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The Embodiment of Environmental Discourse in Language Learning: A Critical Ecolinguistic Study of EFL Textbooks in Indonesia

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Abstract

As environmental issues become more prevalent, it is vital to incorporate ecological components into the curriculum to equip future generations with the necessary foundations to preserve and improve ecology. In light of this circumstance, many countries are compelled to include instructional approaches representing environmentally-based topics in textbooks. Nevertheless, whether the textbooks facilitate environmental education (EE) to promote ecological principles or foster students' competence in recurrent environmental concerns is ambivalent, particularly in the Indonesian context. The current study attempts to analyze the ecological verbal and visual contents engaged in Indonesian EFL textbooks. This study also unpacks the extent to which EFL textbooks in Indonesia accurately reflected the ecolinguistics perspective. Content analysis was employed in this study, adapting Stibbe's (2015) ecolinguistics framework and Kress and van Leeuwen's (2016) visual grammar theory. The findings revealed that EE in Indonesian EFL textbooks highlights the natural beauty and ecotourism locations while mainly disregarding ecological degradation. In contrast, EFL textbooks must emphasize contemporary world issues to cultivate positive attitudes and ecological consciousness among learners. Subsequently, these findings have significant consequences for the development of environment modules in Indonesian EFL textbooks.

Keywords: ecolinguistics, environmental education, EFL textbooks, visual grammar

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1. Introduction

Environmental education equips learners with environmental principles (The United Nations Educational, Scientific and Cultural Organization [UNESCO], 1978; Monroe & Krasny, 2016) that may control their behaviour in dealing with environmental issues and become agents in solving environmental problems (Mliless & Larouz, 2018). By incorporating environmental issues into education (Derevenskaia, 2014; Faramarzi & Janfeshan, 2021), some countries use an instructional approach to build environmentally based concepts and understandings of the environment (Monroe et al., 2008). Environmental education cultivates environmental knowledge, skills, and positive attitudes (Carleton-Hug & William-Hug, 2010). Since climate change, pollution, and natural resource depletion were occurring on a global scale (Bonnett, 2007; Stibbe, 2015; Kaushal et al., 2021), United Nations Conference declared that every nation should incorporate environmental issues into education in order to develop the necessary foundations for young and adult generations to protect and improve the environment (United Nations, 1972). Similarly, Tbilisi Intergovernmental Conference recognized environmental education as critical in resolving global and long-term environmental challenges, laying forth goals and recommendations for environmental education implementation (UNESCO-PNUE, 1977). In the same vein, the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro (June 1992) confirmed that environmental education should be integrated into textbooks to increase students' abilities to deal with environmental and development challenges (United Nations, 1992).

Pertaining to the essence of environmental issues, the Indonesian Ministry of Education and Culture has presented the modern curriculum (K-13), arranged textbooks, and provided a variety of teaching programs for elementary, middle, and high school students to increase their awareness of environmental issues (Kemdikbud, 2015). Curdt-Christiansen (2020) asserts that environmental education incorporated into textbooks is an instrument for encouraging readers to engage in social action. In addition, in an effort to conserve nature, educational institutions in Indonesia have adopted ecological policies and included environmental studies in their academic programmes (Rida & Rokhman, 2021). What is more, EFL textbooks should not only focus on improving learners' language abilities (Zahoor & Janjua, 2019), but also on increasing learners' attitudes toward contemporary global issues (Brand & Wissen, 2018; Faramarzi &

Janfeshan, 2021), such as global issues (Damico et al., 2020)

How environmental issues reflected in ELT materials can be addressed from ecological discourses represented through various texts, either written and spoken languages or images, and such concerns can be delved into via the lens of ecolinguistics. Stibbe (2015) asserts that ecolinguistic discourse analysis looks into the effect of language on the life-sustaining interplay across humans, other species, and the natural sphere. Ecological linguistics is considered a current paradigm in corpus linguistics, serving as the basis for inquiring into the ecological emergence in texts; therefore, the ecolinguistic probes on EFL textbooks have emerged as another viable research subject in recent decades (Derakhshan & Shakki, 2019; Zahoor & Janjua, 2019). Thus yet, just a few studies have been published in this area. Furthermore, to the extent of the researcher's knowledge, no study has explored the occurrence and analyzed the essence of both verbal and visual environmental texts in Indonesian High School EFL textbooks. Earlier Indonesian studies have solely concentrated on examining the ecolexicon form derived from environmental-themed textbooks (Pratiwi et al., 2021; Rida & Rokhman, 2021), but no one has proceeded with the intended meaning contained in the environmental-themed. As regards this gap, the study examines how verbal and visual environmental issues are intensively incorporated in EFL textbooks for High Schools in Indonesia. To investigate the problems, the following research questions are formulated as follows: (1) to what extent do the EFL Textbooks in Indonesia reflect the principle of ecolinguistics? and (2) how are verbal and visual environmental care addressed in Indonesian EFL textbooks?

2. Literature Review

2.1. Ecolinguistics

Since the Norwegian-American linguist, Haugen (1972) initiated the research of language ecology, subsequent studies have attempted to examine the role of language in society, particularly the connection between environment and language (Mliless & Larouz, 2018). Ecolinguistics commonly referred to as language and ecology, is a relatively new branch of linguistics that examines how language and discourse interact with the physical and socio-ecological environments in which they are deployed (Stanlaw, 2021). By its very essence, environmental linguistics scrutinizes language patterns that contribute to the deterioration of the environment

and facilitates the investigation of novel linguistic forms that inspire individuals to safeguard the natural world (Meghdari & Yousefi, 2020). As ecolinguistic interpretations develop differently, linguistic scholars tie ecology to the environmental context of language to address language-related issues rooted in sociolinguistic, educational, economic, or political circumstances (Wiertlewska, 2011). Further, Mühlhäusler (2019) contents that critical ecology investigates how people and the environment have interacted across several sorts of discourses regarding the ecosystem.

In the context of language learning, ecolinguistics can be adhered to teaching English as a foreign language (Wang, 2018). By attaching the ecolinguistics terminology, students can learn English and ecology at the same time (Luardini & Sujiyani, 2018). Substantiated by various pieces of research, ecological linguistics-based English learning activities are advantageous to facilitate learners to comprehend the materials because it is based on their cultural context of biology, sociology, and ideology; boost their speeds of learning and learning strategies, controlled by how they produce their communicative competence based on their productive English skills, both oral and written, in a group or individual activities; assist learners to produce English as a tool for making communication than as a language in the form of doing exercises on the papers test (Singh & Espinoza - Herold, 2014; Luardini & Sujiyani, 2018).

