




## RESEARCH ARTICLE

Section: *Literature, Linguistics & Criticism*

## Lexical metaphors in Minyak Pengalun: Unveiling the ecological and cultural identity of Karo tradition

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### ABSTRACT

The purpose of this study is to determine how the Karo people's ecological and cultural identity is reflected and constructed through lexical metaphors, as found in Minyak Pengalun. This study used a qualitative study design, gathering data through semi-structured interviews with community elders and traditional healers, and document analysis of cultural texts about Karo customs. The metaphors were identified, categorised, and interpreted using methods of metaphor analysis. Nature as a Healer, Purity and Traditional Wisdom, Cultural Continuity and Heritage, Integration and Unity, Ritual and Traditional Knowledge, and Spirituality and Talent are the six categories of metaphors of equality that the results show. These analogies define Minyak Pengalun as a profound cultural artefact that represents the Karo community's fusion of nature, culture, and spirituality, going beyond its status as a form of medicine. The Minyak Pengalun metaphors indicate the continuation of cultural practices that emphasise ecological harmony by reflecting the Karo people's reverence for the environment and knowledge as conveyed via a worldview. This study advances knowledge about the importance of language and traditional expressions in preserving the ecological and cultural legacy of indigenous groups, such as the Karo people.

**KEYWORDS:** lexical metaphors, ecological identity, cultural identity, traditional knowledge

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## 1. Introduction

The study of metaphors has long fascinated linguists and cultural theorists, particularly in the realm of lexical metaphors, which serve as vital instruments in shaping thought and cultural identity (Santrauka, 2020). Lexical metaphors, which involve the application of words and phrases to convey meanings beyond their literal interpretations, are powerful tools in expressing cultural narratives and ecological concerns (Lempp et al., 2023). In the context of indigenous traditions, these metaphors become particularly significant as they encapsulate the values, beliefs, and environmental interactions of the communities they represent (Kövecses, 2015). The Karo people of North Sumatra, Indonesia, possess a rich cultural tapestry, deeply intertwined with their ecological surroundings. One of the central elements of Karo tradition is *Minyak Pengalun*, an oil derived from local plants, which holds substantial cultural and ecological significance (Roseva Sari Br Bangun & Sabariah Bangun, 2021; K. E. Tarigan & Lubis, 2022).

Despite the richness of the Karo tradition, there remains a notable gap in the literature regarding the role of lexical metaphors in understanding this cultural phenomenon. Previous research has primarily focused on the lexical features of Karo language and culture or explored ecological themes in isolation from cultural expressions, and also on the medicinal uses, cultural practices, and traditional knowledge surrounding Karo oil, but they do not explore the use of metaphors or language in these traditions (Abdullah, Wahidin, Wibowo, & Mariani, 2023; Aritonang, Lubis, & Sujarwo, 2024; Suharti, Kartika, & Sugiyanta, 2021). This oversight highlights a need for comprehensive studies that bridge these domains, offering insights into how lexical metaphors can illuminate the intricate relationship between ecology and cultural identity. Additionally, much of the existing literature lacks a specific focus on *Minyak Pengalun* as a symbol of Karo ecological and cultural identity, leaving a crucial aspect of Karo tradition unexplored.

The primary research problem of this study addresses the limited understanding of how lexical metaphors in *Minyak Pengalun* reflect and construct the ecological and cultural identity of the Karo people. By analyzing these metaphors, the study seeks to uncover the underlying beliefs and values that inform the Karo's relationship with their environment and the broader implications for cultural identity. This investigation will involve an examination of various texts, oral traditions, and local narratives where *Minyak Pengalun* serves as a focal point for metaphorical expression.

The significance of this study lies in its potential to contribute to a deeper understanding of the Karo tradition and the ways in which language shapes ecological awareness and cultural identity. By unveiling the lexical metaphors associated with *Minyak Pengalun*, this research not only enriches the field of metaphor studies but also offers valuable insights into the cultural practices of the Karo people. Furthermore, this study may serve as a model for similar investigations within other indigenous cultures, emphasizing the importance of language in preserving and articulating ecological and cultural narratives. Ultimately, by exploring the intersection of language, culture, and ecology.

