, climate change, ecological trauma, moral responsibility, and conservation awareness. Ecological personification in the text of Lutsotso is not just a stylistic tool but a cultural and communication strategy that helps, among other things, deepen emotional involvement, cognitive interpretation, and environmental consciousness. The results suggest that indigenous ecological expressions need to be embedded in EE, communication, and governance processes. The study not only addresses issues in cognitive pragmatics, ecolinguistics, and environmental communication but also preserves indigenous knowledge systems for sustainable environmental management.

Keywords: Cognitive pragmatics; Ecolinguistics; Environmental discourse; Lutsotso; Personification

1.0 Introduction

There has been a growing interest in the role of language in environmental discourse as the urgency of the ecological crisis and the effects of climate change have grown in recent years. In particular, environmental issues are no longer reduced to scientific or economic ones; instead,

they are increasingly understood as discursively, cognitively, and culturally mediated (Stibbe, 2021; Goatly, 2017). In this context, language is not a transparent channel of communication, but a powerful means of constraining and shaping people's perceptions, attitudes, and actions vis-à-vis the environment.

Specifically, one of the most successful linguistic techniques used in environmental communication is personification, which involves attributing human characteristics such as emotions, intentions, actions, and moral reasoning to environmental entities. As a result of this strategy, the environment (in the form of land, water, forests, and weather) is presented not merely as a resource but as a participant in human activity. As a result, the environment is presented as a morally relevant entity in human relationships, promoting a sense of care and stewardship toward it (Stibbe, 2015; Goatly, 2017). Thus, personification is important for developing environmental awareness and promoting sustainability practices.

Cognitive-pragmatically, in particular, in Relevance Theory, meaning is not merely encoded in language but inferentially constructed through the interplay of linguistic and contextual factors. In other words, hearers infer the meaning by drawing on assumptions, cultural knowledge, and cognitive processes (Wilson & Sperber, 2016; Carston, 2019). Accordingly, personification is a communicative strategy that guides interpretation by anthropomorphizing environmental phenomena. For example, statements like "the river is crying" or "the land judges actions" are not taken literally; rather, they invite hearers to infer environmental meanings such as environmental degradation or the moral implications of human actions. Therefore, personification increases communicative relevance by providing tangible, relatable, and emotive meanings to abstract ecological ideas.

While the use of metaphor and personification in global environmental communication has received much attention, there is a dearth of studies on how these linguistic resources are used in indigenous African languages (Mühlhäusler & Peace, 2017; Stibbe, 2021). Specifically, in the case of Luhya languages, such as Lutsotso, while research has been conducted on phonology, morphology, and syntax of the language, little scholarly attention has been paid to discourse-pragmatic meaning (Ongarora, 2016; Barasa, 2018). Consequently, language in the creation of environmental knowledge and sustainable

practices in these settings has not been well investigated. As such, this research aims to redress this oversight by exploring the role of personification in Lutsotso discourse as a cognitive-pragmatic tool for raising environmental awareness and promoting sustainable engagement with the environment.

Historically and culturally, Lutsotso is spoken by the Abatsotso, a group within the Abaluhya in western Kenya. The Abaluhya are one of the largest Bantu-speaking communities in Kenya and have a history of migration from the Great Lakes and Central African regions (Were, 2017; Ochieng', 2018). Through generations, the Abatsotso have nurtured a deep and enduring connection with their environment, particularly through agriculture, livestock rearing, and forests and rivers. As a result, their worldview and personification are rooted in a strong human-environment connection, viewing the environment as sentient and responsive (Ogola, 2019; Akuno, 2021). In this worldview, personification is naturally an expression of the ecological relationships and promotes harmony, respect, and sustainability (Ndlovu-Gatsheni, 2020).

Linguistically, Lutsotso is spoken mainly in western Kenya, including Kakamega Central and its neighboring districts in Kakamega County. This area has fertile land, high rainfall, and significant ecological features, including the Kakamega Forest, Kenya's only tropical rainforest (Kenya National Bureau of Statistics, 2019; Wanyonyi, 2020). In this environmental setting, the Abatsotso's livelihood and lives rely heavily on ecology. Thus, environmental factors such as rainfall, fertility, and forests are key themes in the domain. Here, personification is a useful and relevant strategy for understanding and sharing ecological knowledge, and fosters environmental understanding and behavior towards sustainability.

The Lutsotso (Olutsotso) language is a member of the Bantu language family and the Luhya language branch (Nurse & Philippson, 2017; Eberhard et al., 2023). Like other Bantu languages, it has an agglutinative structure and a system of noun classes that regulate agreement. Crucially, these properties allow for the production

of rich meanings, such as metaphorical and personified expressions. But, while this is possible, previous studies have largely focused on formal grammar, ignoring meaning at the discourse level (Barasa, 2018; Ongarora, 2016). So, this study highlights the need to explore their use in context to convey ecological meaning.

This study contributes to the fields of language, culture, and ecology. By examining personification of the ecosystem in Lutsotso discourse and analysing it using Relevance Theory, this study seeks to show that ecological meaning is not simply stated but inferentially derived from culturally specific expressions. In conclusion, this study adds to the discourse in pragmatics, cognitive linguistics, and ecolinguistics, and to the recognition of the role of indigenous languages in raising environmental awareness, promoting sustainability, and preserving ecological knowledge (Mühlhäusler & Peace, 2017; Stibbe, 2021).

1.1 Objectives

This study aims to examine the case of ecological personification in Lutsotso discourse in the framework of Relevance Theory. Specifically, the study:

1. identifies expressions of ecological personification in Lutsotso discourse to communicate experiences and concerns in the environment.
2. explains how ecological personification is used as a cognitive-pragmatic tool to create environmental meanings and ecological awareness for Lutsotso speakers.
3. analyses the implicatures, the ecological meanings of personified expressions of the environment, the cognitive effects, and the processing effort that make up the field of Relevance Theory.

2.0 Literature Review

Ecolinguistic scholarship broadly concurs that language influences what and how one sees in the environment, as well as one's ecological actions, and that the perception of language's effect on ecological action is a complex phenomenon not yet fully understood. Previous research mostly addressed discourse and ideology in environmental communication (Stibbe, 2015,

2021), while Critical Discourse Analysis examined power relations in environmental discourse (Fairclough, 2015; Carvalho, 2018). While these methods do reveal the ideological nature of nature, they are generally still descriptive rather than cognitive or inferential in how ecological meanings are interpreted in real communication.