2.2. Incorporating Environmental Education in Textbooks

Environmental education has been incorporated into textbooks in many countries (Guillemette et al., 2008), and it brings together advances in continuous learning and education enhancement for learners (United Nations, 1992). Through environmental education, students should be able to create a connection between what they are learning in the classroom and the nature with which they come into contact in their daily lives (Faramarzi & Janfeshan, 2021). This indicates that there is room to consider environmental education in terms of materials and educator interactions that are noteworthy for realizing content to help children develop pro-environmental understanding and attitudes (Cutter-Mackenzie, et al., 2014), and bolster their linguistic competence. Therefore, ELT textbooks should place equal emphasis on enhancing students' language skills and broadening their understanding of current global issues and environmental calamities (Zahoor & Janjua, 2019). Teachers may inspire schoolchildren to have massive environmental awareness, and

teachers with favorable attitudes about the environment are more likely to consider environmental education in their classes (Chung Ko & Kin Lee, 2003; Kim & Fortner, 2006).

2.3. *Indonesian EFL Textbook*

Orfan et al. (2021) referred to textbooks as instructional printed material designed to assist language learners in improving their linguistic and communicative abilities. As one of the learning materials, textbooks play an essential role in the success of teaching and learning (Handayani et al., 2018). The content of textbooks is the product of sociocultural evolution, they are retrospectively shaped by both teachers' and learners' actions (Brown, 1992; Design-Based Research Collective [DBRC], 2003; Wang & Hannafin, 2005). From a critical linguistic perspective, language textbooks are perceived as cultural and social mediators (Wang & Hemchua, 2022).

As far as the Indonesian setting is concerned, the government under the direction of the Ministry of Education and Culture supplies and authorizes English textbooks for use in Indonesian schools. The textbooks are expected to become the ultimate learning tool, with all teachers and students across the country accessing them as fundamental teaching materials (Parlindungan et al., 2018). The textbooks designed must be compatible with the current curriculum, school syllabus, student needs, and teaching objectives and goals (Cunningsworth, 1995) and adopt topics adapted to the region (Lestariyana & Widodo, 2018; Sulistiyo et al., 2020), including environmental issues, to meet students' needs for learning. As a result, customized EFL textbooks are becoming popular in Indonesian schools (Puspitasari et al., 2021).

3. Methodology

This study adopted content analysis to examine the incorporation of environmental texts in Indonesian High School EFL Textbooks. Content analysis is part of qualitative research (Elo et al., 2014), which analyses content in public records, textbooks, letters, films, or other documents (Ary et al., 2009). Through the content analysis approach, this research investigated the extent to which environmental issues are incorporated as learning resources and addressed how environmental concerns were represented visually and verbally in Indonesian EFL textbooks by

adopting Stibbe's (2015) ecolinguistics framework and Kress and van Leeuwen's (2006) approach of visual grammar as the meanings of visual and verbal modes are inherently social and are shaped by the social environment in which they exist (Qi & Hemchua, 2022)

The data comprised environmental texts addressed in the newly-published Indonesian EFL textbooks for Grades X – XII High School and they are publicly accessible on the Ministry of Education and Culture's official website https://buku.kemdikbud.go.id/. The selected textbooks have been widely utilized in both public and private high schools as the primary instructional materials. To sum up, the researcher determined these textbooks for content analysis because: (1) they were presented by Indonesian authors who are familiar with English classrooms in Indonesian contexts; (2) they complied with the requirements or standards established by the Indonesian National Education Standards Agency and organizational suitability; and (3) they contained considerable linguistic and visual substances that represent the cultural values including environmental issues in Indonesian (Puspitasari et al., 2021).

When it comes to the research questions, the researcher attempted to engage the analytical procedures as follows: first, the researcher endeavoured the data condensation by collecting and simplifying both verbal and visual environmental content (including images, sentences, and topics related to natural issues) represented in Indonesian EFL textbooks. In this phase, the researcher proceeds to deepen the findings by measuring the frequency of verbal and visual texts related to natural issues in EFL textbooks. Then, both verbal and visual environmental texts were analyzed by adopting Stibbe's (2015) ecolinguistics skeleton and Kress & van Leeuwen's (2006) visual grammar theory.

In light of verbal environmental discourses, there are eight different forms of Stibbe's (2015) frameworks that deal with language ecology: ideology, framing, metaphor, evaluation, identity, conviction, erasure, and salience. This study only focuses on the ideology, framing, and evaluation framework. Alluding to this, the ideology framework was executed to address the meaning of texts regarding environmental issues, while framing was adopted to discuss the trigger word to indicate the particular area represented in the texts. In addition, the evaluation skeleton was adhered to consistently identify whether individuals think positively or negatively regarding the environmental discourse (Stibbe, 2015). In addition, for visual environmental texts, Kress and van Leeuwen's (2006) visual grammar

concept was adopted. Essentially, it conceives three types of metafunctional meanings: ideational, interpersonal, and textual. This study only evaluated the textual parameter of the environmental visual texts, which can directly transfer the information or meaning to the audience.

4. Results

Axiomatically, it should be noted that the EFL textbooks for Senior High Schools combine numerous environmental units. Pertaining to the findings, the researcher discovered diverse proportions of ecological values in each EFL textbook, with the EFL textbook for Grade X containing more environmental texts (19.5%) than those for Grade XI (8.82%) and Grade XII (9.09%). In detail, the measurements and percentages of environmental content are presented as follows.

Table 1
Description of English as Foreign Language Textbooks 2017

Textbook	No. of pages	No. of chapter	Units Promoting Environmental Education		
			Chapter Title	No. of pages	Percentages
Bahasa Inggris X	220	15	Which One is Your Best Gateway?	19	19.5 %
			Let's Visit Niagara Falls	12	
			Strong Wind	12	
Bahasa Inggris XI	170	8	Natural Disasters-An Exposition	15	8.82 %
Bahasa Inggris XII	176	11	Why Don't You Visit Seattle?	16	9.09 %

Bahasa Inggris X, a revised edition in 2017, has the most pages (N=43) devoted to environmental education, whereas *Bahasa Inggris XI* has the fewest (N=6). Along with the number of chapters in the textbooks, table 1 revealed that chapters 15, 8, and 11 cover environmental topics. As depicted in the following table, the textbook encompasses three main important environmental topics – tourist destinations, natural disasters, and pollution – in both textual and non-textual (visual) modes, and at different frequencies of occurrence.