## 2. Review of Literature

### Conceptual Metaphor

It is within this context that Zhang (2021) develops some of the foundational ideas of Conceptual Metaphor Theory (CMT). The researcher realizes that metaphors are not strictly linguistic in nature but are instead at the very core of human thought and the structuring process as relates to reality. In a similar vein, it reinforces the overall idea that metaphors are central to human thinking but takes it a step further with the emphasis on embodiment within human experience. He introduces shades of meaning, such as the contextual and conceptual aspects of metaphors, and presses the bounds of literal versus figurative language. Metaphors are more than linguistic ornamentation; they reflect deep cognitive mappings between different conceptual domains (Ge, Mao, & Cambria, 2022; Simamora et al., 2025; Yusuf, Widayati, Mbete, & Aswani, 2021). The metaphorical expressions are considered the linguistic manifestations of those conceptual relations in human cognition. For example, the phrase "TIME IS MONEY" describes how an abstract target domain, like time, is understood through money as a more concrete source domain so that abstract concepts become more tangible and accessible. Stefano Gandolfo provides a critical approach to the use of CMT, emphasizing the culturally bounded nature of metaphorical thinking and questioning the possibility of using CMT universally across different cultures and historical times. He calls on scholars to adapt and requalify his CMT findings whenever

working with culturally other texts, in particular those emanating from traditions such as premodern China, for which the convention about the relationship between language, images, and the world is radically different from Western conventions. As Akbulut (2023) says, “conceptual metaphors can constitute a conceptual basis for understanding both similarities and differences between cultures”. She provides examples of idiomatic expressions both in English and Turkish to prove how conceptual metaphors operate differently across languages. For example, the literal meaning of idiomatic expressions in English, such as “it is raining cats and dogs,” does not have any equivalent in Turkish, but it is a culturally adapted counterpart. This underlines the fact that metaphors carry information about the cognitive processes and cultural standpoints that are specific to each language. It makes CMT a very helpful assistant for translators in understanding how people of different cultures conceptualize their experience.

### Ecological Identity and Cultural Identity

The concept of ecological identity relates to how individuals and communities perceive themselves in relation to their natural environment. Thurkey & Rahbarianyazd (2024) mention that ecological identity is described as the connection between humans and their natural surroundings, affecting how urban spaces are designed and utilized. This identity is expressed through the integration of natural elements like parks and gardens in traditional urban spaces, which enhances cultural significance and fosters a deeper understanding of a community’s ecological character. Ecological identity encourages the incorporation of environmentally sustainable elements, strengthening the bond between a community and its environment, while supporting urban conservation efforts and promoting cultural value. Ecological identity is viewed as a profound cultural-environmental connection shaped by the traditional ecological practices and values passed down through generations. This ecological identity is critical for maintaining the balance between humans, nature, and cultural heritage, particularly in multi-ethnic societies, where ecological culture intertwines with cultural traditions to ensure sustainability and cultural preservation (Petrova & Yarovoy, 2019). According to Peng (2023), cultural identity is a broad concept that incorporates various dimensions like national, racial, gender, and social identities, which evolve and are influenced by social, cultural, and historical contexts. Cultural identity is inherently dynamic and constantly changing, influenced by both personal and societal factors. Peng emphasizes the multi-layered nature of cultural identity, shaped by factors such as language, social interactions, and ecological surroundings.