Figurative language, particularly metaphor, has also been a focus of research in cognitive linguistics regarding environmental meaning-making. George Lakoff and Mark Johnson argue that metaphors profoundly shape how the environment is understood because they encapsulate abstract phenomena in terms of familiar human experiences. Similarly, Flusberg, Matlock, and Thibodeau (2018) show that such metaphors affect one's environmental reasoning and policy attitudes. But these studies tend to focus on metaphor and marginalize personification as a unique approach to ecology. Moreover, Kövecses (2020) argues that cognitive linguistics holds that there are universal patterns of metaphorization and that cultural differences in environmental conceptualization are ignored. Likewise, meanings are culturally bound and therefore cannot be explained by universal cognitive models, as Sharifian (2017) suggests, but rather by indigenous ecological knowledge systems. These critiques are significant because they show that there is a need for an analysis of figurative environmental expressions in African indigenous languages that goes beyond the general theory of metaphor.

Research on African languages has shown that the concept of ecological personification is a frequent feature in environmental communication on the continent. In Yoruba discourse, Akinyemi (2016) found that rivers and forests were regarded as moral agents capable of rewarding or punishing human actions, thereby enforcing the community's environmental ethics. As Okafor (2018) found in his study of Igbo proverbs, land and nature are emotionally responsive objects that foster social responsibility towards nature. Both studies successfully introduce the ethical aspects of ecological language, but primarily through ethnographic and literary approaches, and neither provides an account of how listeners infer

ecological meaning from such personifications in interaction.

Furthermore, research in southern Africa confirms the communicative value of ecological personification. The Xitsonga oral stories examined by Mafela (2017) indicate that forests and rivers are personified to reinforce the community's conservation values and ecological responsibilities. Similarly, the study by Chitando (2020) on songs and folktales in the Shona language shows that environmental degradation is depicted through humanized imagery of the earth with a broken heart, angry rivers, and forests in pain. These studies, however, tend to be more symbolic and representational than cognitive-pragmatic in this regard. Therefore, they describe the meaning of ecologised personifications culturally but offer only a limited amount of information on how interlocutors infer their meaning.

The study of figurative language in the environment has also been examined in indigenous contexts in East Africa. A study on Kiswahili environmental poetry by Mulokozi (2019) shows how the poem uses personification to evoke the sense of drought, pollution, and ecological distress in an emotionally engaging manner. In a similar vein, Wanjiru's (2021) study of Gikuyu oral discourse reveals that land and forests are portrayed as entities with memory, judgment, and feelings. Whilst these studies effectively identify the importance of figurative language in fostering environmental awareness, they remain stylistic and descriptive, failing to adequately discuss the inferential processes by which a hearer can extract meaning from context in relation to the environment.

Indigenous ecological discourse also indicates that personification represents relationships ontologies where humans and non-humans are interrelated actors in the same ecological system (Mühlhäusler & Peace, 2016; Ndlovu, 2021). This type of research suggests that the environment is not simply regarded as material resources but also as social and moral actors. This view makes a very important contribution to the branch of linguistics called 'ecolinguistics', but the literature treats personification primarily as a

cultural worldview rather than as a communicative and cognitive process. Consequently, little attention has been paid to the pragmatic nature of ecological personifications in discourse and to the role they play in shaping interpretations of a text and emotions in its readers.

This has been reinforced by recent advances in ecolinguistics, via the notion of "stories we live by" (Stibbe, 2021) that suggest that environmental stories drive ecological practice and ethical understanding. In this light, phrases like "the river is crying" or "the land is tired" convey empathy more effectively than technical descriptions of the environment. This approach, while recognizing the rhetorical power of ecological narratives, is less likely to incorporate cognitive-pragmatic models that account for listeners' interpretations of such expressions in their context. Little empirical research has integrated both the concepts of ecolinguistics and the Relevance Theory to elucidate hearers' implicatures and contextual meanings in personified ecological discourse.

In Luhya studies, most research has focused on phonology, morphology, and syntax (Ongarora, 2016; Barasa, 2018), with little attention paid to the discourse-pragmatic and ecolinguistics dimensions. As a result, there is little research that has explored the process of personification in the construction of ecological meaning in Lutsotso discourse. Furthermore, despite the applications of Relevance Theory in metaphor research, irony research, and studies on non-literal communication (Wilson & Sperber, 2016; Carston, 2019), few studies have examined indigenous African environmental discourse and how it can be described in terms of Relevance Theory. This raises theoretical and empirical issues regarding the cognitive processing and interpretation of culturally specific ecological personifications in communicative settings.

Hence, the present study goes beyond previous descriptive and stylistic studies by combining ecolinguistics, African-language empirical research, and cognitive pragmatics. In contrast to most previous research, which focuses solely on ecological symbolism, this study examines ecological personification in Lutsotso

discourse as a cognitive-pragmatic strategy used to create and convey environmental meanings of degradation, conservation, climate change, and ecological responsibility for speakers and hearers. The study, in turn, contributes to the African ecolinguistic literature and illustrates the role of Relevance Theory in the understanding of inferential meaning construction in indigenous ecological discourse.

3.0 Theoretical Framework

This research adopts the cognitive-pragmatic lens of Relevance Theory to explain the process of meaning-making and interpretation in communication. First of all, the theory was developed by Dan Sperber and Deirdre Wilson in their seminal work *Relevance: Communication and Cognition*. In constructing this theory, the researchers aimed to go beyond previous pragmatic theories, particularly those of H. P. Grice, which accounted for communication in terms of cooperative principles and conversational maxims. Instead, Relevance Theory proposed a more cognitive explanation of communication, suggesting that people are driven by a need for relevance rather than following a series of conversational principles. Over the years, the theory has gained influence across fields such as linguistics, cognitive science, and discourse analysis, especially regarding how people interpret literal and figurative language in context (Wilson & Sperber, 2016; Ifantidou, 2019).

Building on this legacy, Relevance Theory rests on a number of principles that account for the way we interpret. First, it argues that communication is inferential, which means that listeners infer more than merely decoding linguistic expressions and construct meaning by bringing together linguistic and non-linguistic knowledge. In particular, the theory rests on two principles. On one hand, the cognitive principle of relevance implies that cognitive processes strive to maximize cognitive effects while minimizing cognitive effort. On the other hand, the communicative principle of relevance suggests that all utterances come with a default presumption of optimal relevance, which in turn leads the hearer toward an appropriate interpretation meaning but complemented by contextual information, and

implicatures, that is, further meanings derived from what is said.

Notably, these inferential processes are helpful for interpreting non-literal speech, such as personification. In these contexts, literal meanings are often unlikely or unsatisfying; thus, the hearer is encouraged to seek a more contextually plausible interpretation that maximizes cognitive effects. For example, when a speaker says that "the land judges actions", the hearer will not interpret this literally but rather will infer an ecological meaning concerning the consequences of eco-abuse. Thus, interpretation is optimal in terms of relevance because it maximizes the balance between cognitive effort and interpretive gains, and personification is a powerful tool for communication.