Table 2

Number of Words and Sentences that Reflected Environmental Verbal Texts

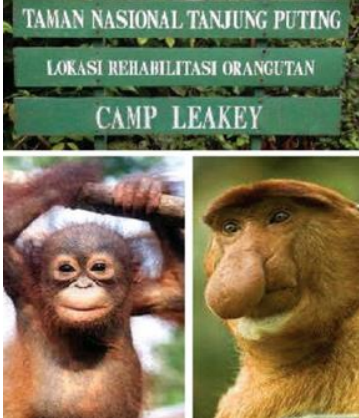| Theme	Words	Sentences
Ecotourism Destination	2867	169
Natural Disaster	557	62
Global Pollution	578	36
Total	4002	267

Table 3

Number of Photos and Images that Reflected Environmental Visual Texts

Theme	Photos	Images
Ecotourism Destination	9	2
Natural Disaster	1	1
Global Pollution	1	-
Total	11	3
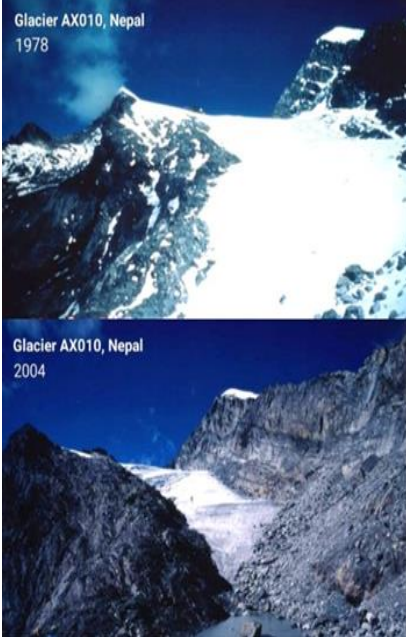
In line with Tables 2 and 3, exposures to *Ecotourism Destinations* take the lead with 2867 words and 169 sentences, while texts on *Natural Disasters* include the fewest words and sentences with 557 and 62 respectively. Alongside the visual text, *Ecotourism Destination* is the most prominent with $N = 11$ (78%), followed by *Natural Disasters* with $N = 2$ (14%), and *Global Pollution* occupied the smallest amount of visual space with only $N = 1$ (8%). The representation of environmental values in three EFL textbooks is presented in Table 4 below.

Table 4

The Description of Visual Representation of Environmental Values in Indonesian EFL Textbooks

Visual Representation	Theme & Chapter	Grades & No. of pages	Textual Meaning (Kress & van Leuween, 2006)
	Exotic beach (3)	X (39)	The illustration depicts the exotic beach as one of the often-visited natural tourist destinations. The representation of a pristine beach, clear skies, and a number of sheltering huts indicates that the location is appropriate for social gatherings.

Visual Representation	Theme & Chapter	Grades & No. of pages	Textual Meaning (Kress & van Leuween, 2006)
	Semeru Mountain (3)	X (39)	The portrayal of a magnificent mountain with a blue sky represents tranquillity, coolness, and the splendour of God's creation as manifested in nature. Mountain is one of the natural tourism spots frequented by climbers and other nature enthusiasts.
	Climbers in the hills (4)	X (50)	The image of the hills is not a photograph like the preceding image; rather, it is a painting depicting two hikers at the natural destination. It tends to encourage us to take a vacation in nature and engage in physical activity.
	Orangutans in National Park (4)	X (53)	With the depiction of two primates species and the location on the board, this area is one of the natural attractions that are also worth visiting. The photo clearly displays "Camp Leakey" as the location name for this natural attraction. Camp Leakey is a rehabilitation and preservation facility for formerly captive orangutans.
	Majestic building of Taj Mahal (4)	X (58)	The representation of the gorgeous and incredibly majestic Taj Mahal is the only well-known and distinctive tourist attraction in India. This amazing structure turns out to have Islamic origins, particularly in its architectural design.

Visual Representation	Theme & Chapter	Grades & No. of pages	Textual Meaning (Kress & van Leuween, 2006)
	National Waterfall (4)	X (65)	The side waterfall is a must-see due to its breathtaking landscape. This natural beauty is ideal for nature enthusiasts to appreciate.
	Niagara Falls Painting (5)	X (69)	The portrait of the waterfall is not a photo taken directly, but rather a painting of Niagara Falls, the most renowned waterfall in the world. This artwork depicts a scene with clear skies, a huge waterfall, trees surrounding it, and a little canoe circling the waterfall's waters in a beautiful and astounding way. It indicates that everyone can appreciate the breathtaking environment surrounding the waterfall.
	Collective Waterfalls of Niagara (5)	X (72)	Photos taken at Niagara Falls provide unequivocal evidence that the glorious creation of God is reflected in the natural world's aesthetic value. This waterfall's majesty seems to urge us to participate in appreciating the splendour of God's creation.
	Person in the Cave of Winds (5)	X (74)	A person wearing waterproof clothes and a smile took a shot with the Cave of Winds in the background at Niagara Falls, indicating that she was awed by the natural beauty and felt it would be "such a loss" if it were not captured on camera. It is incredible! The view enables people to approach the falls and face the surging water.
	Strong	X (181)	It is seen that the photo was taken

Visual Representation	Theme & Chapter	Grades & No. of pages	Textual Meaning (Kress & van Leuween, 2006)
	Wind (14)		when the wind was blowing on the coconut tree. In the image, the leaves of the coconut tree, which are very resilient, are capable of bending. The reason must be strong winds, it indicated humans should seek refuge in a safe location.
	Wind lumps blow trees strongly (14)	X (184)	A painting portrays a strong wind as a cluster of clouds that appears to be blowing on a nearby pine tree. The artwork was created to illustrate children's stories or fairy tales, clarifying the story's plot, enhancing its aesthetic value, and reflecting the narrator's thoughts. The plot must revolve around powerful winds and their consequences.
	Global Warming in Glacier Area (4)	XI (46)	Two photographs from different periods are compared within the same frame in the Nepal glacier region; the first was taken in 1978 and the second one in 2004. The distinction between the two is evident. In 2004, the polar ice caps had melted significantly, resulting in a larger land area than in prior years. Gautam (2014) asserted that Nepal has experienced the damaging effects of climate change. The portrait appears to tell us that we must be conscious of our surroundings. We must take measures to ensure that global warming does not worsen from year to year, including planting more trees, purchasing energy-efficient equipment, and minimizing the use of private vehicles.

Visual Representation	Theme & Chapter	Grades & No. of pages	Textual Meaning (Kress & van Leuween, 2006)
	Seattle the Emerald City (2)	XII (15)	The city and nature come together in the picture beside. Describing the wonderful and extraordinary creations of God and manufacturing enhances the splendouran of this location. This city appears to be more than simply a place to reside or conduct business; it also appears to be a place where newcomers and tourists can recuperate by experiencing the city's natural features.
	San Juan Island (2)	XII (18)	As a spectacular natural attraction, San Juan Island is depicted as a pure sea and blue sky to portray the magnificence of God's creation. In addition to enjoying the naturalist excursions in the area, humans must be appreciative and always take care of this God-given treasure.

Specifically, there were about 4002 words, 267 sentences, 11 photos, and 3 images containing the natural issues in the three EFL textbooks. Due to space limitations, the current study investigates any sentences and figures of the environmental text, and only a few of them have gotten a depth analysis by adopting Stibbe's (2015) ecolinguistic approach and Kress & van Leeuwen's (2006) visual grammar theory.