### Karo Traditional Practices

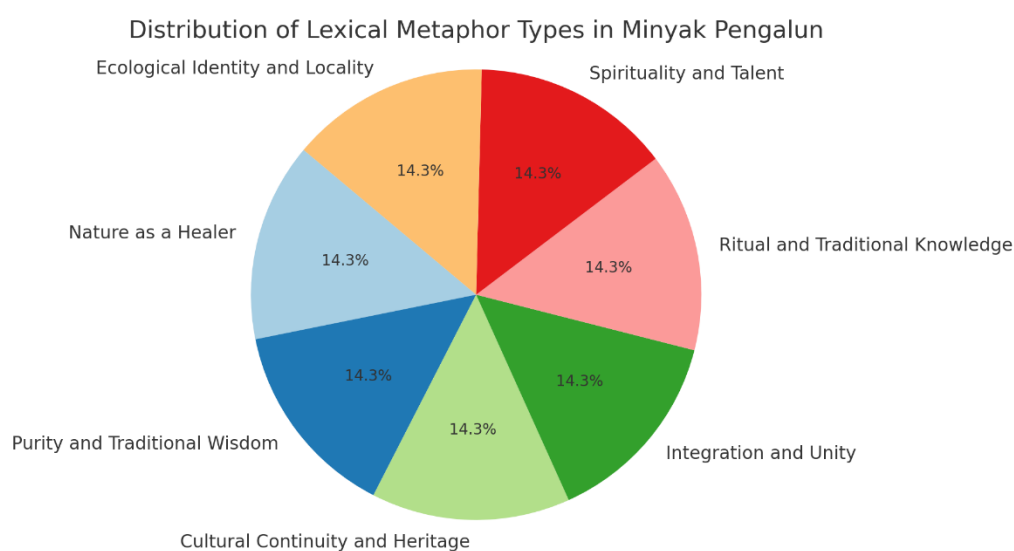
Karo Traditional Practices include cultural, medicinal, and ecological customs, the largest of which consists of traditional practices concerning healing, the use of medicinal plants, and ways of preparing herbal remedies. These are some of the community’s local environmental and heritage resources that preserve knowledge passed down from ancestors through generations. Previous studies, such as Tarigan, Yusro, Arbiastutie, & Mariani (2022), assert that the herbal treatments are accorded to the Karo people, especially those living in Doulu Village, by Battra or traditional herbal healers. They use a total of 31 plant species, with 16 being from the *Zingiberaceae* family, to treat common illnesses: fever, stomach ailments, and respiratory problems. Other studies are done dealing with Ethnobotanical Knowledge and Its Preservation (Singarimbun, Elfrida, & Indriaty, 2024), which shows how the ethnic group Tiganderket Karo utilizes 92 medicinal species belonging to 44 plant families. Among them, boiling is the most-used preparation method; the subsequent boiling process preserves the healing aspects of the plant. Zai, Sinaga, and Sinulingga (2024) also explore the Traditional Oil of Minak Pengalun with 31 Locally Made Ingredients: Ginger, Turmeric, and Betel Leaf, Produced in Dokan Village, discovering how different health diseases are cured with the produced oil in Dokan Village, which even became a symbol for the interrelation between language, culture, and the natural environment. It stresses the preservation of this activity as an expression of Karo’s linguistic and ecological heritage. The examples listed by the three studies, Karo Traditional Practices, are one of the integral parts of Karo people’s identity, including medicinal plant knowledge, traditional treatment methods, and production of culturally significant remedies such as Minak Pengalun. These activities are contributing to the community’s healthcare and becoming a way to keep cultural and ecological knowledge alive.

### 3. Method

In order to investigate how Minyak Pengalun's lexical metaphors represent the ecological and cultural identity of the Karo heritage, this study used a qualitative design. Semi-structured interviews and document analysis were the two techniques used to gather data. Traditional healers and elders from the community who are familiar with Minyak Pengalun were interviewed, with an emphasis on their language, customs, and cultural traditions. To find more metaphors and linguistic patterns that represent the cultural and ecological background, historical writings and cultural documents pertaining to Karo customs were also examined. Metaphor analysis approaches were used for data analysis in order to find, classify, and interpret metaphors in documents and interviews, thereby exposing their cultural and ecological relevance. Throughout the research process, ethical issues included gaining informed consent, protecting confidentiality, and upholding cultural sensitivity while honouring the traditional knowledge of the Karo community.

