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**ECOLINGUISTICS IN LANGUAGE EDUCATION: ANALYSING
LITERARY TEXTS FOR ECOLOGICAL AWARENESS**

MA THESIS

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ABSTRACT

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This study explores how ecolinguistics and global education can be integrated into English language teaching (ELT) by examining selected literary texts for their ecological themes and their potential influence on learners. The main goal of this research is to narrow the limitations in current reading materials addressing global ecological issues content as well as encouraging ecological awareness. Utilizing Stibbe's (2015) ecolinguistics framework, the study critically examines three storybooks—*The Sun Mother*, *The Magic School Bus and the Climate Challenge*, and *My Cousin Ah Meng*. These texts are evaluated for their linguistic characteristics, framing, ideologies, and ecological discourses, beside their effectiveness in promoting ecological awareness, environmental responsibility, and sustainable attitudes among learners. The findings highlight the potential of ecolinguistics in language teaching by providing contextually rich materials that not only address ecological concerns but also foster individual awareness. This research contributes to the field of study that integrates language education with global education by providing practical insights and suggestions for language teachers. It advocates for the integration of ecologically-themed literary texts in English classrooms, creating a learning atmosphere that prepares students with the skills, knowledge, and attitudes necessary to address urgent ecological challenges.

Keywords: Ecolinguistics, Global Education, Ecological Awareness, ELT, Literary Texts, Ecological Sustainability

ÖZET

DİL EĞİTİMİNDE EKODİLBİLİM: EKOLOJİK FARKINDALIK İÇİN EDEBİ METİNLERİN ANALİZİ

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Bu çalışma, seçilen edebi metinlerdeki ekolojik temaları ve bu metinlerin öğrenciler üzerindeki potansiyel etkisini inceleyerek, ekodilbilim ve küresel eğitimin İngilizce dil öğretimi (ELT) ile nasıl entegre edilebileceğini araştırmaktadır. Bu araştırmanın temel amacı, mevcut okuma materyallerindeki küresel ekolojik meseleler konusundaki sınırlamaları daraltmak ve ekolojik farkındalığı teşvik etmektir. Stibbe'nin (2015) ekodilbilim çerçevesini kullanarak, çalışma, üç hikaye kitabını—The Sun Mother, The Magic School Bus and the Climate Challenge ve My Cousin Ah Meng—dilinin özellikleri, çerçeveleri, ideolojileri ve ekolojik söylemleri açısından eleştirel bir şekilde incelemektedir. Bu metinler, aynı zamanda öğrenciler arasında ekolojik farkındalık, çevresel sorumluluk ve sürdürülebilir tutumları teşvik etme etkinlikleri bakımından değerlendirilmektedir. Bulgular, dil öğretiminde ekodilbilimin potansiyelini vurgulamaktadır; çünkü bu metinler, yalnızca ekolojik kaygıları ele almakla kalmayıp, aynı zamanda bireysel farkındalığı teşvik eden bağlamsal olarak zengin materyaller sunmaktadır. Bu araştırma, küresel eğitim ile dil eğitimini entegre eden bir çalışma alanına katkıda bulunarak, dil öğretmenleri için pratik bilgiler ve öneriler sunmaktadır. Son olarak bu çalışma öğrencilere ekolojik sorunlarla başa çıkmak için gerekli beceri, bilgi ve tutumları kazandıracak bir öğrenme atmosferi yaratmak adına, İngilizce sınıflarında ekolojik temalı edebi metinlerin entegrasyonunu savunmaktadır.

Anahtar Kelimeler: Ekodilbilim, küresel eğitim, ekolojik farkındalık, İngilizce Dil Eğitimi, edebi metinler, Ekolojik Sürdürülebilirlik

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LIST OF ABBREVIATIONS

CDA: Critical Discourse Analysis

CEFR: Common European Framework of Reference for Languages

ELF: English as a Foreign Language

ELT: English Language Teaching

GE: Global Education,

GI: Global Issues

PDA: Positive Discourse Analysis

UN: United Nations

UNESCO: The United Nations Educational, Scientific, and Cultural Organization

CHAPTER I

INTRODUCTION

The introduction section embodies such parts as the problem arising from the research area, the purpose, and the significance of the study. Assumptions about the research and its limitations and necessary definitions are provided followingly.

1.1. Problem

Global education encompasses global topics related to the environment, health, and welfare as humanity faces various changes, obstacles, and growing problems that should be a concern for each individual. The issues come from universally challenging situations with far-reaching effects on nature and society. Similar to any effort taken against, possible adverse effects of any event such as a natural disaster, conflicts between nations, or environmental pollution might be observed in the long run. The emergence of a global problem and following necessary precautions to minimize the results or deal with unpleasant effects require a great deal of work and time for institutions and individuals to reach the desired outcomes.

Among all the global problems, environmental problems come to the front demanding primary focus as the basis of life. Ecology means the environment and its relation to all living creatures and their relationship with each other. Ecology in its nature has a circle of life and balance and various reasons could cause a break or imbalance in the circle. Human beings and their behaviours are considered the primary focus or concern for these reasons. The impact of human activities, ranging from deforestation and pollution to overconsumption and habitat destruction, can significantly influence the balance of ecological systems, potentially leading to adverse consequences for both the environment and its inhabitants. In understanding and addressing ecological challenges, the essential role of human actions becomes evident, emphasizing the need for responsible management and sustainable practices to preserve the delicate balance of our shared ecosystem.

To create long-lasting solutions to ecological problems, a well-planned directive should be followed, focusing on the young generation and their approaches towards these issues. Considering the current conditions that humanity lives in, education must fulfil

the need to raise conscious individuals (Kiziroğlu, 2023). Therefore, global education could be put to work to empower students not only by informing them about these crucial topics but also by equipping them with the knowledge, skills, and dedication necessary for addressing these global challenges and searching for ways to preserve the world as responsible global citizens (Cates, 2000). These natural or societal issues need immediate actions globally, but protecting the environment and addressing ecological problems call for behavioural and attitudinal change starting at an early age. Our planet faces serious threats that are only resolvable with reciprocal dependence globally, and these threats are hard to ignore in this interdependent world (Jacobs & Goatly, 2000). As this work needs cooperation between the countries (Gürsoy, 2010), respectively all the people sharing the world, starting from the younger generations could provide more effective results ultimately. Instead of caring about only their own lives, thinking about society and being a part of the whole world could provide better results for nature and its prevailing problems.

Concerning younger generations, as well as the overall subjects, foreign language education should allocate more time and effort into internalizing the skills of becoming a global citizen (Cates, 1997). Foreign language education (EFL) could best suit global issues, especially ecological problems because the encountered problems persist within the language itself. While the linguistics items we prefer to use convey our attitudes toward the issues, our attitudes could also be shaped by our language. Thus, the reaction is two-way in terms of the language affecting attitudes and attitudes affecting the language. To reach critical solutions for global ecological issues, young learners must be taught with close attention and care, instilling in them a comprehensive understanding of environmental challenges, fostering a sense of responsibility, and equipping them with the knowledge and skills necessary to contribute actively to sustainable practices and the preservation of our planet (Delavan, 2020). As for language teaching, the activities and lesson content must adopt a critical perspective on how their practices and pedagogies play a role in future attitudes and actions of the learners that contribute to ecological problems (Micalay-Hurtado & Poole, 2022).

In light of these views on language and attitudes, language teaching material should be analysed within defined criteria to actively promote ecological well-being and sustainability through teaching methods (Micalay-Hurtado & Poole, 2002). Here, ecolinguistics takes place as the combination of ecology and linguistics, and it is an utterly

comprehensive area of research in that it analyses language through its usage and tries to reveal its impact on thoughts and reflection on behaviour regarding environmental issues. Ecolinguistics could be a good source of information for language studies and English language teachers as it provides the ground rules to choose useful language material to adapt to the classes (Micalay-Hurtado & Poole, 2002). By gaining the insights offered by ecolinguistics, teachers can adjust their instructional materials to not only enhance language proficiency but also establish a heightened environmental consciousness among learners. In doing so, ecolinguistics serves as a bridge, connecting language education with the broader necessity of nurturing environmentally responsible global citizens. The appropriateness of the classroom material poses a great influence on the learners' learning as well as supporting environmental consciousness. Providing our learners with essential skills is crucial for enabling them to persevere and come up with alternative solutions for environmental problems.

Previous studies have focused on analysing the present material like coursebooks already in use in schools (Cristovão, Sanches & Smart, 2022; Jacobs & Goatly, 2000; Xiong & Qian, 2012). The 17 coursebooks investigated by Jacobs and Goatly (2000) were chosen among the 120 ELT coursebooks found in South Asia Ministers of Education Organization, Regional Language Centre's collection (p. 2). Similarly, Xiong & Qian (2012) analysed 5 different Chinese EFL textbook series, consisting 28 books in total, which are employed in state schools countrywide. Lastly, Cristovão, Sanches and Smart (2022) chose to analyse the two coursebooks prevalent in Brazilian public secondary schools. These coursebooks are intended for use in English teaching and include some ecological themes. Since these books are not prepared specifically only for strengthening ecological awareness, they do not meet the researchers' expectations in terms of ecological focus. Furthermore, Çakır, İrez and Doğan (2010) have investigated the pre-service teachers' approaches towards ecological content in EFL classes and they found that teacher candidates have limited knowledge about ecological content and this might be the reason for a low amount of integration.

