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AN ECOLINGUISTIC PERSPECTIVE ON EXPERIENCING NATURE IN FORESTS

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Abstract

Analysing positive experiences of nature in forests from a linguistic perspective, the study aims to explore themes, emotions, and metaphors associated with natural green spaces as expressed in English. The method used is a qualitative approach, encompassing principles from ecolinguistics and cognitive linguistics. Through the analysis, appreciative discourses about forests are emphasised in shaping ecological awareness and harmonious behaviour towards nature.

Keywords: forest; emotions; metaphors; ecolinguistics; cognitive linguistics

ЭКОЛИНГВИСТИЧЕСКИЙ ПОДХОД К ВОСПРИЯТИЮ ЛЕСНОЙ ПРИРОДЫ

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Аннотация

Анализируя положительные впечатления от лесной природы с лингвистической точки зрения, это исследование направлено на изучение тем, эмоций и метафор, связанных с природными зелеными пространствами в контексте английского языка. Применяемый метод представляет собой качественный анализ, включающий принципы эколингвистики и когнитивной лингвистики. В процессе исследования акцентируется внимание на позитивных дискурсах о лесной природе, формирующих экологическое сознание и гармоничное поведение человека по отношению к природе.

Ключевые слова: лес; эмоции; метафоры; эколингвистика; когнитивная лингвистика

Introduction

Forests are essential spaces for practicing wellbeing, sustainable thinking, and behaviour. In a modern, often highly urbanised and technological reality, people seek physiological and psychological restoration through nature [1]. In the last decade, experiential tourism became a global phenomenon [2], including immersive nature experiences such as staying in eco-lodges in forests or engaging in forest bathing. Not only are the nature experiences themselves, but also the discourses surrounding them play a significant role in communication, which is increasingly active online today. The present study examines how people talk about forests in online discourse, focusing solely on positive experiences.

Attention to positive experiences of nature and the emotions they evoke in today's ecological reality is underappreciated, partially due to the pressing destructive ecological discourses. Positive psychologists, such as Barbara Fredrickson, state that positive emotions are considered to have a more lasting impact on cognition over time and should be given greater priority within human-nature relationships [4]. Recently, pressing destructive environmental discourses (e.g., biodiversity loss) have seen certain fluctuations towards encouraging discourses about nature, which highlight ways to appreciate nature in life, as well as through language and perceptions of reality [3]. Drawing on these considerations, this study aims to focus on the following:

- 1) To explore how forests are depicted in relation to positive nature experiences;
 - 2) To identify the emotions and metaphors associated with forests.

To achieve this, the principles of ecolinguistics [5] and cognitive linguistics [6; 7] have been utilised within a qualitative data analysis framework. Ecolinguistics examines how language influences ecosystems and shapes communication about nature, while cognitive linguistics explores the interplay between language, cognition, and emotions in shaping our perception of forests.

Walking in the forest

Interest in forests as "fundamental health resources" [8] has consistently heightened, especially as people have begun to spend more time indoors in a rapidly urbanising reality characterised by sedentary lifestyles [9]. Undertaking outdoor activities has been associated with health improvements, including physiological and psychological well-being [10], as well as cognitive and emotional benefits of "passive nature exposure" [11]. The more spectacular nature is (e.g., seeing massive mountains), the greater the impact it has on humans' psychological and spiritual wellbeing [12] and enhance concentration even when experiencing simplified built-up areas [13].

One of the most trending notions associated with forests for the past decade—forest bathing or *Shinrin-yoku*—emerged in Japan. Advocated by the Forestry Agency in 1982, forest bathing was identified as "a form of recreation involving walking and inhaling the fragment substances released by trees" [14]. Such monumental cognitive functions as perception, memory, and attention benefit from forest bathing. Reduced tension and anxiety, elevated mood, improved concentration, and a space to feel creative—all of these provide a positive effect on cognition.

Positive effects of exposure to forests are evident, and the practice has become popular worldwide. Nowadays, travel to forest-bathing destinations is often described mindful, allowing people to enjoy the forest atmosphere. In addition, forest-based activities provide valuable opportunities to contribute to public health. In this sense, the discourse encompasses communities of forest-bathers and hikers, as well as families spending time in forests, which has become increasingly popular.

Intriguingly, virtual reality (VR) blended with nature is enthusiastically implemented in wellbeing practices of relaxation and stress reduction through nature, especially forests [15]. For example, one study showed that even in VR, forest environments were found "to increase the level of vigor and a decreased level of negative emotions". However, the studies also reported "an increased level of fatigue" in VR [16] and cybersickness [17].