In this theoretical context, Relevance Theory is particularly relevant to this study as it offers a sophisticated way of thinking about personification in ecological communication. In particular, it allows us to view personification as something more than a stylistic flourish; namely, as a cognitive-pragmatic tool for effective communication. By assigning human traits to environmental features, speakers make abstract ecological ideas more tangible, familiar, and appealing. This makes the statements more accessible and persuasive.

Moreover, the theory is especially helpful in analysing discourse in indigenous languages, where cultural knowledge is pivotal to meaning construction. In such contexts, personification may be rooted in cultural beliefs, enabling speakers and listeners to rely on shared presumptions about human-environment interactions. Thus, Relevance Theory can account for how these culturally embedded expressions are efficiently inferred, ultimately promoting environmental understanding and practice. To sum up, by drawing on both cognitive pragmatics and ecolinguistics, Relevance Theory provides a holistic framework for analysing the communicative and interpretive roles of personification. It not only explains the inferential processes of meaning construction but also underscores the role of personification in increasing relevance, thereby promoting

environmental awareness and moral responsibility among members of particular cultural and linguistic groups.

4.0 Research Methodology

This research is qualitative, focusing on the relevance-pragmatic interpretation of personification of ecology in the discourse of Lutsotso, guided by Relevance Theory (Sperber & Wilson, 2016). The overall orientation is interpretive: the aim is to make the interlocutors' constructions and interpretations of meaning in the context of ecology understandable, rather than just to describe the language on the surface. In this aspect, the study focuses on the inferential process of communication, which is part of figurative language used to represent environmental realities. Data sources and data collection are naturally occurring ecological discourses in the Lutsotso speech community. No data were invented; rather, they were gathered using an authentic, contextual "triangulated" process. First, ecological expressions were observed and recorded in spontaneous conversations, storytelling situations, and community-based environmental discussions. Secondly, informal data was also elicited through conversations with speakers, especially on drought, flooding, farming, deforestation, soil degradation, and conservation. Some expressions were even reconstructed from oral memory - the participants recalled the most frequent and typical ecological sayings or narrative forms that are part of everyday communicative situations. This triangulation of observation, elicitation, and oral recall ensured that the dataset was more likely to reflect real-life communicative experiences than artificially created examples.

All the expressions were recorded and then reproduced in Lutsotso and translated into English, with an attempt to maintain their form and pragmatic meaning. In total, fifteen (15) expressions of ecological personification were chosen for analysis. The selection was based on sound methodological principles. First, expressions were selected by other community members based on their terms of use in the community's ecological discourse. Their level of contextual relevance, particularly regarding

environmental issues such as climate variability, pollution, soil degradation, water stress, and ecological conservation, was also considered. In addition, expressions that were inferentially rich in meaning, especially beyond literal meaning, were prioritized. Last, only expressions clearly demonstrating ecological personification, in which natural things like rivers, soil, wind, forests, grass, land, and rain are given human attributes like emotion, speech, memory, intention, or judgment, were selected.

The data were first systematically organized into contextual categories (water, land, vegetation, and climate discourse) before they were compiled and selected for analysis. This organization provided an organized analysis of ecological significance in various environmental domains. All the analysis was conducted within a pragmatic Relevance-Theoretic framework. Firstly, each expression was analysed at the explicative level, i.e., the meaning linguistically encoded is identified and enriched by context. Literal interpretations, such as "the river is crying" or "the soil is tired," were immediately discovered to need inferential adjustments in most cases. The analysis then continued with the analysis of implicature derivation, which involved deducing intended ecological meanings from the contextual assumptions shared in the Lutsotso community. By this approach it was assumed that the presence of emotional or cognitive terms of nature was linked to environmental factors, such as deforestation, pollution, overgrazing, or climate imbalance.

In addition, the effects of each expression on cognition were analysed. It was noticed that ecological personification creates an emotional response, empathy towards the environment, moral reflection on human responsibility, and a conceptual reframing of the environment as an active player rather than a passive resource in ecological processes. Simultaneously, processing effort was addressed in accordance with Relevance Theory, which confirmed that while literal meanings are dismissed as implausible, inferential meanings exhibit strong contextual effects and low processing costs, which is the optimal processing. Importantly, the procedure was a systematic

inferential sequence. First, the meaning of each expression was identified literally. Then pragmatic incongruities were identified, in which non-human entities had human properties. Then, appropriate background information on environmental realities in the Lutsotso community was brought to life. It was followed by inferential derivation of ecological meaning, and finally, the interpretations were synthesized according to relevance, relating linguistic form, context, and environmental understanding.

Ethically, the study ensured the responsible handling of indigenous ecological knowledge by interpreting all expressions in their communicative and cultural contexts, thereby avoiding misinterpretation. Translation was carefully done to ensure the integrity of meaning, acknowledging that the data are part of the community's collective ecological knowledge system. This study is well grounded in a Relevance-pragmatic approach that considers ecological personification as an inferential communicative strategy. The study shows how Lutsotso speakers build ecological meaning in their daily speech through observation, elicitation, oral memory reconstruction, transcription, translation, and contextual inference. In conclusion, the concept of meaning in ecological personification arises when linguistic form, contextual assumptions, and inferential processes interact, grounded in the principle of relevance.

5.0 Data Presentation and Analysis

In this section, we present and analyse 15 examples of ecological personifications from a collection of environmentally oriented discourse. The examples are analysed as prototypical statements found in ecological stories, indigenous environmental talk, and community environmental discourse. These items are analysed in terms of Relevance-Theoretic (RT) explicature, implicature, cognitive effects, and processing effort (Wilson & Sperber, 2016; Carston, 2019). The exploration shows that personification is a cognitive-pragmatic strategy used to produce ecological meaning and raise environmental concerns.

Instance 1: “Omwalo kuliriranga obukhonyi” [The river is crying for help.]

Context: Used in the discussion of water pollution.

When used in discussions about water pollution, the statement “*omwalo kuliriranga obukhonyi*” [The river is crying for help] is an arresting example of ecological personification, treating a natural body of water as emotionally responsive. At the level of explicature, the statement imagines the river metaphorically crying, invoking a human emotion to a natural feature. This immediately suggests that the statement is not to be taken literally but figuratively.

At the level of implicature, it directs the hearer to infer that the river is in a state of ecological distress, probably due to pollution and human interference. The "cry for help" does not refer to vocalization but rather to an inferential clue signalling ecological suffering that needs human intervention. In the context of Relevance Theory, the hearer automatically rejects the literal meaning as implausible and infers a contextually relevant meaning that optimizes the message's relevance by connecting it to background knowledge about pollution and its impact. These inferences have powerful cognitive consequences, including emotional activation. The use of the expression evokes feelings of sympathy and empathy as human suffering is mapped onto the river, making the environmental issue more relatable and relevant to the listeners. Thus, abstract concepts of pollution are cognitively transformed into accessible emotional responses, reducing the cognitive load needed to comprehend the problem's severity. In sum, the personification of the river in "crying for help" is communicatively significant as its de-abstracts environmental pollution and makes it a morally weighty and emotionally engaging issue. As a consequence, it heightens environmental concern and promotes a sense of environmental care.