Despite the significance of global issues, a gap exists in providing language teachers with sufficient literary material addressing global concerns for classroom integration. As suggested by Cates (2000), language teachers face difficulties when searching for diverse materials covering global problems. Even though teachers want to focus on ecological issues in their lessons, they encounter some difficulties in choosing

the right material for their lessons possibly due to their insufficient familiarity with these issues or time constraints during the planning period. Therefore, it creates a challenge, often resulting in a scarcity of integrating global issues into the courses. If teachers have access to readily evaluated material in terms of ecological awareness, they could make use of them and put them into action more frequently and more effectively. Considering the increasing effects of ecological issues, this study will focus on raising awareness through foreign-language classes and analyse the selected literary texts in the realm of ecology and linguistics, in other words, Ecolinguistics according to Stibbe's (2015) discourse analysis criteria for ecological awareness.

1.2. The Objective of the Research

The purpose of this study is to narrow the gap in the integration of global issues, particularly environmental subjects, into language classrooms. Within the context of the Ecolinguistics approach, critical analysis of the predetermined texts and evaluations of their possible impacts on learners' awareness and behaviour regarding ecological issues will be pointed out.

The study has two claims; primarily, to explore the existing literary texts for language teachers, identifying gaps and limitations in addressing global issues; secondly, to examine the selected literary texts in terms of ecolinguistics, understanding how they contribute to shaping attitudes, ideologies, and actions related to ecological consciousness. It also attempts to provide insights and recommendations for language teachers to enrich the lessons with efficient reading material on ecological topics and create a suitable learning environment in which to practice language skills. Considering these tangible results, this study aims to contribute to the language education field by employing relatively new and comprehensive research on the integration of language and global education skills as well as increase diversity in the research field by employing Ecolinguistics analysis on the selected storybooks with an ecological focus.

Under these objectives, the study tries to find answers to the following research questions:

- 1) What ecolinguistic criteria can EFL teachers apply to evaluate and select teaching materials that effectively promote ecological awareness among learners?

2) How do linguistic features in *The Sun Mother*, *The Magic School Bus* and *the Climate Challenge* and *My Cousin Ah Meng* promote ecological awareness, as analysed using Stibbe's ecolinguistics framework?

3) To what extent do storybooks with ecological themes, analysed in this study, influence learners' environmental attitudes, knowledge, and behaviours, fostering awareness and promoting environmental responsibility?

1.3. Significance of the Research

This research is expected to prove effective for the stakeholders of language teaching; including teachers and language learners. Firstly, it draws attention to the potential gap in the field by evaluating the available literary texts to integrate global issues into language teaching, creating a useful resource for educators. Besides, a new perspective could be achieved through the analysis of the texts in terms of ecolinguistics to emphasise their significance on learners' attitudes and acts towards ecological matters as language choices shape our way of thinking deeply. Accordingly, the results will offer new insights for language teaching since education has to keep up with present advancements and carry daily life into the classroom by covering current issues.

Another significant aspect of this study is its critical views on the integration of various skills related to language teaching and language analysis. There is a lack of emphasis on the use of global issues particularly literary texts addressing environmental concerns. As Arıkan (2009) notes, prior studies have largely focused on the definitions and explanations of the relevant concepts, often neglecting or leaving out the question of how to select an effective text for awareness-raising purposes. In addition, promoting active learner engagement in environmental issues can accelerate the awareness-raising process. Therefore, the ultimate aim of raising well-informed and socially conscious global citizens could be accomplished through comprehensive, in other words, environmentally aware lesson content. To conclude, this study aims to make a valuable contribution to the field where there is a limited number of research regarding the use of teaching materials with ecological content, especially literary texts.

1.4. Assumptions

In this study, the selected literary materials are assumed to cover ecological topics. The English teachers who will make use of these materials are regarded as being eager to

incorporate ecological topics and the learners are assumed to be A2-level learners of English based on the “Common European Framework of Reference for Languages (CEFR)” (British Council, n.d.). It is also assumed that the English teaching syllabus covers environmental topics and teachers already have experience on using literary materials in classes to foster language learning.

1.5. Limitations

This study has some limitations in terms of the number of texts evaluated under ecolinguistics discourse analysis criteria. As the study aims to suggest a bunch of ecologically effective texts usable as language teaching materials, increasing the total number of examined materials could be helpful, however, due to time limitations and the unavailability of evaluating each present text, 3 texts have been investigated under the ecolinguistics discourse analysis framework by Stibbe (2015). Another limitation is related with the foreign language level of the students. The literary texts analysed in the study is appropriate for students that have A2 language level skills. Therefore, the lesson focus might move to explaining language functions rather than emphasizing the content.

1.6. Definitions

Environmental Education: It is a continuous learning process that enables individuals to be aware of their environment and gain knowledge, skills, values, and experience to solve environmental problems for future generations (Vaughan et al., 2003).

Global Education: Global Education (GE) represents a comprehensive and interdisciplinary educational strategy that seeks to safeguard global well-being by advocating for peace, democracy, human rights, and environmental sustainability. It urges young individuals to actively engage in shaping a more promising future for the entire world (Ferguson-Patrick, Macqueen, & Reynolds, 2012; Selby, 1999; Tye & Kniep, 1991). Initially rooted in social studies, it has since expanded its influence to include language teaching.

Global issues: Commonly referred to as Global Issues (GI), encompass challenges that have adverse impacts on all living beings on Earth. The United Nations (UN) characterizes global issues as problems that extend beyond national boundaries and cannot be effectively addressed by any single country in isolation. The organisation has

compiled a comprehensive list of these global issues such as peace education and human rights (UNESCO, 1974).

Ecolinguistics: Ecolinguistics is an interdisciplinary field that explores the relationship between language and the environment. It investigates how language shapes and reflects our perceptions of the natural world, ecosystems, and environmental issues. Ecolinguists examine the role of language in influencing attitudes toward the environment, ecological sustainability, and the interconnectedness between language, culture, and the ecosystem (Stibbe, 2015).

Critical Discourse Analysis: Critical Discourse Analysis (CDA) is an approach that involves examining language use from a critical perspective to uncover underlying power dynamics, social structures, and ideologies. This method goes beyond surface-level analysis and aims to reveal how language can influence and reflect broader social, political, and cultural contexts (van Dijk 2008; Fairclough, 2014).

Ecological well-being and sustainability: This term refers to the health and balance of the natural environment and the ability to maintain these conditions over the long term. This concept involves promoting the health of ecosystems, biodiversity, and the overall ecological system, while simultaneously ensuring that human activities do not deplete or harm these vital elements.

CHAPTER II

CONCEPTUAL FRAMEWORK

2.1. The Integration of Global Issues in ELT: Cultural Aspects/Raising Awareness

2.1.1 Global Education

Global education, a significant component of current educational approaches, aims to cultivate a comprehensive understanding of our interconnected world and address critical problems that surpass national borders. These critical problems are not limited by national borders or do not concern only a group of people. On the contrary, they should be regarded with great attention by every individual and organization, from small companies to nations.

The concept of global issues in education dates back to the 1960s when it appeared as a divergence from individuality to the necessity of world unity (Gaudelli, 2003). The global education trend that arose in America after World War II aimed to serve the national interests by increasing its political, economic, and socio-cultural influence across the globe. Following the devastating events that occurred in the 20th century, including World War I and II, the use of nuclear weapons and their profound impacts on global security, and the Cold War tensions between the United States and the Soviet Union, educators were prompted to recognize the urgent need for global education. The essential aim of global education back then was to educate students with realistic and geo-politic points of view (Lamy, 1983). During and post-war years generally focused on how to handle contemporary challenges and raise competent citizens against any potential threat nationwide; however, this view shifted towards a more international perspective in time as the immediate effects of war diminished (Dyer & Bushell, 1996). Therefore, a plausible response arose to the unprecedented challenges facing humanity, aiming to equip learners with the knowledge, skills, and attitudes necessary to address pressing global issues and foster international cooperation (Gaudelli, 2003). Instead of nation-based steps, issues requiring global actions have become prominent. As globalization has advanced in the past fifty years, the focus has shifted from nation-based approaches to global solutions. Such issues as climate change, pandemics, and terrorism, which all

require international cooperation for effective resolution, highlight the crucial role of collaborative efforts in confronting present-day difficulties.