Expressing nature through language

Ecolinguistics emphasises the role of language in how we speak about nature and environmental matters, including the climate crisis [18] or human-animal relationships [19; 20]. The intrinsic nature of ecolinguistics is summarised by Arran Stibbe as follows:

Ecolinguistics consists of questioning the stories that underpin our current unsustainable civilisation, exposing those stories that are clearly not working, that are leading to ecological destruction and social injustice, and finding new stories that work better in the conditions of the world that we face.

Recently, a new approach to ecolinguistic studies has emerged based on "the Chinese worldview of harmony" [22]. Named Harmonious Discourse Analysis, this approach focuses on shaping a harmonious way of thinking and an approach to human-nature relationships [23]. In a similarly favourable tone, the present study encourages appreciative discourses of nature by exploring written content that offers positive descriptions of human-nature relationships. To unveil more layers of language in use, conceptual metaphor, as a cognitive tool, and the principles of Conceptual Metaphor Theory (CMT) developed by George Lakoff and Mark Johnson [24] are used to explore conceptualisations of forests. There has been an increase in ecolinguistic studies that explore language and thought by employing CMT to examine the conceptualisations of nature. For example, recent studies in ecolinguistics have employed such metaphorical reasoning to analvse the Chinese concepts of shui (水, water) and huo (火, fire), which are two of the Five Elements (五行, wu-xing) in traditional Chinese philosophy [25].

How we perceive natural environments, such as the ocean or forests, influences the mental images and concepts we have about nature. For example, water can be conceptualised as an abstract "container" full of beneficial goods for people, but it can also be a "home" to marine organisms. Similarly, forests can represent homes for animals and birds, but they can also be thought of as unique rejuvenating spaces.

Expressing forests in language: A qualitative analysis

A demonstrative study has been conducted to showcase how language can be used to examine forests and the positive experiences attached to them. A set of web articles in English has been compiled about the beneficial experiences of forests, comprising 8,256 words. Fifty examples describing forests have been extracted for the analysis, along with the emotion words associated with them. The size of the textual sample reflects a typical online search conducted by an Internet user.

The 50 examples were treated non-numerically [26], meaning they were manually focused on detailed description of forests and their linguistic categories. The grounded theory method [27] was applied to the text analysis, which focuses on extracting information "grounded" in language without any predefined categories. A qualitative "code-as-you-go" procedure has been used, which means applying short labels to the text, such as the keyword "forest", the emotion keyword "happiness", or labels of certain themes traced in the text. It can include a specific idea, a keyword, or recurrent element in text. This data-based approach allows uncovering novel or unexpected insights from the text and disclosing the meaning behind those insights. An illustration of how each of the 50 cases has been treated is provided below:

Example 1. The longevity of trees and forests means they often carry an emotional connection for people, inspire awe and provide a sense of time, and connect people with places and memories.

The main codes for a single example

a sense of time

code

tree forest

connection

emotion

feeling

keywords/phrases trees forests emotional connection; connect people with places and memories conceptual metaphor: force inspire awe; provide a sense of time awe

Findings and interpretations

The main categories identified through the analysis are illustrated in Diagram 1. They comprise themes linked to the positive experiences of nature in forests, emotionally charged descriptions of forests, and their most prevalent metaphorical conceptualisations, all of which are described in more detail in the following sections.

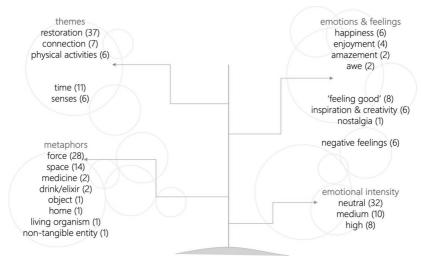


Diagram 1. The main categories identified through the qualitative analysis of the keyword "forest" as expressed in English.

Thematic content

The analysis has shown three prevalent themes in the favourable forest-human experiences as expressed in language: (a) restorative properties of forests, including relaxation, (b) the power of forests to connect people with nature, themselves, other people, as well as with memories, and (c) physical activities, especially walking.

When describing physical activities, the act of walking has been predominant, along with a simple presence in the forest without any intense activities. This includes "gazing at the sky" or "breathing in fresh air". These have been described alongside "camping in the forest" or having an adventure exploring the nature. Some descriptions mentioned the activation of humans' senses when in the forest: "Listening to the

sounds of nature is a magical experience and you only have to look up to feel a sense of amazement."

Restorative properties of forests have been frequently mentioned in relation to "relaxing", "recharging" and, intriguingly, "re-wilding the brain" in the context of digital detox. The descriptions of calming states were more numerous. It appears that time spent in forests can be important when describing experiences of nature. In this regard, particular time periods have been mentioned in relation to restoration and enjoying forests, such as "short-term exposure" or "regularly visiting" forests. In addition to feeling rejuvenated in the forest (not near it, but inside its space), the analysis has shown that forests are spaces for connecting and reuniting with the self, others, and nature: "They know that when people and nature connect, good things happen."