Concerning the environmental issues addressed in the three EFL textbooks, this study highlights the nature, locality, and text themes for outlining the involvement of environmental education in the Indonesian context.

Table 5
Environmental Themes in the Indonesian EFL Textbook's Units

Themes and Subthemes Ecotourism Destination	Nature	Locality	Elements of Subthemes
National Park	Natural	Local	Exotic nature Wildlife conservation Orangutans' preservation
7 Wonders of The World	Human	Global	The majestic building of Taj Mahal Architectural achievement

Themes and Subthemes Ecotourism Destination	Nature	Locality	Elements of Subthemes
National Waterfall	Natural	Local	Epic monument
			Spectacular scenery
			Charming waterfall
International Falls	Natural	Global	Beauty lake
			Amazing collective waterfalls
			Wonderful attraction
			Cave of The Winds
			Maid of The Mist Boat Tour
			Niagara Adventure Theater
			Wax Museum of History
			Rainbow Air Helicopter Tours
Natural City	Human, Nature	Global	Emerald City
			Bainbridge Island
			Pike Place Market
			The cosy resorts
			Chihuly Garden and Glass
			Boeing factory in Mukilteo
			Theo Chocolate Factory
Natural Disaster			
Strong Wind	Nature	Global	Destructive substance
			Invisible substance
Global Pollution			
Global Warming	Human	Global	Climate change
			Ice and glaciers melting
			Effects of greenhouse gases
Air Pollution	Human	Global	Hazardous environment
			Effect on the quality of human health
			Diseases related to air pollution
			Causes noise pollution

Table 6
Occurrences of Ideology, Framing, and Evaluation in Sentences

Theme	Ideology	Framing	Evaluation
Ecotourism Destination	4	15	7
Natural Disaster	1	-	-
Global Pollution	3	1	2
Total	8	16	9

Focusing on the locality of environmental concerns, Table 5 indicates that most environmental texts are global ($N = 6$), while only 2 are local. Moreover, the different topics included in each theme are *Ecotourism Destination, Natural Disaster,* and *Global Pollution.* In conjunction with the nature, locality, and theme of the text presented in Table 5, the additional information is offered as follows: 1) the majority of the text is devoted to natural beauty and global warming; 2) a

significant proportion of the images and photographs attached in environmental units depict tourist destinations; 3) the concept of ecology in environmental units is related to tourist destinations, natural disasters, and pollution; 4) the exercise associated with the environmental unit focuses on vocabulary that describes ecology.

Following the ecolinguistic framework (Stibbe, 2015), the discourses are categorized into environmental values (ideology, framing, and evaluation) that reinforce social awareness and conventions EFL learners should learn. The three ecological values are represented by three main different themes including (1) ecotourism destination that covers National Park, Seven Wonders of the World, National Waterfall, International Falls, and Natural City; (2) natural disasters comprising strong wind; and (3) global pollution accommodating global warming and pollution. On the three major topics, ecological discourses signifying ideology are the least prevalent in the textbooks (N = 8); in contrast, ecolinguistic framing is the most widely adopted (N = 16). Additionally, evaluation expressions are displayed on a reasonably large scale (N=9). From the environmental figures, the theme of Ecotourism Destinations (N=11) exceeds Natural Disasters (N = 2) and Global Pollution (N = 1).

5. Discussion

In light of the findings outlined above, Indonesian EFL textbooks for high school learners were mostly concerned with general English structures rather than integrating environmental education. Subsequently, linguistic structures in environmental texts have the potential to influence learners' awareness of environmental issues at the level meaning of construction (Mliless & Larouz, 2018).

5.1. Ideology Framework based Verbal Environmental Text

Ideology refers to the belief system shared by members of specific groups in society about how the world was, will be, or should be (Stibbe, 2015). The utilization of ideology framework in environmental texts in high school textbooks emerges in *Ecotourism Destination* with N=4 and *Global Pollution* with N=2, while fewer occurrences take place in *Natural Disaster* texts with N=1 position.

Ideologies might become frozen in language. Consequently, identifying

strategies to melt the ice was the goal of the analysis. It was often considered as *denaturalizing the language* (Machin & Mayr, 2012). In this regard, the following quotation exemplifies how the environmental text shares its belief system and implicit meaning.

This is called a park, but unlike any park that you have seen in your city, this is a jungle! (Grade X)

The preceding discourse involved ideology over the justification for considering *a park* as *a jungle*. It indicated that *a park* made itself equivalent to *a jungle* over the repetitive phrase *this is…* in a single entire sentence. The park deserves designation as a forest since it satisfies the requirements for a forest with an ecological scale and the presence of living creatures. Further, a park may be referred to as a jungle when it embraces a vast territory with dense vegetation and an enchanting landscape and provides ecological services to the living organisms (Colfer et al., 2006). Additionally, considering further through the clause *unlike any park that you have seen in your city*, this implicitly replaces the peculiarities and uniqueness of the park, such as parks that are often observed and well-known to the public, but it encompasses much more (Pierce, Sheil, & Kishi, 2006).

In contradiction to the issue at hand, the most significant discourses for ecolinguistics to resist are the discourses expressing ideas that strongly oppose several aspects of ecosophy, i.e., are thought to play a role in ecological devastation (Stibbe, 2015). To exemplify, consider the environmental text below.

Is it an end to our world? Global warming is a phenomenon used to describe the gradual increase in the temperature of Earth's atmosphere and oceans. (Grade XI)

The interpretation of the idea in the clause *Is it an end to our world?* conceives the adverse ideology and belief systems towards global warming, which vehemently controvert the aspects of ecosophy (Stibbe, 2015), as if the environmental destruction produced by global warming will lead to the end of the world or the apocalypse. As scientists have predicted for decades, the consequences of climate change will arrive more abruptly, and it is conceivable that the situation may worsen in the future, posing a threat to the end of the world's existence (Zhukov & Gushcha, 2020).

Moreover, a *special emphasis* on environmental discourse needs to be made to indoctrinate learners' thinking and mental perceptions to be more aware of their

environment. This has been placed on greening learners' socialization, as this entails shaping future generations to mitigate the ecological disruptions coming over society at large (Bhalla, 2012; Zahoor & Janjua, 2019).

The greatness of nature will make you feel very small and price God. (Grade X)

The environmental discourse above expresses the positive ideology and belief system toward ecology. The metaphor *small* in the discourse implies that humans are a minor element of nature (Vining et al., 2008). Alluding to this, they should be grateful for God's blessings in the form of natural greatness and take actions that reflect ecosophy (Martin, Maris, & Simberloff, 2016). Humans should realize the fundamental relationship between nature and humanity from an ethical position (Drengson, Devall, and Schroll, 2011). Simply put, the environmental text above was consistently in line with ideological ecosophy, which encourages humans to appreciate nature.