Instance 2: “Omutsuru kulaheranga obutinyu” [The forest is breathing heavily]

Context: Deforestation discussion.

The expression “*omutsuru kulaheranga obutinyu*” [The forest is breathing heavily], when used in discussions of deforestation, is an example of personification, in which the forest is

linguistically represented as a sentient being that can respond physiologically. At the explicature level, the phrase directs the hearer to imagine the forest as a person who is breathing, especially breathing heavily. Such anthropomorphism does not invite a literal interpretation, but rather a metaphorical one in which natural processes are transposed onto human physiological processes. At the level of implicature, the statement invites the hearer to infer that the forest is under significant environmental stress, most likely due to deforestation, destruction, or human overexploitation. The metaphor of "heavy breathing" serves as a trigger for the hearer to interpret environmental imbalance, that the forest is having trouble "breathing" and keeping its processes in balance. According to Relevance Theory, the hearer does not understand the utterances literally; they dismiss the implausible literal meaning and instead construct a contextual and relevant meaning based on their background knowledge of forests, environmental stress, and human impact on ecosystems.

From a cognitive-pragmatic perspective, the breathing metaphor elicits embodied cognitive responses. The association of the forest with a human physiological process enables the hearer to perceive the state of the forest in an easily accessible and embodied manner. This makes the abstract concept of environmental damage more concrete and the impact of deforestation more perceptually real. Therefore, the forest is no longer seen as a passive geographical entity but as an active and vulnerable system with "labored breathing". In short, the expression creates a sentient victim of environmental degradation. As a personified entity, it is perceived as an organism capable of suffering and experiencing distress, thereby prompting emotional and ethical responses. This rhetorical strategy heightens environmental awareness by turning environmental degradation into a tangible, ethically loaded experience and by inviting the hearer to appreciate the vulnerability of ecosystems and the need for conservation.

Instance 3: ‘*Liloba lichonyere okhulisia emikhono chilahendanga ta*’ [The soil is tired of feeding careless hands.]

Context: Over-farming and soil exhaustion.

The statement "*Liloba lichonyere*" [The soil is tired of feeding careless hands,] in the context of over-farming and soil fatigue, personifies the soil as a sentient, emotional, and physical actor in farming relations. At the level of explicature, the statement anthropomorphizes soil with the human experience of fatigue and constructs it as if it could get tired, just as human beings do after a hard day's work. The use of this particular form of speech deliberately animates the soil, transforming it from a passive resource into an active participant capable of experiencing states such as "being tired".

At the level of implicature, the statement implies that overuse, improper farming methods, and unsustainable exploitation have led to loss of soil fertility. The reference to "careless hands" also suggests reckless human management, implying that the soil's degradation is not an accident but an outcome of irresponsible agricultural practices. In the context of Relevance Theory, the hearer does not take the statement at its face value; they infer a meaning through a process whereby the implausibility of soil becoming tired gives rise to a contextually relevant meaning. This resolves human agricultural activity to environmental effects, based on cultural and experiential inferences about land practices and ecological impacts. The cognitive implication of anthropomorphizing is important because it leads the hearer to moralize farming. The personification of soil as a being that can be exhausted prompts the listener to think of agriculture not only as a technical and economic enterprise, but as an ethic of human-environment relations. This moralization enhances cognitive engagement by encouraging consideration of responsibility, stewardship, and sustainability when interacting with the land. Our final interpretation is that the soil is discursively constructed as an ethical actor in farming. It is not simply a passive medium for agricultural production, but rather a being that reacts to human actions and cries out when abused. The personification of the soil enhances ecological ethics by illustrating that unsustainable agriculture has material and moral implications and by suggesting the need for sustainable interaction

with the land.

Instance 4: “*Ebikulu bikuhenganga Kalakala*” [The mountains are watching us silently.]

Context: Environmental conservation message. The phrase “*Ebikulu bikuhenganga kalakala*” [*The mountains are watching us silently*] creates a strong environmental narrative through anthropomorphism, attributing human qualities of perception to the mountains. In this metaphor, the environment is not passive but is anthropomorphically endowed with the capacity of perception, as if it is able to “see”. This explicature transforms the mountains from a geographic entity to a moral consciousness in the ecological moral world.

According to Relevance Theory, the phrase prompts a more complex inferential process in which the hearer is led from literal meaning to an implicit meaning. The mountains' silence does not mean inaction, but rather a heightened sense of the invisible yet steady moral presence. The implication here is that human action in the environment is not a secret or concealed, even if no human is readily visible. Rather, nature is metaphorically depicted as a constant judge of human behaviour. In this cognitive-pragmatic context, the concept of “watching” does not refer to literal visual processing, but rather serves as a procedural prompt to the listener to interpret ethically. Silence is an important addition here: it allows for inference rather than issuing a warning, thereby creating greater mental effort and stronger context effects. The hearer is encouraged to make an ethical inference whereby environmental devastation is not just physically visible but, at the same time, ethically perceptible. As a result, the expression's discursive function is to assert accountability and responsibility for the environment. The metaphorical representation of the mountains as silent observers renders nature as a moral agent in human affairs. The upshot of this is that the environment does not simply provide the stage for human activity; it is symbolically reconstructed as an eyewitness that “sees” and, in so doing, holds us to account, prompting increased environmental consciousness and moral reflection.

Instance: 5 “*Omuyeka kwachinga oburume bweliruma*” [The wind is bringing messages of

anger]

Context: Climate change discourse.

In the Lutsotso conversational discourse, the phrase “*Omuyeka kwachinga oburume bweliruma*” [The wind carries messages of anger] is a fertile ecological metaphor that allows the encoding of climate phenomena as communicative events. At the explicature level, the wind is anthropomorphized and seen as a messenger, a communicative vehicle that delivers “messages”. The translation of a natural phenomenon from an impersonal meteorological event to an intentional agent in human-environment relations allows the wind to be cast as a mediator in the discourse. In Relevance Theory terms, the statement activates an inferential process on the part of the listener that extends beyond the literal weather reading to infer an environmental meaning. The implicature is that extreme weather events - such as strong winds, storms, or unpredictable climatic changes - are not merely accidental but symbolically represent environmental imbalances. Hence, “anger” is metaphorically used to symbolize environmental imbalance, deterioration, or eco-pain resulting from human actions.