Considering this requirement, various scholars have touched upon global education; for example, Cates (1990) defines global education as “teaching with the aim of empowering students with the knowledge, skills, and commitment required by world citizens for the solution of global problems” (p. 41). Fisher and Hicks (1985) refer to global education as “education which promotes the knowledge, attitudes, and skills relevant to living responsibly in a multicultural, interdependent world” (p. 8). In line with these definitions, global education encompasses blending educational context with common issues that should be addressed globally.

The integration of global issues into lesson content has been regarded vital in current educational policies to enhance the learners with the knowledge, skills, and attitudes necessary to handle the current problems and also contribute to solutions (Yakovchuk, 2004). By integrating such issues as climate change, biodiversity, human rights, food crisis and famine, economic sustainability, and health into lessons, learners could benefit more from the lessons; enabling them to broaden their perspectives and develop a sense of social responsibility (Focho, 2010). This pedagogical approach extends beyond the traditional limitations of teaching, which typically emphasizes rote memorization, standardized testing, and depending on a fixed curriculum. Instead, GE encourages active classroom interactions that respond to real-world challenges, prompting students to analyse, discuss, and propose solutions to global issues.

Since the responsibility falls upon each educator to contribute to maintaining peace, and teaching universal rights such as equality and justice besides raising awareness towards global problems, language teachers should also devote sufficient time and effort to achieve these goals (Pramata & Yuliati, 2016). Present methodologies indeed make use of global issues as content but the lesson is generally limited to an explanation of the problem and its causes rather than allocating more time to practical solutions. Cates (2000) alleges that most educators feel that learners are not competent enough to turn to global issues due to traditional teaching methods such as teacher-oriented and exam-based evaluations. This claim might be still valid for certain situations, but current educational practices generally focus on learners’ needs, support active learners, and make room for class participation. Thus, language teachers should seize the opportunity to empower

students to become informed global citizens capable of addressing real-world challenges effectively.

2.1.2 The Aims of Global Education

Since its birth, GE has promoted wider-scale goals and turned to younger generations for more effective outcomes. In 1974, The United Nations Educational, Scientific, and Cultural Organization (UNESCO) summoned six aims of global education, which are “awareness of environmental problems, a basic understanding of the environment and its problems, and humans’ role in the environment; an attitude of concern for environmental problems, skills in overcoming environmental problems, ability to evaluate proposed solutions to environmental problems, participation in solving environmental problems” (as cited in Jacobs & Cates, 1999, p. 46). Thus, a crucial goal of global education is that learners develop a sense of global responsibility and take a role in coming up with solutions (Cates, 1990). This statement applies to the basis of education, covering all subjects and levels.

According to Focho (2010), global education should seek to manage cultural awareness and sensitivity, teaching each culture is unique and diverse. When learners have gained such a perception, they are more likely to show tolerance towards other people. Another point emphasized by global education is awareness and understanding of the matters requiring attention and events that have the potential to affect our own lives and the lives of people around the world. In addition to these, Focho (2010) claims that global education helps establish a system of universal values, enhancing critical thinking and leadership skills, and facilitating experiential learning.

In global education, it is also of great importance to enable students to examine their own values and attitudes, develop knowledge and skills to fight prejudice and discrimination, and actively engage in global communities (Roux, 2001). Regarding the overall goals of global education, it is an educational approach towards fostering active citizenship among individuals, and the development of skills to address issues of inequality, injustice, and stereotypes. Besides, promoting increased respect for diversity, human rights, and the environment has been emphasized within the related explanations (Augutienė & Baltrėnienė, 2014).

All in all, GE aims to foster raising awareness towards worldwide problems, including a variety of subjects, and promotes cultural diversities. By the agency of global issues integration into lesson content, educators can create a more efficient teaching environment. Similar to GE, second language teaching also includes broader educational goals as well as language acquisition and proficiency. Therefore, the aims of GE and foreign language instruction could be smoothly combined with the help of suitable content out of global issues.

2.1.3 Challenges to the Implementation of Global Education

Successful implementation of global education is often hindered by several political, sociocultural, economic and pedagogical obstacles. The main challenges include a lack of resources, curricular limitations, cultural prejudices, and limited language proficiency. These all could create difficulty in employing global education meaningfully. Teachers' limited access to educational materials may further prevent them from sparing their efforts to integrate global education into schools and classrooms. This problem can be managed by providing teachers with extra, easy access and adequate resources apart from available lesson materials.

Additionally, if standardized testing and core subjects are prioritized, the pressure may leave little room in the lesson content for global education, making it challenging for educators to incorporate global education standards. If global education themes are embedded into the curriculum, they could be discussed within the ongoing process without changing the focus. Moreover, cultural differences, prejudices, and resistance to new ideas may deter teachers from placing efforts to promote cross-cultural understanding and appreciation in the classroom (Merryfield & Kasai, 2015). However, teachers can eliminate cultural prejudices by applying inclusive materials that promote empathy and understanding towards others.

After overcoming various obstacles, the language barrier often emerges as one of the most significant and challenging restrictions to address. Limited language proficiency among students may slow down effective communication and engagement with global issues (Akban & Yavuz, 2020). Therefore, correct material and suitable activities might be a solution for removing language constraints such as simplifying the language and using visual aids. Even though their language is at the beginner level, their perspectives towards the issue could be broadened with such methods.

Hyttén and Bettez (2008) also highlight that bringing complex issues into the classroom may result in a depressing atmosphere, particularly when the focus is placed on problems or negative aspects. However, the researchers (Hyttén & Bettez, 2008) argue that knowledge enforces awareness and causes learners to think outside the box to be responsible citizens as life is not always pleasant. Lastly, rapid globalization and technological advancements can create new complex and interconnected global issues that are difficult to address in the classroom, requiring educators to continuously adapt and update their lesson plans. Keeping up with the current trends and catching the global issues need continuous attention, and therefore, might be easy to overlook. Thus, educators must collaborate effectively, prioritize resources, and provide ongoing support to ensure the successful implementation of global education efforts.

2.1.4 Global Education in EFL

In language teaching, establishing a standardized level of proficiency is essential for achieving global language competence. The Common European Framework of Reference for Languages (CEFR) is a widely recognized framework that describes and assesses proficiency levels in foreign languages across Europe. It provides a common basis for comparing language qualifications and promotes language learning, teaching, and assessment by advocating learner-centred lessons that focus on learners' needs and contemporary challenges, helping to relate lesson material to their daily lives (Horstein, 1990; Stempleski, 1993). This aligns well with the goals of GE and English Language Teaching, providing opportunities for activities designed to achieve key objectives.

GE, as an approach to foreign language teaching, aims to equip students with the skills essential to effectively learn and use a foreign language. It also empowers them with the knowledge, skills, and commitment necessary to address global challenges as responsible global citizens (Cates, 2000). Educators argue that the foreign language classroom serves as an ideal environment for global education, as it provides opportunities for language acquisition alongside fostering awareness and understanding of global issues (Dyer & Bushell, 1996; Jacobs & Goatly, 2000; Maley, 1992; Cates, 2000; Mark, 1993; Starkey, 1988).

Integrating global issues in foreign language teaching enriches language acquisition by providing a meaningful context for linguistic development (Crandall, 1987). Through this engagement, language learners not only acquire target grammar

structures and vocabulary but also practice their communication skills within a broader subject (Jacobs & Cates, 1999). Addressing global issues within the language learning environment enables students to express their thoughts, opinions, and solutions to problems, reinforcing their language proficiency while simultaneously raising a sense of global awareness (Cates, 2004). This was first mentioned in the Linguapax Kiev Declaration (1987). Linguapax is a program that promotes linguistic diversity, peace and cultural awareness through language learning. In this program, teachers are encouraged to utilise global topics to foster cultural understanding and enhance learners to reflect their ideas on complex global issues while practising foreign language skills on challenging topics. Thus, the Linguapax Kiev Declaration is regarded as groundwork for linking language education with global awareness (UNESCO, 1987). In the following years, this concept gained credibility in the field. For example, Dyer and Bushell (1996) argued that employing global issues in language teaching promotes students' use of English not only to express their own values but also to engage in critical thinking and discussion about them, while also considering and integrating diverse perspectives. The foreign language classroom serves as a sufficient space where multiple languages and cultures interact, facilitating the development of a global perspective through interactions and exchanges.

GE could be argued as an intriguing approach to language teaching in that it allows learners to be equipped with language tools that are necessary to negotiate meaning and the skills required for communicative purposes on globally concerning issues. Thanks to the integration of global issues into language lessons, learners could have the opportunity to reach a more comprehensive and enriching educational experience and could prepare themselves to be both language proficient and socially conscious and globally competent individuals (Merryfield & Kasai, 2004).

Global issues may vary around the topics that are classified as having potentially detrimental outcomes to the world and humanity. Various topics such as human rights, refugees, democracy, health problems, climate change, and environmental problems are regarded as global issues by the United Nations (UNESCO, 1987). Cates (1990) categorizes the contents of global issues into four subjects, respectively; "peace, human rights, development, and the environment" (p.41). He also summarizes the basic aims of global education which are first to inform the learners about the problem, its causes and effects, and then to improve learners' skills essential for solutions such as

“communication, critical and creative thinking, cooperative problem-solving, etc.” (p. 41).