5.2. Framing Analysis based Verbal Environmental Text

Framing refers to the way of structuring a particular area of life by using a trigger word. This trigger word is applied to evoke a *frame* into humans' minds about a specific area in their life (Stibbe, 2015). Addressing the existence of framing ecolinguistic framework, it occurs largely in *Ecotourism Destination* texts with $N = 15$, while fewer appearances take place in *Global Pollution* text with $N = 1$ position, and in *Natural Disaster*, there is no framing specifically. For instance, the following discourse represented Stibbe's (2015) concept:

Tanjung Puting National Park is an internationally famous ecotourism destination, which is located in the southwest Central Kalimantan peninsula. (Grade X)

The discourse's target domain contains a source framework that the Central Kalimantan area offers a wonderful ecotourism destination, known as *Tanjung Puting National Park*, and shapes readers' minds through the adoption of trigger words like *international* and *famous*. These positive trigger words might result in immediate enhancement in the discourse's performance (Broomhead, et al., 2012), implying that ecotourism location in Central Kalimantan is extremely well-known and highly recognized across the globe.

Moreover, Lakoff (2006) asserted that framing can shape *mental constructs* that

enable us to comprehend reality–and, on occasion, to create what we assume to be reality (Lakoff, 2006). The following environmental discourse exemplified his concept:

The impact of climate change is noticeable throughout Asia-Pacific, either during hot days or too much rain accompanied by wind and thunderstorms. (Grade X)

In this extract, the discourse above explicitly attempts to reframe climate change in Asia-Pacific, using the trigger word of *noticeable*, accompanied by hot and dry weather, wind, and thunderstorm. The word *noticeable* can construct humans' brains to assume the reality (Lakoff, 2006); it also incorporates a *warning*, which offers prior notification about the upcoming situation (Boysen, 2017), that climate change is undeniably real and needs urgently handled. The text replaces a more obsequious frame of *environmental issues* in the specific area– Asia-Pacific (Stibbe, 2015), with the notion of absorption and distant problem to be resolved through climate change policies and individual activities (Shahzad, 2015; Pomarici & Seccia, 2016).

5.3. Evaluation Analysis based Verbal Environmental Text

Evaluations fundamentally can be revealed by analyzing the appraisal patterns in language (Stibbe, 2015). Concerning the evaluation framework, *Ecotourism Destination* texts largely dominated evaluation discourses more than the other themes with N=7, followed by *Global Pollution* with N=2, and in the *Natural Disaster* theme, nothing represented evaluation. Numerous linguistic features can be utilized to judge various aspects of life positively or negatively (Martin & White, 2005). They include explicit appraisal items such as *good, right, wrong,* or *bad*, and implicit expressions with positive or negative connotations such as fresh, natural, or intelligent (Stibbe, 2015). Obviously, the following environmental discourse underlying this concept.

Visitors from foreign countries come to this park because of its amazing nature. (Grade X)

Along this line of inquiry, applying positive appraisal items such as *amazing* has led to a positive evaluation indicating the park has a unique natural landscape. For the sake of visitors, implicit expressions with positive connotations, as Stibbe (2015) proposed in the language system are adopted to make readers believe that

the park can become a favourite assists tourist destination for local and foreign tourists.

Contrary to the positive issue at hand, Stibbe (2015) argued that due to the world's complexity, human cognition's restricted power, and our constant need to make judgments, it is natural for the world to be simplified into negatives. However, there is a danger that the simplification would lead to a blind acceptance of things that are bad or have become detrimental as the world changes (Stibbe, 2015). As considered in the discourse below.

Global warming is not a new problem, but lately, people are acknowledging that we are facing a serious problem. (Grade XI)

The term *serious problem* was associated with the language system's negative connotation. It was triggered by stimulants that did not align with the intended objective (Moors, Cruys, & Pourtois, 2021). This extract took efforts to transform the negative into something significant positive (Stibbe, 2015). Subsequently, the problem highlighted above should be addressed by climate change policy and human actions (Shahzad, 2015; Pomarici & Seccia, 2016).

5.4. Textual Meaning Analysis for Visual Environmental Text

Prior studies on textbook appraisal have shown that textbooks can be instrumental in instilling environmental principles in learners (Faramarzi & Janfeshan, 2021). Thereafter, discourse on environmental practices cannot be dissociated from the sociocultural setting (Goulah, 2015); as well as visual representations can mediate the environmental experience of individuals. Moreover, the concept of *environmental images* brings up viewpoints of both beautiful landscapes and impending environmental disasters (Hunt, et al., 2014). Weight difference environmental values reflected in the three EFL textbooks (Grades X–XII) reveal that each textbook emphasizes a distinct set of values that must be taught to learners of that grade. In this respect, Grade X dominated environmental values more than Grade XI and XII. Given spatial considerations, only 5 pertinent images were chosen for a thorough evaluation. The environmental visual discourses are focused on ecotourism destinations (3 figures), natural disasters (1 figure), and global pollution (1 figure).

Figure 1
Environmental Visual Text Presenting Beach (Bahasa Inggris, Grade X, p.39)

Since ecotourism is universally acknowledged as an activity that assists individuals to overcome various challenges (Cheng, Jin, & Wong, 2013), it became crucial in creating policies for the maintenance and growth of the social community in any country (Wardle, et al., 2021). In this respect, the proportion of ecotourism destinations in EFL textbooks for grades X, XI, and XII are 78%, 14%, and 8%, respectively (Figure 1, p.39; Figure 2, p. 39; and Figure 3, p. 48). Starting with Figure 2, the depiction of a stunning Semeru mountain with a blue sky represents tranquillity, coolness, and the natural beauty of God's creation. This natural beauty might act as a *natural sign* that explicitly justifies belief in God (West & Pelser, 2015).

Figure 2
Environmental Visual Text of Ecotourism on Mountain (Bahasa Inggris (Grade X, p. 39)

Figure 3

Environmental Visual Text of Ecotourism on Waterfall (Bahasa Inggris, Grade X, p. 27)

　　　The environmental visual values of ecotourism destinations can also be explored in Figure 3. Clear skies, a spectacular cascade, and surrounding trees exemplified the majesty of nature at Niagara International Waterfalls. It is undeniable evidence that the splendour of God's creation is reflected in nature's beauty (West & Pelser, 2015). Due to the existence of ecotourism spots, human holiday destinations no longer consist just of man-made urban tourism, as was previously the case, but also of amazing natural landscapes, so that humans will always appreciate nature (Štetić & Trišić, 2019).