### 4. Results

Based on the information from the text and the interviews, Figure 1 below shows how different kinds of lexical metaphors are distributed in Minyak Pengalun. The frequency and relative importance of each kind of metaphor in the discussion of Minyak Pengalun are shown graphically in the chart. A thorough examination and justification of the conclusions drawn from the graphic may be found below:



**Figure I.** Distribution of Lexical Metaphor in Minak Pengalun

Referring to Figure 1, the results show that there is an even distribution of lexical metaphors across six different categories. The complex cultural and ecological themes woven into Minyak Pengalun's narrative framework are exemplified by these categories, which together account for 14.3% of the total. Ecological Identity and Locality, Spirituality and Talent, Ritual and Traditional Knowledge, Integration and Unity, Cultural Continuity and Heritage, and Nature as a Healer are among the types of metaphors. Another, equally significant category is Purity and Traditional Wisdom.

#### 4.1 Nature as a Healer

The metaphor of "Nature as a Healer" occupies the largest segment, indicating that the metaphor that is most commonly used in Minyak Pengalun is the portrayal of nature as an active agent in the healing process. The oil's ingredients, which include herbs, roots, and medicinal plants native to the Karo region, are seen as direct manifestations of nature's healing power; the metaphor constructs nature not as a passive resource but as an active participant that provides strength, resilience, and protection to human health. This emphasis on nature reflects the Karo people's deep ecological connection and respect for their environment, and it indicates that their traditional healing practices are based on the belief that health is a gift from nature that needs to be respected and understood.

## **4.2 Purity and Traditional Wisdom**

Next in size is the metaphor for “Purity and Traditional Wisdom.” This implies that the validity of the traditional knowledge and the purity of the ingredients used to make Minyak Pengalun are given much attention. As a metaphor for the holy and unchangeable transmission of ancestors’ knowledge, the oils are frequently referred to as “100% natural” and chemical-free. The emphasis on purity demonstrates the Karo community’s dedication to preserving the uniqueness of their customs. It implies that these oils’ worth is derived from both their physical characteristics and their adherence to age-old knowledge and customs that have been upheld for many generations.

## **4.3 Cultural Continuity and Heritage**

The oils are symbolically seen as cultural relics, according to the “Cultural Continuity and Heritage” section. By carrying the knowledge and identity of the Karo people, the oils are positioned as symbols of ancient wisdom in this metaphor. The oils are seen as cultural artefacts that bridge the past and present, not only as medicinal cures. This metaphor emphasises how important Minyak Pengalun is in maintaining and strengthening the Karo people’s traditional identity. It means that the oils serve as a means of preserving cultural knowledge and continuity in the face of change.

## **4.4 Integration and Unity**

The idea of combining disparate components into a unified whole is emphasised in the “Integration and Unity” section. Minyak Pengalun is prepared by blending a variety of materials to make a well-balanced medicinal product, signifying the union of many ecological, cultural, and spiritual elements. The Karo tradition’s holistic commitment to health and healing is reflected in this metaphor. It implies that power and effectiveness come from the well-balanced fusion of several elements, each of which enhances the whole.

## **4.5 Customary and Ritual Knowledge**

This section exemplifies the metaphor of “Ritual and Traditional Knowledge,” highlighting the temporal and ceremonial aspects of oil preparation. This observance of particular times and customs symbolises alignment with the cycles and rhythms of nature. The metaphor also symbolizes respect for natural cycles and the importance of tradition in the oils’ efficacy. It implies that the method and time of healing, which are based on ecological knowledge and cultural customs, are just as important as the components.

## **4.6 Talent and Spirituality**

Making Minyak Pengalun is seen as a spiritual gift or ability rather than merely a skill, as the “Spirituality and Talent” part demonstrates. The oil is positioned symbolically as the result of ancestors’ or God’s favour. By implying that only people with a unique connection to the spiritual realm can efficiently make the oils, this metaphor gives them a spiritual component. It highlights the idea that healing involves both practical knowledge and spiritual and supernatural impact.

## **4.7 Locality and Ecological Identity**

The use of indigenous flora and components that are exclusive to the Karo region is symbolic, as the “Ecological Identity and Locality” section illustrates. The Karo landscape and the community’s adaptability to and dependence on their surroundings are perceived as being reflected in the oils. The Karo people have a strong bond with their land and the surrounding ecology, which is shown by this metaphor. It presents the oils as emblems of ecological identity and cultural pride, demonstrating how the ancient therapeutic methods are intrinsically linked to the local environment.