Cates (2000), along with other researchers (Mark, 1993; Swenson & Cline 1993; Yoshimura, 1993), propose a more comprehensible categorization to the broad spectrum of global issues.

Environmental concerns: pollution, deforestation, endangered species, climate change, recycling, natural disasters, etc.

Peace education matters: wars, nuclear proliferation, refugee crises, and related conflicts.

Human rights challenges: racism, gender inequality, and children’s rights violations.

Intercultural communication: cultural clashes, the balance between global citizenship and national identity, multiculturalism.

Socio-economic issues: poverty, wealth distribution, consumerism, advertising impacts, and similar socio-economic factors.

Health-related issues: ranging from drug abuse to diseases like AIDS and other public health concerns.

Linguistic imperialism: addressing the dominance and influence of certain languages over others in global contexts.

Global education provides numerous topics that educators and students could benefit from. However, it is crucial to note that the integration of these topics should be carefully planned and consistently incorporated into lesson content (Jacobs & Cates, 1999). Paying attention to the content of classroom materials from a social and cultural perspective, selecting student-centred active teaching methods, and using language teaching approaches that focus on international issues are among the recommendations that help integrate global issues into the classroom (Erfani, 2012).

However, determining which global issues to include in lessons also requires a critical consideration. Various researchers and educators have applied GE in teaching English and provided good examples. For instance, Sargent (1993) argued that conflict resolution in peace studies might be a way to promote communicative language skills. Similarly, Yoshimura (1993) demonstrated how beginner-level children can be introduced

to global issues by organizing overseas study tours to foster both global consciousness and language learning. These examples suggest that the goals of GE and foreign language instruction can be smoothly combined, creating a holistic and effective educational experience.

Furthermore, several scholars have put forward some recommendations concerning how to implement GE in language classrooms. Jacobs and Cates (1999) suggest that “projects, role plays, simulations and cooperative learning” (p. 46) are especially appropriate for integrating global content. Roald (1991), as cited in Dyer & Bushell (1996), advises beginning with a needs analysis to identify students’ beliefs and interests in global issues. Dale (1995), as cited in Dyer & Bushell (1996), proposes using critical thinking activities, such as analysing films (covering related topics like *Mississippi Burning* or *Do the Right Thing*) to explore topics like racism. Students then could engage in problem-solving writing tasks and collaborative discussions, fostering critical thinking skills and deeper understanding. In such a step-by-step process, their writing tasks could turn into formulating opinion essays based on claims and sharing peer ideas by justifying arguments (Dale, 1995).

Besides, Stempleski (1993) claims that cross-cultural prejudices might be overcome by applying similar cases as lesson content. A discussion might reveal the underlying causes of bias and can help to eliminate or at least diminish it among the students. In terms of teaching methods, Ladousse (1987), Omaggio, (1978) and Kagan (1994) propose that using projects, role plays, simulations and cooperative learning facilitates student engagement and active learning encourages students to explore different perspectives, collaborate with peers, and apply classroom learning to real-world situations. To integrate language skills with GE goals, Sandilands (1989), cited in Cates (2002), offers that students may listen to information about organizations like Amnesty International, discuss human rights issues, read newsletters, and write letters advocating for the release of prisoners of conscience (Starkey, 1988). Another suggestion came from Starkey when he used the historical background of a global issue such as environmental pollution to teach past, present, and future tenses more relevantly (as cited in Pike & Selby, 1988). This approach entails students exploring the problem, examining its current impact on their community or country, and engaging in future-oriented activities to address the issue.

To sum, integrating global education within the context of English language teaching presents a game-changing approach beyond traditional language instruction. The range of topics combined with correct methodology and suitable material could yield remarkable results. By aligning language instruction with students' interests and promoting critical thinking, educators can foster language proficiency while preparing students to be a part of an increasingly interconnected world. As evidenced by various scholars and practitioners in the field, the incorporation of global themes, such as conflict resolution, human rights, and ecological concerns, enhances learners' higher-level thinking and intercultural communication skills, preparing them for an increasingly interconnected world. This integrated approach to language learning will prepare students to handle modern challenges and help them feel responsible and involved beyond the classroom.

2.1.5 Exploring Global Education in English Language Teaching in Türkiye

Though dating back to the 1960s, research on global education in Türkiye has been put aside to some extent; in other words, the number of research conducted in the related field is limited. However, some studies have revealed remarkable insight from educators and students regarding integrating global education into lesson content.

Several studies have been accumulated to provide an overview of teachers' perspectives and attitudes towards global education in Türkiye. In Çavdar's (2006) study aiming to enhance foreign language teachers' interest in global education and issues, English teachers in Greece and Türkiye were surveyed regarding their views and attitudes towards global education, issues, and values. The study included 181 English teachers, with 109 representing Türkiye and 79 representing Greece, who were surveyed via a questionnaire, and 16 teachers were interviewed for more detailed insights. The results indicated that English teachers in both countries had positive attitudes towards using global issues in their classes. Nearly all participants acknowledged the importance of global issues and values, expressing the belief that students, as future world leaders, should be aware of political, economic, and global developments and issues. Moreover, they emphasized the importance of equipping students with critical thinking skills to address global issues, considering it the responsibility of teachers to prepare students in this regard. Both Greek and Turkish teachers paid more attention to global issues such as the environment, peace education, socio-economic issues, and human rights. Similarly, in

the context of global values, teachers in both countries prioritized values such as freedom, peace, equality, rights, democracy, social responsibility, tolerance, independence, and respect. However, there was a significant difference between Turkish and Greek teachers regarding the selection of global topics and values for instruction. While most Turkish teachers felt constrained by the curriculum set by the ministry, expecting the ministry to develop a program incorporating global issues and values, Greek teachers felt more freedom in selecting global topics and values for instruction.

In 2019, Kaplan investigated teachers' and students' perspectives, practices, and awareness regarding the integration of global issues in English classes in Anatolian High Schools in Çanakkale, Türkiye. Data were collected through questionnaires administered to 250 students and 30 teachers, along with document analysis of English language teaching programs and teacher competency documents. Analysis of quantitative and qualitative results showed that while teachers generally viewed the integration of global issues positively, issues like peace education and language imperialism were considered politically sensitive. However, few teachers regularly included global issues in their lessons, suggesting a need for higher-level decisions on integration. Students also had positive perceptions but preferred global issues to be integrated occasionally within the standard curriculum rather than forming the entirety of it. Document analysis revealed limited mention of global issues in the curricula, mostly focusing on non-political environmental matters. Overall, the study enhanced participants' awareness of the importance of global issues in English classes.

Likewise, Akbana and Yavuz (2020) explore the incorporation of global issues (GIs) in English as a Foreign Language (EFL) teaching contexts in Türkiye. Their study aims to investigate EFL lecturers' views on GIs and how they integrate GIs into their teaching. The data for the study were collected through a short survey of open-ended questions and follow-up semi-structured interviews with nine EFL lecturers at a state university in Türkiye. The findings of the study reveal that EFL lecturers have a clear understanding of GIs and prefer both coursebook-dependent and independent methods to incorporate GIs in language teaching. The lecturers believe that young adults with at least a B1 level of English proficiency are the best target learner groups for embedding GIs in language teaching. They also prefer to focus on speaking and writing skills to incorporate GIs in their teaching, particularly with students whose majors are related to the topics of interest. The study concludes with methodological and pedagogical implications for

researchers and teachers to incorporate GIs in EFL teaching. The authors suggest that incorporating GIs in language teaching can enhance students' awareness, critical thinking skills, and motivation. They also emphasize the need for teachers to be aware of students' readiness and language proficiency level, and to choose appropriate content aligned with these factors.

The second focus in the field is on the implementation practices and their findings and possible insights for future research. Saraç-Süzer (2008) discusses the teaching of reading and writing skills in a foreign language, specifically focusing on the process and task-based syllabus approach. It presents a syllabus proposal and evaluation data for a course called *Reading and Writing Skills II* that was implemented at Hacettepe University in Türkiye. The course aimed to develop critical reading skills, student autonomy, and focus on global issues. The syllabus was designed in a way that allowed students to choose the reading topics and conduct research and writing activities related to those topics. The five main topics chosen by the students were terrorism, the Greater Middle East project, freedom of expression, multiculturalism/multilingualism, and gender discrimination. The course materials were collected in personal portfolios instead of using a textbook, allowing students to conduct library and internet research and write personal reflections. The qualitative and quantitative data collected from the students throughout the course provided important evaluation findings, showing that the syllabus and teaching model were welcomed by the participants and helped increase student participation and motivation.