Figure 4

Environmental Visual Text Presenting Natural Disaster (Bahasa Inggris, Grade XI, p. 181)

　　　Looking at the diverse side, natural disasters, represented by the coconut trees in figure 4, are also encoded as essential learning materials. They serve as the central topic of the visual text. Exposing students to such issues is deemed critical to raise their awareness of nature, which is vital to the existence of sentient creatures and has a considerable impact on the well-being of human beings (Goldman et al.,

2014). In the photos, the coconut tree's tough leaves may bend themselves due to the strong wind. Any living creature could be exposed to danger when twigs, stems, or stiff leaves strike them. Even more, strong wind causes a substantial amount of physical damage, injury, death, and economic loss. (Marchigiani et al., 2013). In addition to the environmental damage, global warming is equally detrimental to the future living world (United Nations Children's Fund [UNICEF], 2020). As considered in Figure 5, there has been a significant change in the Nepal glacier area.

Figure 5
Environmental Visual Text Presenting Global Pollution (Bahasa Inggris, Grade XII, p. 46)
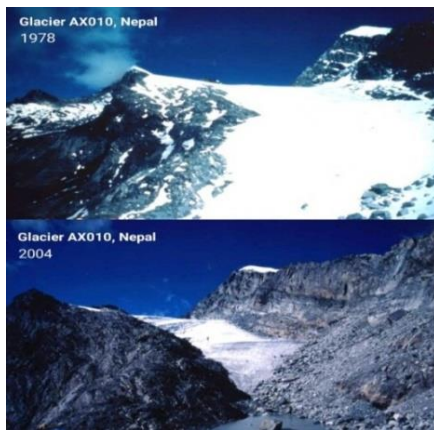
Two photographs from different periods (1978-2004) are compared within the same frame in the Nepal glacier region. In 2004, the polar ice caps had melted which caused the land area to be more expansive than in previous years. Many scientists have expressed concern that the general rise in temperature in the highlands poses a severe environmental and humanitarian threat to Nepal (Gautam, 2014). About the issue at hand, the above illustration appears to imply that individuals must be cognizant of the environment and adhere to climate change policies (Fairbrother, 2022) by undertaking concrete steps toward the preservation of natural resources, such as planting more trees, purchasing energy-efficient equipment, and reducing traveling by private vehicles (Shahzad, 2015; Pomarici & Seccia, 2016).

6. Conclusion

Due to the world's catastrophic ecological situation currently being one of the most

potent threats to the future survival of humanity, eco-studies are becoming increasingly important in drawing attention to and designing remedies to worldwide ecological problems (Zahoor & Janjua, 2019). Hence, the incorporation of environmental issues in textbooks is vital to support the pedagogical goals of environmental education for learners and assist them in comprehending the complexities of natural systems and the interrelationships between human beings and nature. For that reason, EFL textbooks must promote contemporary global issues to shape the learners' positive attitudes and encourage their awareness of ecology (Brand & Wissen, 2018; Faramarzi & Janfeshan, 2021). Nonetheless, in actuality, environmental education in EFL textbooks in Indonesia tends to emphasize natural beauty and ecotourism sites both verbally and visually, while ecological deterioration is often ignored.

What is more, the study's findings have the potential to promote the eco-pedagogical improvement of English textbooks adopted in Indonesian schools at various levels. They can also be valuable as a reference for the global community as readers and scholars interested in this discipline and can maximize EFL learners' ecological understanding through language learning. Furthermore, the results can be significant for educators in encouraging learners to be more concerned about environmental issues; educators who have a pro-ecological outlook are more adept at integrating environmental education into their curricula (Chung Ko & Kin Lee, 2003; Kim & Fortner, 2006).

With respect to ameliorating the environmental unit, other aspects that might impede environmental education in the Indonesian context need significant improvement. For instance, the untrained human resources and ineffective material may hamper the integration of environmental education in Indonesia. The insertion of more environmental degradation material and careful evaluation of EFL textbooks can assist policy-makers in determining whether textbooks are adequate in terms of both language and environmental components. Adopting proper environmental damage in EFL textbooks also demands that the educational institution conduct the necessary analysis in order to identify frequent environmental problems. It is highly recommended that teachers employ additional materials for teaching, such as films, real materials, photographs, and so on, to engage learners more in contemporary global issues. This research is confined as it solely relies on ideology, framing, and assessment frameworks. Further inquiry into ELT materials addressing ecological aspects that include other Stibbe's fundamental bones: metaphor, identity, conviction, erasure, and salience, might bestow more profound insights.

References

Ary, D., Jacobs, L. C., Razavieh, A., & Sorensen, C. K. (2009). *Introduction to research in Education.* Wadsworth Cengage Learning.

Bhalla, A. (2012). Eco-consciousness through children's literature: A study. *The Indian Review of World Literature in English*, *8*(2), 1–8.

Bonnett, M. (2007). Environmental education and the issue of nature. *Journal of Curriculum Studies*, *39*(6), 707–721. https://doi.org/10.1080/0022027070 1447149.

Boysen, G. A. (2017). Evidence-based answers to questions about trigger warnings for clinically-based distress: A review for teachers. *Scholarship of Teaching and Learning in Psychology*, 163–177. https://doi.org/10.1037/stl0000084

Brand, U., & Wissen, M. (2018). What kind of great transformation? The imperial mode of living as a major obstacle to sustainability politics. *GAIA - Ecological Perspectives on Science and Society*, 287–292. https://doi.org/10.14512/ gaaryia.27.3.8

Broomhead, P., Skidmore, J. B., & Eggett, D. L. (2012). The effects of a positive mindset trigger word pre-performance routine on the expressive performance of junior high age singers. *Journal of Research in Music Education, 60*(1), 62–80. https://doi.org/10.1177/0022429411435363

Brown, A. (1992). Design experiments: Theoretical and methodological challenges in creating complex interventions in classroom settings. *The Journal of the Learning Sciences*, *2*(2), 141–178. http://dx.doi.org/10.1207/ s15327809jls0202_2

Carleton-Hug, A., & William-Hug, J. (2010). Challenges and opportunities for evaluating environmental education programs. *Evaluation and Program Planning,* 159–164. https://doi.org/10.1016//j.evalprogplan.2009.07.005

Cheng, M., Jin, X., & Wong, I. A. (2013). Ecotourism site in relation to tourist attitude and further. *Current Issues in Tourism*, *17*(4*)*, 303–311. https://doi.org/10.1080/13683500.2013.800030

Chung-Ko, A. C., & Kin-Lee, J. (2003). Teachers' perceptions of teaching environmental issues within the science curriculum: A Hong Kong perspective. *Journal of Sciences Education and Technology*, *12*(3), 187–204. https://doi.org/10.1023/A:1025094122118

Colfer, C. J. P, Sheil, D., & Kishi, M. (2006). *Forests and human health: Assessing the evidence*. Center for International Forestry Research

Cunningsworth. (1995). *Evaluating and selecting EFL teaching materials.* Macmillan.