In Lutsotso discourse, this personification is part of a culturally informed interpretive approach that treats natural events as communicatively significant for moral and environmental deliberation. The wind, then, is a communicative sign within the community's discourse system, enabling speakers to encode messages about climate change in culturally familiar terms. This increases interpretive salience, as it invites listeners to treat environmental events not only as physical events, but also as meaningful messages to be heeded. The Relevance Theory analysis also demonstrates that the cognitive impact of this expression is to turn abstract climate science into context-specific meaning. The wind's “anger” enhances emotional and cognitive involvement, leading to an interpretation that connects environmental events with moral responsibility. In conclusion, the implication of this Lutsotso-inspired ecological metaphor is that the wind is an ecological speaker. It is not a passive agent; it “speaks” in symbolic terms, warning about environmental imbalance,

and is part of the cultural construction of nature as an active agent in human moral and ecological responsiveness.

**Instance 6: “*Liloba litsulirana buli likonzo*”
[The land remembers every wound]**

Context: Land degradation discussion.

Within Lutsotso ecological discussions, the idiom “*Liloba litsuliranga buli likonzo*” (“The land remembers every wound”) is a culturally specific metaphor that renders environmental degradation as both physically and morally persistent. At the explicature level, the land is endowed with the human cognitive function of memory, elevating it from an inert physical space to a personified participant able to remember and “recall” prior encounters, especially those that are hurtful or disruptive. From a Relevance Theory point of view, the sentence prompts the listener to infer a more elaborate inferential meaning from the literal meaning. The implicature emphasizes that environmental harm is not ephemeral but cumulative, with enduring consequences. Thus, activities such as deforestation, soil depletion, or land mismanagement are viewed as “*amakonzo*” [wounds] that persist within the ecosystem rather than being erased after the action is over. In the Lutsotso conversational pragmatics, the metaphor of memory adds to temporal interpretation. The land is not only seen as present but also as bearing the memory of past human actions. This conceptualization invites speakers and listeners to link current environmental practices to past behaviour and future environmental consequences, thus broadening the interpretive domain of land management discourse.

The Relevance Theory significance of this metaphorical extension of memory is the enhancement of contextual effects. The metaphorical extension of memory to the land enhances cognitive and emotional salience, contributing to greater cognitive accessibility and moral significance of environmental degradation. The hearer is led to infer that environmental damage is not wiped away but retained in the environment's “memory” for future repercussions or acknowledgment. As a result, the communicative consequence of this idiom is the

promotion of awareness of sustainability in the Lutsotso language community. It conceptualizes the moral responsibility to care for the environment as an obligation conditioned by the environment's temporal continuity. In this sense, the land is construed as a moral repository that documents human behaviour and witnesses acts of care and neglect, thus calling for more sustainable and responsible relations with the environment.

**Instance 7: “*Emisala chimonyanga obuhonyi*”
[The trees are whispering warnings]**

Context: Deforestation awareness campaign.

In the ecological rhetoric of Lutsotso, the idiomatic expression “*Emisala chimonyanga obuhonyi*” [The trees are whispering warnings] is a metaphor that linguistically and socially embodies environmental awareness. At the explicature level, trees are anthropomorphized with human speech, “*okhumonya*” [whispering], which instantly transforms them from silent parts of the physical environment into communicative agents in the ecological milieu. This anthropomorphism presents the forest as more than a passive vegetative structure, but an animate communicative entity. In terms of Relevance Theory, the statement triggers inferential processing by the hearer beyond the semantic content of the utterance. The implication is that deforestation and ecological degradation are not covert processes but can be perceived through ecological signs that convey implicit warnings. The “*okhumonya*” [whispering] of trees represents subtle yet consistent ecological signs of imbalance, such as species loss, erosion, and forest degradation.

In Lutsotso's communicative practice, this metaphor accentuates the view of nature as a warning system in everyday environmental experience. The listener is encouraged to perceive ecological changes as non-random, non-arbitrary, and significant. Thus, the trees become semiotic agents whose “speech” is saturated with environmental caution and calls for communities to acknowledge the effects of environmental exploitation. The Relevance Theory process also demonstrates the intensification of cognitive effects in this aural metaphor. Speaking in a whisper rather than at a normal volume conveys

both urgency and subtlety, thereby encouraging the listener to make more inferences. This elevated inferential effort increases environmental risk awareness and, at the same time, incorporates moral responsibility into the interpretation of the environment. In all, the communicative function of this Lutsotso expression is to promote environmental conservation by anthropomorphizing trees as communicators of warning. In short, trees are seen as communicators of environmental distress, as living indicators of risk, whose "voices" call for environmental conservation and ecologically responsible action.

Instance 8: "*Omwalo kulafwitsanga kalakala*" [The lake is dying slowly]

Context: Water pollution and eutrophication.

The Lutsotso ecological discourse, the idiom "*Omwalo kulafwitsanga kalakala*" [The lake is dying slowly], offers an effective metaphor of slow death to represent environmental degradation. At the explicature level, the lake is explicitly attributed to the state and process of dying, which is a quality-of-life attribute. Such a choice of words transforms the lake from an inorganic structure into an organism dying, thereby emphasizing its fragility. According to Relevance Theory, the statement requires the listener to infer more than the literal depiction of change. The implication is that the lake is undergoing a catastrophic environmental change, perhaps due to pollution, eutrophication, and human contamination. The "slow death" of the lake conveys the idea that environmental degradation is not sudden but gradual; it occurs over time and is often noticed but often neglected until it reaches a tipping point.

In Lutsotso's communicative practice, the concept of dying facilitated stronger cognitive and emotional processing of the message. The temporal element of the metaphor, "slowly", is pragmatically important: it enhances the sense of urgency by indicating that it is a process in the making and that it can still be reversed by timely action. This aligns with Relevance Theory, which holds that contextual effects are enhanced when hearers infer immediacy and consequences from sparse linguistic data. The metaphoric appeal also boosts environmental awareness. Viewing the lake

as a sentient being under threat, the expression conjures feelings of concern and empathy, leading the hearer to consider the ecological crisis not just as an environmental problem, but as a form of suffering. This semantic transformation enhances the semantic salience of pollution discourse in Lutsotso conversations. In sum, the communicative impact of this expression is to heighten emotional awareness of the environmental crisis and foster a sense of ecological responsibility. The lake is therefore construed as a living entity whose "death" symbolically represents environmental decline. Finally, the lake is not just a water source but a quasi-sentient creature whose decline calls for moral and environmental action.

Instance 9 : "*Eshibala shibolanga okhubira eshimyu*"

[The Earth is talking to us through droughts]

Context: Climate variability.