In Arıkan's research (2009), the contextualization of English grammar through activities centred on environmental peace education is explored whether it enhances students' awareness of global issues. Data for evaluating the effectiveness of this instructional approach were gathered from two sources. First, 50 fourth-year pre-service English language teachers were introduced to relevant classroom activities and assessed their suitability for foreign language instruction. Second, 46 tenth-grade students participated in these activities led by pre-service teachers and provided feedback on their learning experience. The evaluations of pre-service English language teaching (ELT) teachers were collected using 15 Likert-type questions, while tenth-grade students responded to four structured, open-ended questions. Quantitative and qualitative data findings suggest that integrating English grammar with environmental peace education is an effective strategy for foreign language instruction.

One more study, a doctoral dissertation, submitted by Başarır (2018) aimed to enhance higher education students' language skills and global awareness through English teaching using a theme-based model within the content-based language teaching approach, while also addressing implementation challenges. Conducted as action research during the 2015-2016 academic year, the study involved second-grade students at Nevşehir Hacı Bektaş Veli University, Vocational School of Tourism and Travel Management program. Data collection methods included interviews, observation, student diaries, researcher diary, student products, and achievement tests. The themes for the course were determined beforehand, focusing on diversity, gender equality, and global warming. Results from the implementation lasting 22 lessons indicated positive impacts on language skills improvement and heightened awareness of global issues. Challenges such as confidence in pronunciation, native language usage, and word choice were addressed through action research measures. Students demonstrated enhanced perceptions of diversity, expanded understanding of gender equality, and improved comprehension of global warming causes and solutions. The study concluded that theme-based English courses fostered awareness development, critical thinking, and motivation among students, contributing to language learning and engagement with global issues.

Lastly, the purpose of Bulut and Arıkan's study (2015) is to analyse English language coursebooks in terms of how they represent ethnicity, gender, and disability, and to relate this analysis to socially responsible teaching. The study uses a checklist adapted from Cunningsworth (1995), as cited in Bulut & Arıkan (2015), to analyse 240 reading passages from 10 different coursebooks. The checklist includes categories such as nationality, disability, gender roles, and number of males and females. The results indicate that the coursebooks generally lack sensitivity to differences based on ethnicity, gender, and disability. Disability is rarely mentioned in the coursebooks, or only mentioned in one or two sentences. Women also receive less representation than men in the coursebooks and are often portrayed in subordinate roles. In terms of ethnicity, British and American characters are represented more frequently than characters from other countries. The study concludes that coursebooks need to be more inclusive and representative of different nationalities, ethnicities, genders, and disabilities to promote social responsibility in English language teaching.

Overall, these studies illuminate the integration of global issues into English language teaching practices in Türkiye. Çavdar (2006), Kaplan (2019), and Akbana &

Yavuz (2020) offer insights into educators' perspectives on this integration. While methodologies and focuses vary, each emphasizes the importance of incorporating global issues to enhance students' awareness and critical thinking, as well as teachers' responsibility in preparing students to address global challenges. However, differences arise in perceived constraints, particularly regarding curricular restrictions faced by Turkish educators. Regarding implementation practices, Saraç-Süzer (2008) and Arıkan & Bulut (2015) focus on specific instructional methodologies such as task-based syllabus and environmental peace education, while Başarır's (2018) research adopts a broader theme-based model. Despite differences, all studies highlight the effectiveness of integrating global issues in enhancing students' language skills and awareness, emphasizing the importance of innovative teaching methods and thematic approaches. Additionally, Bulut and Arıkan's (2015) study underscores the need for more inclusive representation in English coursebooks to promote social responsibility in language teaching. Together, these studies provide valuable guidance for curriculum development and teaching approaches, offering a comprehensive understanding of the strategies and challenges involved in integrating global issues into English language education in Türkiye.

2.1.6 Global Education in English Teaching with Ecological Concerns

As the field of education evolves to address the complexities of our interconnected world, integrating global issues into education becomes increasingly imperative. From the origins of global education, the framework stresses the necessity of equipping learners with the knowledge, skills, and attitudes necessary to navigate global challenges. However, when examined deeper into the integration of global issues, it becomes evident that ecological concerns represent a vital aspect of this educational challenge. In order to serve ecological concerns, a transition to the use of lesson material with ecological content smoothly merges the broader goals of global education. An examination of ecological awareness within educational contexts may help to reflect the urgency of addressing environmental challenges through the use of language teaching methodologies as the environment is interconnected across all disciplines (Jacobs & Cates, 1999).

Even though foreign language lessons cover some themes related to nature, animal world, recycling etc., they are generally more superficial; focusing on the related vocabulary with a functional grammar. Thus, they could be argued as not underlining the

environmental problems and not involving learners as active members of society (Jacobs & Goatly, 2000). Instead of shallow reference to environmental topics, using texts essentially written to promote ecological awareness and finding solutions to environmental problems could yield more effective results; however, a gap in the field was discussed by Jacobs and Cates (1999), as well as by Akbana and Yavuz (2020) in their interview with pre-service teachers in terms of available foreign language material to integrate into classrooms. To compensate for this lack, eco-analysis of texts with an environmental focus could provide educators with ready-to-use materials that align with global education objectives, offering suitable resources for fostering ecological awareness and sustainability in the classroom. By such analysis, teachers can effectively integrate environmental themes into language lessons, empowering students to engage critically with ecological issues and contribute to positive change in their communities and beyond. Considering how to conduct a proper analysis, ‘ecolinguistics’ as a branch has emerged as a relatively novel field to conduct an analysis based on a grounded framework (Stibbe, 2015). This framework could be regarded as a language science as it adopts a natural approach to language from being plain to more enriched.

According to previous explanations in the field by some pioneer researchers (Crystal, 2000; Haugen, 1970; C.F. Voegelin & F. M. Voegelin, 1964), ecolinguistics can be defined as the study of how human beings interact with their environment to create an ecology that supports their existence and the study of the limits and carrying capacities of these processes for human and non-human life united. This definition is grounded in a naturalized and realist philosophy of science and encompasses various ecological dimensions. Steffensen and Fill (2013) suggest four basic approaches that are effective in revealing the spoken or written language: the symbolic, the natural, the sociocultural, and the cognitive ecology. The relation to the biological environment, social and cultural aspects, and users’ cognitive skills to interpret the language and its surroundings are also emphasized by focusing on the interconnections of languages within a specific area (Steffensen & Fill, 2013). The researchers claim that the ecolinguistics approach can contribute to critical studies in ecolinguistics, particularly in addressing the impact of human practices on ecosystems. They propose a unified ecolinguistics framework encompassing a naturalized foundation for concerns such as the exploitation of natural resources, empowerment of marginalized social groups, and the peaceful coexistence of languages and cultures in multicultural communities.

Given that basis, the integration of ELT and ecolinguistics can prove a powerful tool to bring up new approaches and also an update in language teaching materials and methods. Keeping up with global problems and equipping learners with contemporary skills along with higher-order thinking skills (analyse/evaluate/synthesis) (Bloom et al., 1956) are essentially aimed beforehand for each teaching practice. In essence, this study aims to highlight the potential of merging ELT and ecolinguistics, offering a holistic framework that goes beyond linguistic competence to foster informed and diligent global citizens who are aware of global situations. In this way, language teaching can establish a deeper connection between language acquisition and ecological awareness, emphasizing the mutual relationship between linguistic expressions and the environment. Educators could also make use of this analysis model when deciding upon relevant material.

2.2. Language and Environment

The relationship between language and environment has been a concurrent issue among the various researchers exploring how language shapes our understanding of ecological issues and influences attitudes toward sustainability. Schultz (1992) proposes that environmental discourse brings about the profound impact of language and it shapes public perception and policy. The researcher argues that commercial interests, as dominant players in society, heavily influence the language used in discussing the environment, often framing it in terms that support exploitation. She also criticizes the use of seemingly neutral or positive terms like ‘development’ and ‘resource’ which carry associations that favour commercial use of the environment. In her view, even terms like ‘sustainable development’ are chosen to mask unsustainable practices. In addition, she also highlights how euphemisms and pejoratives (degrading words) are used to distort environmental issues. For example, destructive activities are often labelled with harmless terms like ‘harvest’ or ‘clearing’ masking their negative impact. Conversely, pejoratives like ‘weed’ or ‘waste’ are used to devalue elements of the ecosystem that are not commercially exploitable.

Schultz (1992) advocates for a conscious reconsideration of the language used to discuss the environment, suggesting more accurate and less exploitative alternatives. The researcher calls for environmental advocates and the public to challenge the fixed language that gives value to commercial interests and promote terms that reflect the true

value and condition of natural ecosystems. The researcher (Schultz, 1992) emphasizes that the future of environmental conservation could depend on reshaping the linguistic framework to foster a greater appreciation and respect for nature. Changing the wordage for environmental emphasis could be exemplified as using “(human-induced) climatic dislocation” instead of “global warming”; “human-made” instead of “man-made” etc. (Schultz, 1992).