Emotions and other states

Experiencing nature in forests often evokes a myriad of emotions and feelings. Even the limited textual sample included a wide range of emotions: 50 examples comprise 14 emotions and 35 cases of feelings. The emotions include joy and happiness and the more complex awe and amazement. The feelings can be grouped into (a) relaxing feelings ("a sense of peace", "calm"), (b) simply good feelings ("feeling good"), (c) inspiration and creative feelings ("creative", "vigor"), and (d) negative feelings ("anxious", "stress-related exhaustion") that can be eliminated or have their intensity lowered by interacting with the forest: "Consider making a tribute to trees in the form of a story or poem. The creativity that forests provide is second to none." or "Disconnect from the digital world. Don't refresh your social media feeds, refresh your mind instead."

The emotions and feelings have also been analysed for the intensity of their description, with the results of neutral (32 examples), medium (10), and high intensity states (8). An overly descriptive style of emotions and feelings is present with high intensity, as in "I couldn't be happier", "incredible sense of awe", or medium intensity, such as "happier" or "better mood". However, there are more examples that simply mention a certain feeling or emotion without exaggerating them. The exceptions are the descriptions of negative feelings: "After a walk

in the forest, participants were significantly less anxious, slept better, and slept longer."

Metaphorical conceptualisations

The prerogative of metaphorical conceptualisations and figurative expressions is the ability to create vivid imagery beyond the literal meaning and convey complex ideas in a more relatable way. Eight kinds of conceptual metaphors have been identified, with two prevalent types distinguishing forests as abstract FORCES and SPACES that make people feel good and healthy. Forests have an "impact" on humans, "change" mood, "help" or "provide" restoration and refreshment for people. The second predominant conceptualisation suggests thinking of forests as IMMERSIVE SPACES that offer relaxation, connection, and positive emotional experiences within the limits of these green spaces, as indicated by the preposition "in": "Wherever there are trees, we are healthier and happier, [...] it isn't about exercising—like hiking or jogging—it's simply about being in nature."

It is worth mentioning less numerous but salient conceptualisations of forests as MEDICINE, HOME, and unusually—DRINK/ELIXIR. As some type of medicine, forests have been "prescribed" to people to lower stress levels. Commonly, being in nature and away from our homes means feeling disconnected from stressful daily lives, often in hectic urban environments. However, with forests, the feeling of home can imply comfort and safety usually associated with physical places or a feeling that these places can provide for people: "Is the forest your home away from home?" and "Drink in the flavor of the forest and release your sense of joy and calm."

Concluding notes

The value of nature's beneficial influence on humans is difficult to overstate. Not only are the positive experiences of nature vital, but the ways in which people discuss them are crucial in today's dynamic world. Language, cognition, and emotions are pivotal in understanding such communication enhancing awareness of the harmony of human-nature relationships. Ultimately, this study seeks to inspire more explorations of the intricate human-nature relationships, emphasising the need for the appreciative and harmonious ways in which we discuss and engage with nature.

References / Список литературы

- 1. Nukarinen, T., Istance, H. O., Rantala, J., Mäkelä, J., Korpela, K., Ronkainen, K., Surakka, V., & Raisamo, R. (2020). Physiological and psychological restoration in matched real and virtual natural environments. In *Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems (CHI EA '20)* (pp. 1–8). Association for Computing Machinery. https://doi.org/10.1145/3334480.3382956
- 2. Na, Q., Nurmalinda, E., Rianto, R., Djati, S., & Rahmanita, M. (2024). Multisensory Experiential Tourism Strategies in Guangxi, China. *TRJ Tourism Research Journal*, *8*(1), 111-126. https://doi.org/10.30647/trj.v8i1.247
- 3. Huang, G. & Zhao, R. (2021). Harmonious discourse analysis: approaching peoples' problems in a Chinese context. *Language Sciences*, 85, 101365. https://doi.org/10.1016/j.langsci.2021.101365
- 4. Fredrickson, B. L., & Anderson, D. H. (1999). A qualitative exploration on the wilderness experience as a source of spiritual inspiration. *Journal of Environmental Psychology*, 19(1). 21–39. https://doi.org/10.1006/jevp.1998.0110
- 5. Stibbe, A. (2021). *Ecolinguistics: Language, ecology and the stories we live by* (2nd ed.). Routledge.
- 6. Lakoff, G. & Johnson, M. (1980). *Metaphors We Live By*. The University of Chicago Press.
- 7. Kövecses, Z. (2020). *Extended Conceptual Metaphor Theory*. Cambridge University Press.
- 8. Oh, B., Lee, K. J., Zaslawski, C., et al. (2017). Health and well-being benefits of spending time in forests: Systematic review. *Environmental Health and Preventive Medicine*, 22(71). https://doi.org/10.1186/s12199-017-0677-9
- 9. Doimo, I., Maseiro, M., Gatto, P. (2020). Forest and Wellbeing: Bridging Medical and Forest Research for Effective Forest-Based Initiatives. *Forests*, 11(791). https://doi.org/10.3390/f11080791
- Corazon, S. S., Sidenius, U., Poulsen, D. V., Gramkow, M. C., & Stigsdotter, U. K. (2019). Psycho-Physiological Stress Recovery in Outdoor Nature-Based Interventions: A Systematic Review of the Past Eight Years of Research. *International journal of environmental research and public health*, 16(10), 1711. https://doi.org/10.3390/ijerph16101711