In Lutsotso ecology, the statement "*Eshibala shibolanga okhubira eshimyu*" ("The earth is speaking through droughts") employs highly inferential rhetoric, representing climate variability as a form of communication. At the explicature level, the earth is anthropomorphized in the sense that it is no longer thought of as an inert physical object but as a communicative agent that speaks in a language of environmental events. From the point of view of Relevance Theory, this utterance encourages the listener to go beyond the literal meaning of 'drought' as a meteorological phenomenon to infer its ecological significance. The implication is that droughts are not accidental natural events, but rather meaningful signs of ecological distress or imbalance, often linked to environmental degradation, climate change, or disrupted ecological cycles. The drought, then, presents itself as a semiotic form in which the environment "speaks".

In Lutsotso's communicative practice, this metaphorical approach reinforces the interpretive relationship between humans and the environment by conceptualizing natural phenomena as communicable. The hearer is encouraged to interpret climate events instead of simply observing them. This transforms ecological knowledge from descriptive to inferential

reasoning, whereby meaning is constructed from context. The Relevance Theory insight is manifest in the conversion of drought into speech. The expression draws on a "speaker" of earth, thereby amplifying contextual effects by inviting the hearer to connect ecological suffering to moral and ecological responsibility. The effort the hearer makes to interpret drought as "speech" yields considerable inferential value in terms of awareness of ecological responsibility and urgency. As such, the communicative function of the expression is to encourage ecological thinking about climate events and heightened environmental awareness among the Lutsotso speech community. Finally, the earth is conceived of as a purposeful speaker, speaking through drought as a symbolic code to convey a state of ecological emergency and to evoke human consciousness, responsibility, and action.

Instance 10: "*Obunyasi bulilinga hasi obwayi obusiro*" [The grass is crying under grazing pressure]

Context: Overgrazing.

In the environmental discourse of Lutsotso, the turn of phrase "*Obunyasi bulilinga hasi obwayi obusiro*" ("The grass is crying under grazing pressure") builds environmental meaning by anthropomorphizing vegetation, thus making ecological stress emotionally relevant. At the explicature stage, grass is humanized by attributing it with the ability to feel human emotions, in this case to "cry", which immediately transforms it from an ecological commodity to an emotionally distressed plant. Relevance Theory suggests that the utterance leads the hearer to infer a meaning beyond the literal representation of grazing, which is overgrazing. The implication is that livestock overgrazing has a negative ecological impact by removing vegetation and causing erosion. The "crying" of grass symbolically represents these ecological effects, enabling the hearer to infer ecological imbalance from a human emotional perspective.

In Lutsotso's communicative practice, the emotional metaphor improves the understanding of the environment. The metaphor of human suffering onto vegetation increases the proximity between ecological events and human morality.

The listener is consequently better positioned to reason that ongoing grazing activity disturbs ecological harmony and undermines ecosystem sustainability. How emotional framing boosts contextual effects illustrates the Relevance Theory process. The crying metaphor attracts and focuses attention on the environmental message, making it stand out. It prompts the listener to build a moral interpretation, in which ecological problems are not merely technical but also cause suffering to components of the ecosystem. Finally, the rhetorical purpose of this expression is to raise awareness of sustainable grazing by invoking empathy for the environment. The verdict is that the vegetation is personified as a suffering entity, and its "crying" under grazing pressure is a metaphor for unsustainable human practices and the need for better environmental stewardship.

Instance 11: "*Omwalo kusinyishe inyanga hino*" [The river is angry today]

Context: Flooding events.

The phrase "*Omwalo kusinyishe inyanga hino*" [The river is angry today] in Lutsotso ecological discourse serves as a metaphor that anthropomorphizes hydrological events as affective ecological phenomena. At the level of explicature, the river is considered to be in a human emotional state of anger, transforming it into a sentient being with the capacity for emotion and affect. This anthropomorphism places the river in an active role in its interactions with the environment rather than treating it as a passive natural resource. According to Relevance Theory, the hearer is encouraged to infer more than the literal meaning of flooding. The implicature is that the river's flooding is not simply a mechanical process. The event is not merely an annual occurrence but rather a manifestation of natural forces that signify the imbalance of the ecosystem and environmental uncertainty. The river's anger symbolizes the volatility and destructive potential of high water, especially in the context of environmental disturbances such as deforestation, mismanagement, or climate change. Communicative practice is a cognitive tool for understanding risk. By attributing human emotions to nature, the metaphor allows hearers to readily infer danger while also tapping into both moral and

experiential knowledge. The river's anger becomes a culturally recognizable alert that communicates flooding as both a physical risk and an important event that demands careful consideration and attention.

The Relevance Theory relevance of this metaphor lies in its effect of heightening accessibility and contextualization. The angry metaphor increases salience, making the message more relevant. It steers the listener toward an interpretation of nature as dynamic, highlighting the ecosystem's unpredictability and vulnerability. In short, the communicative outcome of this expression is to increase awareness of environmental risk, leading to adaptive responses to flooding. In all, the river is perceived as an emotional ecological figure who is "angry" because of the powerful, even violent effects of ecosystem imbalance, calling for cautious and respectful attitudes towards natural water sources.

Instance 12: "*Liloba lilobanga okuhana obiokhulia*" [The soil refuses to give crops]

Context: Soil infertility.

Lutsotso ecological discourse categorizes environmental meaning through the metaphor of refusal, which refers to soil infertility and declining productivity as a refusal to produce crops. At the explicature level, the intentionality of the soil - its ability to "refuse" - linguistically elevates it from an inert resource to an active agent in the production of food. In terms of Relevance Theory, the expression demands that the listener infer a more contextually enriched meaning than a literal agricultural interpretation. The implicature is that infertility and productivity loss are not accidental but are derived from ecological problems, such as depletion, overuse, soil erosion, or unsustainable agricultural practices. The concept of "refusal" metaphorically represents environmental consequences through the land's negative response to human actions.

In Lutsotso's communicative strategy, personifying the soil as an agent enhances the message's interpretive power. By suggesting that low yield is an "agricultural decision" made by the land, the expression invites farmers and the broader community to view environmental consequences and outcomes as interactive and not

passive. This perception promotes understanding of the self-regulatory nature of crop productivity through environmental stewardship and sustainable land use practices.

The Relevance Theory process accounts for increased contextual effects arising from metaphorical intentionality. While the soil doesn't actually act, the inferential extension to "refusal" draws a powerful connection between human actions and ecologically responsive conditions. This promotes recognition of the relationship between agricultural practices and environmental consequences, and as such, causal and moral reasoning. In the end, the rhetorical effect of this expression is to encourage soil preservation and sustainable farming. Therefore, it is concluded that the soil is personified as an active agent in Lutsotso's ecological imagination, one that "decides" whether to produce crops based on the treatment it receives, thereby promoting environmental responsibility and stewardship.

Instance 13: "*Omutsuru kulindanga abana be*" [The forest is protecting its children]

Context: Conservation narrative.