Another researcher Penman (1994) also highlighted the significance of language on environment and pointed out the need for communication studies to enhance human understanding and address serious life issues, particularly environmental concerns. In his study, Penman (1994) argues that communication is fundamental to our existence and plays a crucial role in shaping our interactions with and understanding of the environment. The researcher adopts a social constructionist view, suggesting that our discussions and the language we use construct our perceptions of environmental issues. This constructionist perspective emphasizes the process of communication, or ‘verbing,’ which influences our future actions and the possibilities we can predict for addressing environmental problems.

Penman (1994) also critiques the typical environmental discourse, or ‘green speak,’ which often uses vague and similar language that fails to facilitate effective action or change. For example, terms like ‘sustainable’ and ‘biodiversity’ are noted for their lack of referential adequacy, highlighting how they conceal precise meanings and prevent constructive dialogue. The researcher proposes that by reevaluating and transforming the way we talk about the environment, communication studies can uncover new ways for environmental solutions and foster a more active, inclusive discussion with diverse perspectives. Emphasizing human involvement and responsibility in environmental issues could encourage more practical and sustainable actions.

A more recent publication in the related field has been conducted by Arran Stibbe (2015). The researcher has studied the relationship between language and environment/ecology and his remarks indicate that language influences how we think about the world and how we act. According to Stibbe (2015), ecolinguistics could be key to critiquing forms of language that contribute to ecological destruction and aiding in the search for new forms of language that inspire people to protect the natural world. He coined the term *The stories we live by* – to explain mental models that influence behaviour and lie at the heart of the ecological challenges we are facing. He argues that language shapes how we

treat each other and the natural world, and therefore, has a significant impact on our actions.

In his study, *Ecolinguistics: Language, Ecology and the Stories We Live By*, Stibbe (2015) also discusses the different approaches and theories within ecolinguistics and how language can be analysed to reveal “*the stories we live by* - mental models that influence behaviour and lie at the heart of the ecological challenges we are facing” (pp. 1, 2). He emphasizes the importance of ecolinguistics inquiry and how it can contribute to the search for new stories that promote ecological sustainability. He shows his findings as “the forms stories take, and their linguistic manifestations” (p. 17). He underlines that these story types are not isolated but interact and overlap, where ideologies may incorporate evaluations and metaphors, or where metaphors enhance framing. By understanding and analysing these interconnected stories, we can uncover deeper insights into how language shapes our perceptions and actions toward the environment and society.

All the researchers mentioned above (Schultz, Penman, and Stibbe) are on the same page about the dramatic effect of language on the environment, and awareness of possible problems and actions, illustrating the necessity for a cautious approach to the words and narratives we employ. This context has significant implications for foreign language learning, where language serves as a tool for communication as well as a means of shaping worldview and cultural understanding. By integrating environmentally conscious language practices into foreign language education, learners can develop a deeper appreciation for sustainability. This approach encourages learners to engage critically with how language influences environmental discourse and empowers them to participate actively in global sustainability conversations. Thus, the transformation in environmental language and its analysis discussed by Stibbe (2015) can be a powerful component of foreign language teaching, promoting a more sustainable future through healthy communication.

2.3. Discourse Analysis: Ecological, Critical, or Positive?

Critical Discourse Analysis is the base for the analytical examination of spoken or written language and focuses on the discourses affecting how humans treat each other, other organisms, and the physical environment (Stibbe, 2014). This will include discourses such as those of conservation of the environment or ecology, but also

discourses such as economic discourse without ecological concerns. Stibbe (2014) concludes that these discourses can encourage people to behave in ecologically destructive ways. It functions by revealing how the commonly accepted beliefs embedded within the dominant discourses of a society serve to support unequal power relations. Fairclough (2003) suggests that these beliefs are to be abandoned when realized to be carrying inequalities.

Over the last decades, CDA has been criticized by some scholars (O'Halloran, 2003; Richardson, 1987; Stubbs, 1997; Toolan, 1997; Widdowson, 2004) in that it only focuses on the specific instances of discourse that align with people's existing ideological biases, which was called 'cherry-picking' by Barlett (2012). In a more detailed analysis, Widdowson (2004) criticizes CDA for a few reasons. Firstly, he claims that CDA often looks at limited parts of texts such as clauses without considering how these features function on the whole. Secondly, he thinks CDA sometimes perceives grammar as more important than it really is and does not explain how grammar works with the context. Also, Widdowson (2004) expresses that CDA does not use its methods consistently and only focuses on some parts of texts instead of the entirety. They tend to pick up short instances rather than examining entire texts comprehensively. Thus, the researcher concludes that CDA researchers seem more problem-oriented as they focus too much on finding social problems in texts.

On the contrary, *Positive Discourse Analysis (PDA)* has been proposed to support the beneficial effects of language on the environment by various scholars such as Luke (2002), Martin & Rose (2003), Martin, (2004), and Barlett (2012). Advocating for a more positive approach to discourse analysis, Luke (2002) argues for the analysis of alternative forms of text and discourse. Martin and Rose (2003) are the first to coin the term PDA. Later, Martin (2004) emphasizes the need for a focus on successful social change and the analysis of positive and productive configurations of power/knowledge in discourse. Barlett (2012) comments on the issue as "Analysis is positive in as much as critique is a necessary step in promoting change for the better" (p. 133).

The distinction between CDA and PDA lies in their analysis of the discourse we favour rather than the discourse we aim to critique (Macgilchrist, 2007). It is an approach within discourse analysis that focuses on examining and understanding language use with an emphasis on positive or affirmative aspects. While traditional discourse analysis often

explores power dynamics, ideologies, and social constructions within language, PDA seeks to identify and analyse instances of positive language, expressions, and constructions. PDA examines language use that promotes affirmative, constructive, and optimistic perspectives. It seeks to uncover instances where language contributes to positive social change, collaboration, or well-being. It is often linked to the idea of promoting social change and empowerment. That explores how language can be a tool for fostering inclusivity, cooperation, and empowerment within various social contexts.

Overall, PDA provides a framework for examining language as a force for positive change, challenging established meanings, and fostering a deeper understanding of how language contributes to social dynamics. PDA perceives a positive progression that may offer valuable insights for individuals aiming to challenge what they perceive as problematic prevailing messages. Besides the texts criticized for having a bitter attitude, texts with a more welcoming approach must be supported as long as positive behavioural change is aimed in a society (Martin & Rose, 2003). PDA goes beyond CDA in that it shows which strategies work effectively for challenging dominant language use. Macgilchrist (2007) illustrates five discursive strategies to combat this conventional language (p. 76).

The first strategy is logical inversion, which involves inverting the dominant view to present an alternative perspective. Proposing reasonable arguments to challenge the common view might attract some of the readers' attention and it may be beneficial to alter their attitudes. However, the researcher assumes that this kind of writing is not favoured much by the mass media. Despite offering logical arguments, its use is limited since mainstream media often overlooks or rejects this approach. As many analysts, like Lakoff (2002, 2004) (as cited in Macgilchrist, 2007) have noted, simply presenting logical arguments against the dominant narrative is not effective in changing public opinion

Another method of challenging traditional narratives is through parody, a more subtle but less common approach. It involves using irony and exaggeration to question the dominant view. Humorously exaggerating common stereotypes engages readers while also questioning their assumptions. For instance, it begins with a satirical depiction of the mentioned figure, then transfers to present an alternative viewpoint, inviting readers to reconsider their preconceptions. Despite its effectiveness, the use of parody could reach a restricted number of media (Macgilchrist, 2007).

The third strategy is complexification, which involves providing a detailed picture of the issue to challenge basic narratives. By combining elements of history, politics, and personal stories within the context, which are typically omitted from mainstream media, it presents a versatile view of the issue. This approach challenges conventional narratives by offering diverse perspectives and highlighting the complexities of the situation. However, the challenge with this method is that it requires extensive space and effort (Macgilchrist, 2007).

The fourth strategy is partial reframing, which involves shifting the issue away from its original location and context and reconstruing it within a different set of knowledge, thereby giving it a different interpretation. It might be useful to shift the focus away and evaluate the event, at least to some point, from a different angle. It may not succeed in changing the whole point of view towards the problematic issue but may provide an alternative perspective.

The final strategy is radical reframing, which involves entirely turning around the reporting of an issue and challenging the dominant discourse. Unlike partial reframing, radical reframing not only engages with other frames but also changes the mainstream view entirely. This reframing challenges the conventional understanding and redirects attention to other topics. Radical reframing succeeds in gaining visibility for different perspectives by engaging with dominant frames (Macgilchrist, 2007).

PDA provides powerful tools to change the way people talk by focusing on the positive uses of language. Benefitting from the above-mentioned strategies, PDA helps people challenge and change dominant stories. These strategies not only question the usual ways of seeing the world but also help create new, inclusive, and positive stories. Ultimately, PDA shows us that language has the power to transform society. By actively shaping how we talk about our world, PDA plays a crucial role in making our communities fairer and kinder.