Curdt-Christiansen, X. L. (2020). Environmental literacy: Raising awareness through Chinese primary education textbooks. *Language, Culture and Curriculum*, 1–16. https://doi.org/10.1080/07908318.2020.1797078

Cutter-Mackenzie, A., Edwards, S., Moore, D., & Boyd, W. (2014). Young children's play and environmental education in early childhood education. *Springer Briefs in Education*. https://doi.org/10.1007/978-3-319-03740-0

Damico, J. S., Baildon, M., Panos, A. (2020). Climate justice literacy: Stories-we-live-by, ecolinguistics, and classroom practice. *Journal of Adolescent & Adult Literacy*, 1–9. http://dx.doi.org/10.1002/jaal.1051

Design-Based Research Collective. (2003). Design-based research: An emerging paradigm for educational inquiry. *Educational Researcher*, *32*(1), 5–8. http://dx.doi.org/10.3102/0013189X032001005.

Derakhshan, A., & Shakki, F. (2019). A critical review of language teacher education for a global society: A modular model for knowing, analyzing, recognizing, doing, and seeing. *Critical Studies in Texts and Programs in Human Sciences, 19*(6), 109−127. https://doi.org/10.30465/crtls.2019.4378

Derevenskaia, O. (2014). Active learning methods in environmental education of students. *Procedia-Social Behavioral and Science*, 101–104. https://doi.org/10.1016/j.sbspro.2014.04.086

Drengson, A., Devall, B., & Schroll, M. (2011). The deep ecology movement: Origins, development, and future prospects (toward a transpersonal ecosophy). *International Journal of Transpersonal Studies*, *30*(1), 101–117. https://doi.org/10.24972/ijts.2011.30.1-2.101

Elo, S., Kaariainen, M., Kanste, O., Polkki, T., Utriainen, K., & Kyngas, H. (2014). Qualitative content analysis: A focus on trustworthiness. *SAGE Open*, *4*(1). https://doi.org/10.1177%2F2158244014522633

Fairbrother, M. (2022). Public opinion about climate policies: A review and call for more studies of what people want. *PLOS Clim*, *1*(5). https://doi.org/10.1371/

journal.pclm.0000030

Faramarzi, A., & Janfeshan, K. (2021). An Investigation into ecolinguistics representation in Iranian high school English textbooks. *An International Refereed Research Journal of English Studies and Culture*, *9*, 70-85.

Gautam, U. (2014). The Annapurna water cooperation consensus. *Hydro Nepal: Journal of Water, Energy and Environment*, *15*, 90–92. https://doi.org/10.3126/hn.v15i0.11382.

Goldman, A., Eggen, B., Golding, B., & Murray, V. (2014). The health impacts of windstorms: A systematic literature review. *Public Health Journal*, *128*(1), 3–28. https://doi.org/10.1016/j.puhe.2013.09.022

Goulah, J. (2015). Climate change and TESOL: Language, literacies, and the creation of eco-ethical consciousness. *TESOL Quarterly*, *51*(1), 90–114. https://doi.org/10.1002/tesq.277

Guillemette, B. G., Clément, C. & Cément, P. (2008). L‟éducation à l‟environnement dans les manuels scolaires de sciences de la vie et de la terre [Environmental education in life and earth science textbooks]. *Aster*, *46*, 155–180.

Handayani, S., Suwarno, B., & Dharmayana, I. W. (2018). Evaluation of Indonesian English textbook for the ninth graders of junior high school "think globally act locally" from efl teachers' perspectives. *Journal of Applied Linguistics and Literature*, *3*(2), 11–32. https://10.33369/joall.v3i2.6821

Haugen, E. (1972). *The ecology of language*. Stanford University Press.

Hunt, V., Muthersbaugh, D., & Kern, A. (2014). Evaluating images of the environment for educational use: Exploring the use of a rubric derived from visual information theory. *Journal of New Horizons in Education*, *4*(1), 49–66.

Kaushal, S., Dhammi, S., & Guha, A. (2021). Climate crisis and language – A constructivist ecolinguistic approach. *Materials Today: Proceedings*. https://doi.org/10.1016/j.matpr.2021.08.093

Kemdikbud. (2015). *Wujudkan kesadaran lingkungan melalui pendidikan berbasis lingkungan* [Realizing environmental awareness through environmentally based education]. Puskurbuk.

Kim, C., & Fortner, R. W. (2006). Issue-specific barriers to addressing environmental issues in the classroom: An exploratory study. *The Journal of Environmental*

Education, *37*(3), 15–22. https://doi.org/10.3200/JOEE.37.3.15-22

Kress, G., & van Leeuwen, T. (2006). *Reading image: The grammar of visual design*. Routledge.

Lakoff, G. (2006). *Thinking points: Communicating our American values and vision: A progressive's handbook*. Farrar, Straus, and Giroux.

Lestariyana, R. P., & Widodo, H. P. (2018). Engaging young learners of English with digital stories: Learning to mean. *Indonesian Journal of Applied Linguistic*s, *8*(2), 489–495. https://doi.org/10.17509/ijal.v8i2.13314

Luardini, M. A., & Sujiyani, E. (2018). Introducing ecolinguistics in EFL classroom. *Advances in Social Science, Education and Humanities, 262,* 375–382. https://doi.org/10.2991/ictte-18.2018.70

Machin, D., & Mayr, A. (2012). *How to do critical discourse analysis: A multimodal introduction*. Sage.

Marchigiani, R., Gordy, S., Cipolla, J. & Adams, R. C. (2013). Wind disasters: A comprehensive review of current management strategies. *International Journal of Critical Illness and Injury Science*, *3*(2), 130–42. https://10.4103/2229-5151.114273

Martin, J. R., & White, P. R. (2005). *The language of evaluation: Appraisal in English*. Palgrave Macmillan. https://doi.org/10.1057/9780230511910

Martin, J.-L., Maris, V., & Simberloff, D. S. (2016). The need to respect nature and its limits challenges society and conservation science. *PNAS*, *113*(22), 6105–6112. https://doi.org/10.1073/pnas.152500311

Meghdari, S., & Yousefi, M. (2020). Critical discourse analysis of educational texts in nature schools: an ecolinguistics perspective. *Language Related Research,* 13(1), 99–127. https://doi.org/10.52547/LRR.13.1.4

Mliless, M., & Larouz, M. (2018). An ecolinguistic analysis of environment texts in Moroccan English language teaching textbooks. *International Journal of Research in Environmental Studies*, *5*, 103–116. https://doi.org/10.33500/ijres.2018.5.011

Monroe, M. C., Andrews, E., & Biedenweg, K. (2008). A framework for environmental education strategies. *Applied Environmental Education and Communication*, *6*(3-4) 205–215. https://doi.org/10.1080/15330150801944416

Monroe, M. C., & Krasny, M. E. (2016). *Across the spectrum: Resources for*

environmental educators. North American Association for Environmental Education.