- 11. Norwood, M. F., Lakhani, A., Fullagar, S., Maujean, A., Downes, M., Byrne, J., Stewart, A., Barber, B., & Kendall, E. (2019). A narrative and systematic review of the behavioural, cognitive and emotional effects of passive nature exposure on young people: Evidence for prescribing change. *Landscape and Urban Planning*, *189*, 71-79. https://doi.org/10.1016/j.landurbplan.2019.04.007
- 12. Fredrickson, B. L., & Levenson, R. W. (1998). Positive emotions speed recovery from the cardiovascular sequelae of negative emotions. *Cognition and Emotion*, *12*(2), 191–220. https://doi.org/10.1080/026999398379718
- 13. Maller, C., Townsend, M., Pryor, A., Brown, P., & St Leger, L. (2006). Healthy nature healthy people: 'contact with nature'as an upstream health promotion intervention for populations. *Health promotion international*, 21(1), 45-54.
- 14. Furuyashiki, A., Tabuchi, K., Norikoshi, K., Kobayashi, T, Oriyama, S. (2019). A comparative study of the physiological and psychological effects of forest bathing (Shinrin-yoku) on working age people with and without depressive tendencies. *Environmental Health and Preventive Medicine*, 1(4). https://doi.org/10.1186/s12199-019-0800-1
- 15. Mattila, O., Korhonen, A., Pöyry, E., Hauru, K., Holopainen, J., & Parvinen, P. (2020). Restoration in a virtual reality forest environment. *Computers in Human Behavior*, 107, 106295. https://doi.org/10.1016/j.chb.2020.106295
- 16. Yu, C.-P., Lee, H.-Y., & Luo, X.-Y. (2018). The effect of virtual reality forest and urban environments on physiological and psychological responses. *Urban Forestry & Urban Greening*, 35, 106-114. https://doi. org/10.1016/j.ufug.2018.08.013
- 17. Hejtmánek, L., Hůla, M., Herrová, A., & Surový, P. (2022). Forest digital twin as a relaxation environment: A pilot study. *Frontiers in Virtual Reality,* 3. https://doi.org/10.3389/frvir.2022.1033708
- 18. Kaushal, S., Dhammi, S., & Guha, A. (2022). Climate crisis and language A constructivist ecolinguistic approach. *Materials Today: Proceedings*, 49(8), 3581-3584. https://doi.org/10.1016/j.matpr.2021.08.093
- 19. Stibbe, A. (2012). *Animals erased: Discourse, ecology, and reconnection with the natural world.* Wesleyan University Press.

- 20. Lamb, G. (2024). *Multispecies Discourse Analysis: The Nexus of Discourse and Practice in Sea Turtle Tourism and Conservation*. Bloomsbury Advances in Ecolinguistics Series.
- 21. Stibbe, A. (2013). An Ecolinguistic Approach to Critical Discourse Studies. *Critical Discourse Studies*, 11(1), 117–128. https://doi.org/10. 1080/17405904.2013.845789
- 22. Zhou, W. (2017). Ecolinguistics: Towards a new harmony. *Language Sciences*, 62, 124–138. https://doi.org/10.1016/j.langsci.2017.04.004
- 23. Zou, C. (2021). Ecological cognitive analysis of Chinese harmonious discourse. *Frontiers in Psychology*, 12. http://doi.org/10.3389/fpsyg.2021.713809
- 24. Lakoff, G. & Johnson, M. (1980). Conceptual metaphor in everyday language. *The Journal of Philosophy*, 77(8), 453–486.
- 25. Lan, C. & Jia, D. (2020). Conceptual metonymies and metaphors behind *SHUI* (WATER) and *HUO* (FIRE) in ancient and modern Chinese. *Applied Linguistics Review*, 11(2), 281–310. https://doi.org/10.1515/applirev-2017-0132
- 26. Gibbs, G. R. (2007). *Analyzing Qualitative Data*. SAGE Publications, Ltd.https://doi.org/10.4135/9781849208574
- 27. Friese, S., Soratto, J., & Pires, D. (2018). Carrying out a computer-aided thematic content analysis with ATLAS.ti. *MMG Working Paper*, (18-02).