In addition to Macgilchrist's (2007) strategies, Bartlett (2012) proposes combining two approaches to understand how they work and how they manage to avoid or deal with obstacles effectively. This kind of examination can help in learning from past experiences and possibly improving current strategies or developing new ones based on established practices. He recommends this method as a comprehensive, adaptable global framework that can be applied to fit conditions. His new approach to discourse analysis

could be summarized as firstly examining a problematic issue by exploring opposing discourses, then revealing the historical origins of the issue, evaluating current practices, and identifying how these discourses represent various perspectives. Additionally, it assesses the role of each discourse within current practices, identifies tensions and commonalities, and explores the conditions that allow for the integration of local discourse into dominant practices. The process concludes with a reflection on these findings with participants. This method is actually formularized for spoken language analysis of local people but it can be adapted to the analysis of written materials.

PDA offers a framework for analysing communication strategies, media discourse, and everyday conversations with an emphasis on positivity. By recognizing the importance of context, PDA considers the social, cultural, and historical factors that influence the use of positive language. Researchers across various fields, including psychology, sociology, education, and communication studies, can benefit from PDA, particularly within the context of educational studies. In the field of language education, PDA is particularly useful for analysing EFL materials. It provides a framework for understanding how language, shaped by social, cultural, and historical contexts, influences how we perceive and interpret information, this approach is especially relevant in language education since it reveals underlying assumptions, beliefs, and prejudices set in texts. Pennycook (2001) emphasizes that language is inseparable from societal realities, with the language used in EFL classrooms not only shaping learners' perceptions but also positioning them as social individuals. Through PDA, educators can explore how language actively constructs social meanings and realities, fostering critical awareness among language learners (Pennycook, 2001).

2.4. Ecolinguistics

Ongoing discussions on language and its influence on our perceptions have led to the development of various methods for text analysis over the years. Researchers have examined texts focusing on different linguistic features such as abstraction and agency or nominalization (Gerbig, 1993; Schleppegrell, 1997). Studies have shown that the choice of words and their associations have a strong impact on how people perceive and interpret information. Besides, Fill and Mühlhäusler (2001) emphasized the role of the language system in forming or influencing perspectives on ecological matters. These diverse

approaches laid the groundwork for Stibbe (2015) to establish a framework for ecolinguistics analysis, referred to as the Analysis of Ecological Discourse.

In their study, Alexander and Stibbe (2014) focus on two main trends within the discipline: the analysis of ecological discourse and the concept of language ecology. The researchers argue that ecolinguistics goes far beyond analysing texts about the environment and considers languages as individual species contacting with each other metaphorically. Ecolinguistics is primarily concerned with the ecological analysis of discourse. The article begins by defining ecolinguistics as the study of the impact of language on the life-sustaining relationships between humans, other organisms, and the physical environment. The researchers refer to Halliday (1978) in that language determines what individuals within a community pay attention to by shaping their linguistic perceptions. Common wordings and discourse patterns model societal behaviours, creating the everyday culture of speech in society. However, Halliday (1978) suggests that individuals can enrich the meanings they are born into. The meaning of the words may change slightly or considerably over time or different meanings can be attributed to any word.

Given the complexity of language and its role in shaping perceptions, the analysis of ecological texts aims to reveal the implicit perspectives or viewpoints that are conveyed through specific linguistic choices. In other words, by critically examining the language used in texts discussing ecological issues, the underlying messages or beliefs may be revealed within the language itself. Studies on lexical choices, distancing techniques, and the use of metaphors in environmental discourse might be useful with that aim. Accordingly, Alexander and Stibbe (2014) conclude that ecolinguistics should analyse discourses within an ecological framework that considers their impact on life-sustaining systems.

Ecolinguistics, as a relatively new term for linguistics studies, has been on the rise within the linguistics field in the last decade. Since its emergence, several researchers, such as Halliday (1978), Haugen (1972), Fill and Mühlhäusler (2001), and Steffensen and Fill (2014), have contributed to its definition, outlining the framework and suggested ways of applying it to the texts to study the relationship between language and ecology. Edward Sapir and Wilhelm von Humboldt can be regarded as early proponents of ecolinguistics in the 19th and 20th centuries, long before the term ecolinguistics was coined

and recognized as a distinct field. Sapir (1912, as cited in Fill & Mühlhäusler, 2001), one of the most influential figures in modern linguistics, explores the relationship between language and the physical and social environment. His controversial Sapir-Whorf Hypothesis suggests that the structure of a language influences how its speakers perceive and think about the world. Contemporary linguist Noam Chomsky (1965, 2016) underlined a different perspective by suggesting that humans possess a kind of ‘innate’ language ability that enables them to grasp the world around them, even without the necessary vocabulary to describe it. Thus, our perception is not restricted by our range of vocabulary.

Another significant early figure in the field was the German philosopher and linguist, Wilhelm von Humboldt (as cited in Fill & Mühlhäusler, 2001). He emphasized the diversity of human languages and their potential for idea development. Humboldt believed that language shapes the way individuals perceive and understand the world. He argued that each language embodies a unique worldview, influencing the thoughts and experiences of its speakers.

With the rise of the terms ‘ecology’ and ‘ecological’ a century later, they were associated with the language used or the speakers’ choice of words and phrases. Haugen (1972) is often credited as the first to emphasize ecological perspectives in linguistics, indicating the need to study language in its ecological context. According to Haugen (1972), language is not merely a set of words and grammatical rules but is deeply connected with the society in which it is used. The primary context in which a language exists and operates is the society where it is spoken, functioning as a tool for communication. In other words, the environment that shapes and influences a language is the social setting in which it is utilized as a tool for interaction and expression among its speakers (Haugen, 1972). Language only exists in the minds of its speakers and functions to connect them to both each other and to their surroundings, including social and natural aspects of their environment. The ‘ecology’ of a language, therefore, encompasses both psychological and sociological dimensions. Psychologically, it involves how individuals perceive and use language, especially concerning other languages they may know. Sociologically, it examines how language operates within a society as a tool for communication and interaction. Ultimately, the ecology of a language is shaped by the people who learn it, use it, and pass it on to others (Haugen, 1972).

Similarly, the role of linguist Michael Halliday cannot be overlooked in shaping ecolinguistics. Halliday (1992) argued that environmental issues do not only belong to biologists and physicists but also to linguists. He asserted that language, as a powerful social tool, can both reflect and shape human relationships with the natural world. The researcher claimed that ecological issues could be addressed through language (Halliday, 2001). His contributions to ecolinguistics emphasize the importance of linguists in addressing ecological challenges, not just scientists in traditional environmental fields. Over time, Halliday's ideas about ecolinguistics brought about some discussions among other significant authors in the field. Steffensen and Fill (2014) put forward four different ways to define the environment in which the ecology of language has been conceptualized: a symbolic ecology, a natural ecology, a sociocultural ecology, and a cognitive ecology. Symbolic ecology means the presence of different languages in a certain area and their relation with each other while natural ecology investigates the relationship between language and the natural environment, specifically focusing on how language is influenced by and interacts with various elements of the biological and ecosystemic surroundings. Moreover, sociocultural ecology explores how language interacts with and is influenced by social and cultural factors. It involves examining how societal norms, cultural practices, historical contexts, and other social forces impact language development, usage, and evolution within communities of speakers. Lastly, cognitive ecology deals with the abilities that allow organisms to exhibit flexible and adaptive behaviours, which contribute to the development and use of language (Steffensen & Fill, 2014). The researchers argue that an extended ecology hypothesis can be created based on these concepts within a unified ecolinguistics framework. They also assert that language is dependent on the natural habitat of language users and that understanding this relationship is crucial as language can affect natural phenomena in the human environment.

To determine whether a written material sufficiently centres on the environment and covers necessary information, a thorough analysis should be conducted. In broad terms, discourse analysis enables the examination of the discourses that either support or harm the environment. It critiques linguistic practices that promote ecologically destructive behaviour while seeking out those that encourage respect and care for the natural world. Rather than just criticizing, focusing on the positive aspects could prove better. Here, ecolinguistics is defined as the study of the intersection between ecology

and language, exploring how language interacts with the natural and social environment. It highlights the importance of understanding the ecological role of language and the impact it has on the environment. Since the beginning of the 21st century, along with challenges such as climate change and the loss of biodiversity, the harmony between humans, nature, language, and culture has been promoted to allow for sustainable growth and celebrate linguistic and cultural diversity. The ecolinguistic analysis evaluates texts that deal with environmental or ecological issues and offers frameworks to study discourses that have the potential to affect life. Ecolinguistics adopts an ecologically based framework to judge discourses and promotes positive discourse (Dash & Phil, 2019).

Stibbe's (2015) ecolinguistics framework is quite practical for measuring ecological focus and evaluating how the language is used. He notes that it is impossible to directly observe cognitive structures in people's minds, but the language patterns that emerge from these structures are available to analyse. The concepts discussed in the book *Ecolinguistics: Language, Ecology and the Stories We Live By* (2015) emphasize 'stories' which are cognitive structures individual to each person. 'Stories-we-live-by' refers to shared beliefs across a culture; and 'linguistic manifestations' are defined as the observable language patterns that stem from these underlying stories. Table 1 below show Stibbe's definitions of the categories on the framework.