In the Lutsotso ecological narrative, the phrase "*Omutsuru kulindanga abana be*" [The forest is protecting its children] creates an ecology in which the forest is endowed with protective and parental agency. At the explanatory level, the forest is endowed with human ability to protect, and its elements are metaphorically construed as "*abana*" [children]. The use of this phrase shifts the semantics of the forest from an ecological to a relational being, grounded in protection and guardianship. In light of Relevance Theory, the hearer is encouraged to move beyond a literal reading and build an inferential meaning that is enriched by the notion of ecological relationships. The implication is that the ecosystem's biodiversity depends on the forest, and any damage to the forest will affect the flora and fauna that live there. The metaphorical "*abana*" [children] depend on the forest for food, shelter, and survival.

In Lutsotso's communicative practice, the metaphor of family is important in solidifying emotional and moral concern for environmental preservation. The metaphorical expression lessens

the conceptual gap between humans and nature, promoting a sense of community and responsibility. The forest is therefore not just a physical environment but also a caring parental figure that nurtures and protects. The Relevance Theory perspective contributes to the understanding of this metaphor's role in increasing contextual effects through rich inference. Protection evokes cultural associations of responsibility, care, and kinship, making the environmental claims more relevant, engaging, and meaningful. This enhances cognitive salience and emphasizes the need for conservation.

In all, the communicative function of this expression is to foster protective attitudes and biodiversity conservation. The implication is that in Lutsotso's ecology, a protective metaphor of the forest is activated as a figure that nurtures and preserves life, thereby requiring human reciprocity to sustain ecosystems.

Instance 14: “*Ifula ihananga ishihanwa eshilayi khumukunda*” [The rain is rewarding good land]

Context: Agricultural success narratives.

In Lutsotso ecological discourse, the phrase, “*Ifula ihananga ishihanwa eshilayi khumukunda*” (“Rain is rewarding for good land”), creates a moralized understanding of agricultural productivity, attributing evaluative capacities to meteorological events. At the level of explication, the rain is endowed with evaluative powers, turning it into a moral entity that assesses human actions of land use. The statement demands from the listener, from the perspective of Relevance Theory, more than a simple literal interpretation of the relationship between rain and agricultural success. The implicature is that good land and good crops are not simply fortuitous, but related to the proper use of land. The notion of “good land” alludes to soil management, land-use practices, and environmental stewardship that preserve ecological equilibrium, which in turn, contributes to agricultural success.

In Lutsotso communicative practice, the moral judgment implied by the idea of rain as “rewarding” reflects a culturally embedded inclination to see nature as responding to human moral behaviour. This reinforces the association

between environmental care and agricultural performance, leading farmers to view ecological responsibility as integral to livelihood. The Relevance Theory model is applicable in inferring moral meanings from environmental events. Rain's reward value imbues the interpretation of climate with a moral dimension, in which environmental events serve as a means of judging ecological action. This enhances contextual effects by enabling the hearer to combine environmental perception with moral appraisal, thereby reinforcing the concept of ecological responsiveness to human behavior. In sum, the communicative impact of the expression is to foster sustainable agricultural practices by integrating ecology with ethics. The take-home message is that rain is imagined as a moral agent in Lutsotso's ecology, a “reward” for sustainable farming practices that reinforces human responsibility for environmental productivity.

Instance 15: “*Eshibala shililiranga hasi wa obusiro bwabandu*” [The earth is sighing under human pressure]

Context: Discussion of climate change.

In Lutsotso ecological discourse, the phrase “*Eshibala shililiranga hasi wa obusiro bwabandu*” [The earth is sighing under human pressure] creates a highly emotive environmental discourse in which the earth is linguistically anthropomorphized as a person who is fatigued. At the level of explication, the earth is anthropomorphized and given the human function of “*shililiranga*,” [sighing], a vocal gesture associated with tiredness, pain, or emotional overburden. This reconceptualizes the earth as a physical ecological system into a sentient being capable of suffering. From the standpoint of Relevance Theory, the statement encourages the listener to interpret beyond the literal imagery, triggering a range of contextual inferences about human-environment relations. The implicature is that humans are placing unsustainable demands on ecological systems through activities such as deforestation, pollution, over-consumption, and unsustainable development, which is resulting in environmental degradation and climate change. The metaphor of “sighing” symbolically refers to this stress, rendering the otherwise unseen effects

of environmental damage cognitively and affectively accessible.

In Lutsotso communicative culture, the metaphor of sighing is pragmatically important as a signifier of fatigue. It mobilizes a human universal metaphor of tiredness to make the concept of environmental distress more accessible. This promotes ecological empathy by inviting hearers to view ecological problems not as abstract scientific notions but as an emotional experience of suffering, ascribed to the land itself. The insight from Relevance Theory is seen in the use of emotional expressions as cues for inferential enrichment. Sighing amplifies contextual effects by reducing complex environmental realities to a single emotionally enriched expression. The listener is encouraged to infer a moral evaluation in which environmental degradation is not only perceived but also morally relevant, warranting reflection and redress. Therefore, the communicative upshot of this expression is to enhance ecological empathy and ecological responsibility among Lutsotso speakers. It is concluded that the earth is viewed as an empathetic being in pain, whose "sighing" is a metaphor for human pressure and, by extension, a call for ecological stewardship and coexistence.

6.0 Results and Discussion

The study of the fifteen Lutsotso ecological expressions shows that ecological personification is a predominant cognitive pragmatic strategy used by the speakers in the construction, negotiation and transmission of environmental meanings. In the entire data set, natural entities such as rivers, forests, soil, land, wind, grass, rain, mountains, lakes, and earth are endowed with human attributes such as emotion, speech, memory, intention, and moral judgment. Unlike previous research on ecolinguistic and discourse analysis, which mainly examined such expressions as symbolic representations of nature (Stibbe, 2015, 2021; Fairclough, 2015; Carvalho, 2018), the present analysis reveals their significance as 'more than' symbolic, in terms of 'inferential interpretation guided by Relevance Theory'.

First, the results show the dominance of the emotional personification pattern. The whole

array of expressions like "the river is crying," "the grass is crying under grazing pressure," "the earth is sighing," "the forest is breathing heavily," "the lake is dying slowly" always relate degradation of ecosystems to emotional and physiological states of humans. Unlike the universalist view of metaphor as a conceptual mechanism (Lakoff & Johnson, 2016; Flusberg et al., 2018), emotional mapping is not only conceptual but also context-specific and culturally bound, which contradicts universalist views on metaphor (Kövecses, 2020; Sharifian, 2017). Importantly, these are not just interesting figurative expressions of nature – they are instead "inferential prompts" that lead the listener from the literal impossible to the ecologically meaningful: pollution, deforestation, overgrazing, and climate stress.