Moors, A., Cruys, S. V., & Pourtois, G. (2021). Comparison of the determinants for positive and negative affect proposed by appraisal theories, goal-directed theories, and predictive processing theories. *Current Opinion in Behavioral Sciences*, *39*, 147–152. https://doi.org/10.1016/j.cobeha.2021.03.015

Mühlhäusler, P. (2019). Revisiting greenspeak. In Christensen, B. (Eds.), *The second cognitive revolution* (pp. 81–88). Springer

https://doi.org/10.1007/978-3-030-26680-6_9

Orfan, S. N., Noori, A. Q., & Akramy, S. A. (2021). Afghan EFL instructors' perceptions of English textbooks. *Heliyon*, *7*(11), 1–6. https://doi.org/10.1016/j.heliyon.2021.e08340

Parlindungan, F., Rifai, I., & Safriani, A. (2018). The representation of Indonesian cultural diversity in middle school English textbooks. *Indonesian Journal of Applied Linguistic*, *8*(2), 289–302. https://doi.org/10.17509/ijal.v8i2.13276

Pierce, C. J., Sheil, D., & Kishi, M. (2006). *Forests and human health: Assessing the evidence*. Center for International Forestry Research.

Pomarici, E., & Seccia, A. (2016). Economic and social impacts of climate change on wine production. *Reference Module in Food Science*, 1–8. https://doi.org/10.1016/B978-0-08-100596-5.03062-6

Pratiwi, Y., Andayani, K., Roekhan, & Prastio, B. (2021). Environmental themes in BIPA textbook: Ecolinguistics perspective. *Advances in Social Science, Education and Humanities Research, Proceeding, 612*, 323–333. https://doi.org/10.2991/assehr.k.211212.061

Puspitasari, D., Widodo, H. P., Widyaningrum, L., Allamnakhrah, A., & Lestariyana, R. P. D. (2021). How do primary school English textbooks teach moral values? A critical discourse analysis. *Studies in Educational Evaluation*, *70*, 101044. https://doi.org/10.1016/j.stueduc.2021.101044

Qi, J., & Hemchua, S. (2022). Analyzing the English comic version of T*he Analects of Confucius* based on visual grammar. *Language Related Research*, *13*(5), 391–419. https://doi.org/10.52547/LRR.13.5.14

Rida, A., & Rokhman, F. (2021). The ecolexicon forms in Indonesian language

textbooks: Ecolinguistic studies at Adiwiyata school. *Seloka: Journal of Indonesian Language and Literature Education*, *10*(2), 105–115. https://journal.unnes.ac.id/sju/index.php/seloka/article/view/44692

Shahzad, R. U. (2015). Global warming: Causes, effects and solutions. *Durreesamin Journal*, *1*(4).

Singh, N.K and Espinoza-Herold, M. (2014). Culture-based education: Lessons from indigenous education in the US and Southeast Asia. *NABE Journal of Research and Practice*, *5*(1), 7–39. https://doi.org/10.1080/26390043.2014.12067773

Stanlaw, J. (2021). Ecolinguistics. *The International Encyclopedia of Linguistic Anthropology*, 1–2. doi:10.1002/9781118786093.iela0110

Štetić, S., & Trišić, I. (2019). The importance of ecotourism for the development of tourism destination - a case study of the special nature reserve "meadows of great bustard", Vojvodina. In book: 4th International Thematic Monograph: *Modern Management Tools and Economy of Tourism Sector in Present Era* (pp.323-339). Association of Economists and Managers of the Balkans in cooperation with the Faculty of Tourism and Hospitality, Ohrid, Macedonia. https://doi.org/10.31410/tmt.2019.323

Stibbe, A. (2015). *Ecolinguistics: Language, ecology and the stories we live by.* Routledge.

Stibbe, A. (2015). *The international encyclopedia of language and social interaction*. Routledge.

Sulistiyo, U., Haryanto, E., Widodo, H. P., & Elyas, T. (2020). The portrait of primary school English in Indonesia: Policy recommendations. *Education* 3–13, *48*(8), 945–959. https://doi.org/10.1080/03004279.2019.1680721

The United Nations Educational, Scientific and Cultural Organization. (1978). The Tbilisi Declaration. Environmental Education Newsletter. Connect, 111(1), 1–8. https://unesdoc.unesco.org/ark:/48223/pf0000153491

UNESCO-PNUE. (1977). Intergovernmental Conference on Environmental Education Tbilissi, Georgia: UNESCO. http://www.gdrc.org/uem/ee/EE-Tbilisi_1977.pdf

United Nations. (1972, June). R*eport of the United Nations conference on human environment*. http://www.un-documents.net/aconf48-14r1.pdf

United Nations. (1992, June). *Report of the United Nations Conference on Environment and Development*. https://www.un.org/en/conferences/environment/rio1992

United Nations Children's Fund. (2020). *For every child, reimagine. UNICEF annual report 2019.* UNICEF.

Vining, J., Merrick, M. S., & Price, E. A. (2008). The distinction between humans and nature: Human perceptions of connectedness to nature and elements of the natural and unnatural. *Human Ecology Review*, *15*(1), 1–11. https://www.jstor.org/stable/24707479

Wang, F., & Hannafin, M. (2005). Design-based research and technology-enhanced learning environments. *Educational Technology Research and Development*, *53*(4), 5–23. http://dx.doi.org/10.1007/BF02504682.

Wang, L. (2018). Research on English classroom teaching from the perspective wang of ecological linguistics. *Advances in Social Science, Education and Humanities Research*, Proceedings, *286*, 153–156. https://doi.org/10.2991/seiem-18.2019.39

Wang, Y., & Hemchua, S. (2022). Can we learn about culture by EFL textbook images?: A semiotic approach perspective. *Language Related Research, 13*(3), 479–499. https://doi.org/10.29252/LRR.13.3.18

Wardle, C., Buckley, R., Shakeela, A., & Castley, J. G. (2021). Ecotourism's contributions to conservation: Analysing patterns in published studies. *Journal of Ecotourism*, *20*(2), 1–31. https://doi.org/10.1080/14724049.2018.1424173

West, R., & Pelser, A.C. (2015). Perceiving god through natural beauty. *Faith and Philosophy: Journal of the Society of Christian Philosophers*, *32*(3), 293–312. DOI:10.5840/faithphil20157743.

Wiertlewska, J. (2011). Ecolinguistic approach to foreign language teaching on the example of English. *Glottodidactica An International Journal of Applied Linguistics*, *37*, 141–151.

Zahoor, M., & Janjua, F. (2019). Green contents in English language textbooks in Pakistan: An ecolinguistic and ecopedagogical appraisal. *British Educational Research Journal, 46*(2), 321–338. https://doi.org/10.1002/berj.3579

Zhukov, A., & Gushcha, S. (2020). Stop global warming. *Journal of Education, Health and Sport*, *10*(3), 18–33. https://doi.org/10.12775/JEHS.2020.10.03.002

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