**Table 1. Lexical Metaphors in Minyak Pengalun**

No.	Type of Lexical Metaphor	Description	Examples
	Nature as a Healer	Portrays nature as an active participant in the healing process, with ingredients seen as carriers of nature's strength and resilience.	Beras-beras sibaguri as 'guardian of health'; Pijerkeling for balance and restoration.
	Purity and Traditional Wisdom	Highlights the purity of ingredients and the preservation of unmodified traditional knowledge.	Minyak Patah Tulang is prepared without chemicals, symbolizing purity and an unbroken line of wisdom.
	Cultural Continuity and Heritage	Depicts oils as cultural heirlooms that embody the wisdom of ancestors, preserving cultural identity amidst modernity.	Minyak Pengalun is seen as a 'living artifact' connecting past and present.
	Integration and Unity	Represents the integration of diverse elements, ecological, cultural, and spiritual, into a cohesive whole.	Minyak Sehat uses over 100 different plants to symbolize harmony and unity.
	Ritual and Traditional Knowledge	Symbolizes respect for the natural order through adherence to rituals and timing in the preparation process.	Collecting herbs on 'good days' as a metaphor for aligning with nature's rhythm.
	Spirituality and Talent  Ecological Identity and Locality	This indicates that creating oils is a spiritual gift, a 'talent' passed down through generations.  Represents the deep connection to the land and local ecosystem through the use of native plants.	Healer's spiritual gift is in creating oils, despite others' failure to replicate the process. Pijerkeling and Sampelulut are symbols of the Karo landscape and community resilience.

The table I indicates that the predominant metaphors “Nature as a Healer” and “Purity and Traditional Wisdom” illustrate the Karo people’s profound confidence in nature’s healing capabilities and the significance of preserving traditional knowledge’s purity. The other metaphors, including “Cultural Continuity and Heritage” and “Integration and Unity,” further underscore the oils’ function as vessels of cultural and ecological identity, while “Ritual and Traditional Knowledge” and “Spirituality and Talent” introduce dimensions of spiritual and ritualistic importance. This finding indicates that Minyak Pengalun is not only a therapeutic medicine; it is a multifaceted emblem that encapsulates the Karo people’s connection to nature, their cultural legacy, and their spiritual beliefs. The oils symbolise the interconnectedness of humanity and nature, implying that health and wellness are founded on a harmonious and respectful interaction with the environment.

## 5. Conclusion

The metaphors employed in Minyak Pengalun serve as potent reflections of the ecological and cultural identity of the Karo people, establishing a profound ecological worldview interconnected with nature and ancient customs. The metaphorical terms underscore a holistic approach in that nature is not only depicted as a resource but as an active healing force; it becomes indicative of the fundamental value that the Karo community places on ecological balance and sustainability. Of special significance are the metaphors dealing with Nature as a Healer and Purity and Traditional Wisdom, through which the Karo people stress respect for the natural environment and the devotion of the people toward maintaining their traditional knowledge systems pure. Other metaphors illustrating how Minyak Pengalun functions as a symbol for the preservation of culture, uniting past generations with the present, include Cultural Continuity and Heritage, Integration and Unity, and Ritual and Traditional Knowledge. It also becomes evident that the oil is not a medicinal product but a complex artifact of culture that incorporates the interplay between spirituality, health, and ecology in Karo society. This research also analyses how the Karo employ Minyak Pengalun to claim their distinctive ecological legacy in the context of ecological

identity and metaphors of location, lending weight to the declaration of how profoundly devoted they are to their land and the flora endemic to it. Through these analogies, the Minyak Pengalun are consequently built as representations of the Karo way of life. This life encompasses ecological equilibrium and continuity of culture and represents the integration of ancient wisdom into everyday practice. This research not only adds to the increasing literature addressing Karo cultural identity but also shows an example through which indigenous ecological and cultural narratives may be treasured and respected because of their articulation via language. Finally, the usage of linguistic metaphors in Minyak Pengalun reveals that health, culture, and environment have to be regarded as linked aspects of human beings.

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