Furthermore, the results corroborate and build upon those of previous studies conducted in Africa. In the realm of Yoruba discourse, for example, Akinyemi (2016) demonstrates how nature is moralized, while in Igbo proverbs, Okafor (2018) illustrates the moralization of nature and its agency. Similarly, Mafela (2017) and Chitando (2020) show that personification is used to reinforce environmental ethics in the ecosystems of the Xitsonga and Shona languages, respectively. Yet despite the success of these studies in bringing the ethical aspect of ecological language to the fore, they are predominantly ethnographic and representational and do not account for how listeners actually make sense of and understand the language in the context of actual interaction. The present research builds on these findings by showing that ecological meaning is not merely encoded but is instead inferentially constructed through explication and implicature processing, thereby addressing an important lacuna in the body of African ecolinguistic research.

Moreover, the analysis shows a second pattern, namely, "communicative personification", which is the representation of nature as a speaker or a messenger. Patterns of anger, warnings from trees, warnings from the earth, are all expressed like this. These results contrast with the results obtained by Critical Discourse Analysis (CDA), which tends to highlight ideology and power

dynamics in environmental discourse (Fairclough, 2015; Carvalho, 2018), because they show that environmental meaning also occurs at a micro-pragmatic level of environmental meaning, that is, when natural phenomena are considered as communicative acts. The Lutsotso data here builds on the concept of “stories we live by” developed by Stibbe (2021) and demonstrates that nature is not just telling a story but also serves a communicative purpose as an active participant, with interlocutors needing to make inferences when decoding the story.

Second, a third major finding is for the attribution of intentional or moral agency. The soil refuses to yield crops; the land remembers every wound; rain rewards good land: ecological systems are seen as having memory, judgment, refusal, and reward. Ndlovu (2021) and Mühlhäusler and Peace (2016) have noted that IEKS involve relational ontologies as the interconnection of humans and non-humans, but the present results suggest that such ontologies are not merely cultural beliefs but are pragmatically invoked in discourse through inferential reasoning. These expressions have strong contextual effects in Relevance-Theoretic terms, converting environmental consequences into morally interpretable outcomes, thereby leading to greater cognitive engagement and ethical reflection. Family metaphors, like “the forest is protecting its children”, on the contrary, further show how ecological relations are linguistically represented by the kinship structure. Previous research (e.g., Stibbe, 2021) has established that ecological narratives are emotional because they draw the reader into the situation, but the Lutsotso data suggest that ecological narratives are more accurately cognitive because they involve the least processing effort while also being emotionally and morally salient.

The analysis reveals a consistent interaction between the explicature and the implicature in all cases, using a Relevance-Theoretic approach (Sperber & Wilson, 2016; Carston, 2019). The literal meanings at the level of explicature are recognized as pragmatically enriched interpretations as soon as they appear, such as: a person “cries”, “refuses” to eat, “forgets”

something, “sighs”, etc. (anthropomorphism). At the level of implicature, however, hearers infer about ecological issues such as degradation, variability, pollution, and unsustainable human activities. This lends credence to Wilson and Sperber's argument that there is no encoding of communication.

Most importantly, the study brings a theoretical contribution beyond the existing literature: ecological personification in Lutsotso is not just figurative or rhetorical; it is a cognitive-pragmatic means of environmental reasoning. This study shows that meaning is produced through the interplay of the processes of contextual inference, emotional activation, and relevance-driven interpretation, which avoids the conceptual mapping approach of cognitive linguistic accounts and the framing of ideology of ecolinguistics approaches.

Lastly, the results indicate that the ecological personification has three big communicative effects. It de-abstracts environmental science, making ecological processes cognitively accessible for the first time. Second, it moralizes environmental relationships, making nature a judge, a repository of memory, and a mere reaction. Third, it increases emotional involvement, leading to empathy, concern, and ecological responsibility. Together, these effects illustrate the performative nature of ecological discourse in Lutsotso and how it shapes perceptions and actions regarding the environment. Finally, in the conclusion, this study shows that ecological personification in Lutsotso's discourse is a systematic inferential strategy with cultural implications and cognitive effectiveness in environmental communication. It adds to ecolinguistics research by combining African-language empirical findings and Relevance-Theoretic pragmatics to provide a more holistic picture of the dynamics of ecological meaning construction, interpretation, and internalization in African communicative settings.

7.0 Conclusion

The analysis of the fifteen Lutsotso ecological expressions shows that ecological personification is a key cognitive-pragmatic process that undergirds the creation,

understanding, and expression of environmental meaning. First, the analysis shows that there is a recurrent pattern in which natural entities such as rivers, soil, wind, forests, grass, land, rain, mountains, lakes, and the earth are endowed with human qualities such as emotionality, speech, memory, intention, and morality. Thus, nature is linguistically reconstructed as not simply a passive physical backdrop but as an interactive, responsive, and moral player in human affairs.

Further, the study reveals that, according to Relevance Theory, these expressions operate in a close interplay between explicature and implicature. On the one hand, explicatures offer explicit anthropomorphisms such as crying, talking, remembering, and refusing. On the other hand, implicatures direct the listener to more complex ecological meanings, such as pollution, deforestation, climate change, overgrazing, soil erosion, and ecosystem imbalance. Thus, ecological issues are not only stated but also implied, felt, and evaluated.

Finally, the study shows that ecological personification improves cognitive and emotional processing. That is, abstract environmental events are personified into human events, thus diminishing the complexity of interpretation and enhancing emotional engagement. In turn, audiences are more likely to sympathize with ecological events and appreciate environmental degradation as morally and socially relevant. Finally, the analysis shows that Lutsotso's ecological discourse invites us to view nature as a communicative, sentient, and moral system. As such, environmental literacy is not just scientific but cultural, ethical, and relational, and humans are environmental stewards in a responsive

environment.

8.0 Recommendations

Based on these insights, several recommendations are put forward. Firstly, indigenous ecological metaphors in Lutsotso discourse should be incorporated into environmental education programs. This is because metaphors improve understanding by expressing abstract ecological ideas in familiar, accessible ways. Secondly, environmental campaigns should be designed to include ecological personification, as this has been found to promote greater emotional response, moral reasoning, and action. Thus, by personifying environmental issues in culturally familiar imagery, conservation knowledge and sustainable behaviour can be enhanced. Thirdly, more research should be conducted on other types of Lutsotso discourse, such as folktales, songs, proverbs, and ritual discourse, to better understand the linguistic encoding and transmission of environmental knowledge from one generation to the next. Secondly, studies on other African languages should be promoted to determine whether similar cognitive-pragmatic strategies of ecological personification exist and how they vary in shaping environmental ethics and worldviews. Lastly, environmental policymakers and stakeholders should acknowledge the contribution of indigenous language resources to environmental management. By drawing on indigenous ecological worldviews in devising and delivering environmental policies, more pragmatic, culturally relevant, and sustainable environmental management can be achieved.

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