Table 1. “Eight Forms That Stories Take, and Their Linguistic Manifestations”

Form of story (cognitive, i.e. in people’s minds)		Manifestation (in language)
<i>ideology</i>	a story of how the world is and should be which is shared by members of a group	discourses, i.e. clusters of linguistic features characteristically used by the group
<i>framing</i>	a story that uses a frame (a packet of knowledge about an area of life) to structure another area of life	trigger words which bring a frame to mind
<i>metaphor (a type of framing)</i>	a story that uses a frame to structure a distinct and clearly different area of life	trigger words which bring a specific and distinct frame to mind
<i>evaluation</i>	a story about whether an area of life is good or bad	appraisal patterns, i.e. patterns of language which represents an area of life positively or negatively
<i>identity</i>	a story about what it means to be a particular kind of person	forms of language which define the characteristics of certain kinds of people
<i>conviction</i>	a story about whether a particular description of the world is true, uncertain or false	facticity patterns, i.e. patterns of linguistic features which represent descriptions of the world as true, uncertain or false
<i>erasure</i>	a story that an area of life is unimportant or unworthy of consideration	patterns of language which fail to represent a particular area of life at all, or which background or distort it
<i>salience</i>	a story that an area of life is important and worthy of consideration	patterns of language which give prominence to an area of life

(Stibbe, 2015, p. 17)

Stibbe’s study (2015) explores various forms of stories, beginning with ideologies. Ideologies are stories adopted by specific groups that manifest through distinct discourses or characteristic language reflecting a governing opinion. These discourses help in constructing meanings about the world from different perspectives, such as education, law, and even, artistic movements. Different forms of stories explored include framings, which use general knowledge to shape our understanding of specific areas like climate change; metaphors, which vividly frame concepts through real comparisons; and evaluations, which are instinctive cultural judgments about what is considered good or bad, often becoming united in societal dialogue without question (Stibbe, 2015).

Additionally, identities play a significant role in how we define ourselves and our groups within society, often manipulated by marketing to shape consumer behaviour. Convictions pertain to our beliefs about the truthfulness of certain realities, influencing societal consensus on issues like climate change (Stibbe, 2015). His study also examines

critical perspectives, highlighting the importance of identifying overlooked or deliberately omitted elements in texts, referred to as ‘erasure.’ This could involve downplaying environmental factors in economic texts or ignoring social justice in environmental discussions. Conversely, ‘salience’ involves emphasizing certain aspects that seem important, which ecolinguistics aims to enhance regarding ecological contexts.

This study here addresses global issues related to ecological awareness, emphasizing the pressing need to incorporate environmental concerns into educational content. By focusing on topics such as climate change, pollution, deforestation, and endangered species, the study aims to analyse how they are reflected in the selected literary materials especially aiming to promote ecological awareness in learners under the terrain of ecolinguistics analysis.

2.5. Ecocritical Approach to Children’s Literature

Considering the growing evidence of environmental degradation and species extinction, there is a wide recognition that children will play an active role in shaping the future rather than just inheriting it. Consequently, children’s literature and its representations of environmental issues hold significant importance on the planet’s fate (Reynolds, 2007). Acknowledging the potential significance of children’s literature in addressing environmental concerns, it is crucial to determine the realistic outcomes that can arise from such texts for young readers.

Addressing environmental issues has intensified since the 1970s as publishers have increasingly incorporated environmental themes in children’s books (Pavlik, 2011). These themes serve various purposes from providing information to advocating for environmental causes (Pavlik, 2011). Stephens (2006) argues that despite the abundance of children’s books with environmental themes, the number of books placing nature at the centre and shadowing humanity and its influence is scarce. Therefore, choosing the right book to create a deeper effect is crucial in that its effects are already possible to be detected in the long term (Pavlik, 2011). The researchers Massey and Bradford (2011) also claim that children can be active eco-citizens and children’s literature can help foster this sense of environmental responsibility depending on the protagonists in these narratives and how their experiences and actions can serve as models for young readers.

Building upon the recognition of children's literature as a significant medium for addressing environmental issues, several studies have dug deeper into the ecological themes embedded within literary works. In a study conducted by Ulu Aslan and Bas (2020), the book titled *I Am a Hornbeam Branch* by Hasan Ali Toptaş is analysed in the context of an ecocritical approach to children's literature. The study aims to examine the human-nature relationship and the perspectives of eco-criticism in literary texts. The book highlights the representation of nature in a cycle based on ecological consciousness, considering material transformations and presenting environmental problems as sociological, psychological, and cultural issues concerning humanity. After the analysis, the researchers (Ulu Aslan & Bas, 2020), concluded that the book provides children with the opportunity to think about environmental problems and situations, fostering ecological consciousness from a young age.

With a similar aim, Yanar (2023) has analysed Jose Saramago's *Lizard*, *The World's Largest Flower*, and *An Unexpected Light* stories in terms of the interconnectedness and interdependence between humans and nonhuman entities. The narrative style shifts the conventional anthropocentric perspective into recognizing the agency and storytelling potential of nonhuman entities, such as animals, water, stones, forests, and the world. Thus, it highlights the importance of recognizing and appreciating the complex interactions between humans and the natural world, promoting a more inclusive and sustainable understanding of the human-nature relationship. The researcher concludes that Saramago's works exemplify a post-humanist ecocritical approach to children's literature, challenging traditional boundaries and promoting a deeper understanding of the interconnectedness of all living beings (Yanar, 2023). This analysis is a good example of how the form of the language could be utilized to create a deeper and more permanent effect on children and suggests a couple of available literary works ready to use in classes as reading materials with an ecological focus.

Furthermore, Çelik and Sırkintı (2023) have explored the role of children's literature in promoting environmental awareness and action. The study focuses on the book *The Lorax* by Dr. Seuss and its Turkish translation, analysing the ecological perspective depicted in the book and how it is translated into Turkish. The researchers apply the principles of deep ecology, a branch of ecocriticism, to analyse the book and its translation. Çelik and Sırkintı (2023) also maintain that literature can act as a mediator in educating readers about environmental issues, raising awareness, and inspiring action.

The findings of the study show that the deep ecology perspective is evident in both the original book and its translation. The literary devices such as repetition, rhyming, hyperbole, and made-up words in both works have been used to emphasize the deep ecological aspect. They argue that research on environmentalist books, especially their translations, plays a significant role in spreading knowledge and creating environmentally friendly societies. The importance of children's literature in promoting environmentalism and the role of translation in spreading environmental awareness across different cultures have been strongly emphasized, thus shedding light on the interplay between environmental values and linguistic choices (Çelik & Sırkıntı, 2023).

The difference between ecocriticism and ecolinguistics mainly lies in their focus and methods. While ecocriticism and ecolinguistics are concerned with environmental issues, ecocriticism is a literary and cultural study that examines texts including novels, poetry, and films in the way they depict nature and principles of ecology. Unlike ecocriticism, ecolinguistics is based on linguistics; it examines language use including narratives and metaphors on how a given use of language promises to shape ecological thought and action. Ecocriticism relies on literary analysis and critical theory, whereas ecolinguistics uses linguistic and discourse analysis.

In conclusion, the studies above-mentioned emphasize how children's literature plays a vital role in raising environmental awareness. By analysing specific books and exploring the connection between humans and nature, researchers show how stories can shape young minds to care for the planet. These findings highlight the importance of including environmental themes in children's books to inspire future generations to protect the Earth. As suggested by the researchers, children's literature needs further analysis of texts under an ecocritical/ eco-linguistical approach to build up a set of good examples focusing on environmental challenges. Instead of only critiquing harmful discourses, this study aims to promote beneficial discourses by performing ecolinguistic analysis.

2.6. Practical Implications for Ecolinguistics in Literary Texts

In the realm of ecolinguistics, the analysis of literary works provides insightful reflections on how language shapes and is shaped by our interactions with the

environment. This explores how linguistic choices can both reflect and influence societal attitudes toward nature and its conservation. Several studies will be provided below to exemplify the application of the ecolinguistics framework to literary texts.

In an article by Alghamdi (2019), the eco-linguistic and cultural significance of animal proverbs from Al-Bahah province were explored to highlight how these sayings show the relationships and interdependencies between humans, animals, and the environment. Proverbs from Al-Bahah use a rich vocabulary to describe the interactions and mutual dependencies among the region's flora and fauna, reflecting deep ecological and cultural insights. The proverbs have been found to predominantly feature domestic animals (86%), with camels being the most referenced, the researcher concludes that this might be due to their economic and practical importance in the region. The proverbs reflect a deep cultural understanding, with specific animal-related terms carrying significant socio-economic implications. For example, camels are often mentioned in metaphors and as parts of larger expressions that are culturally permanent and economically vital. However, gender biases could also be observed in animal representations, with female animals often associated with negative attributes, while male animals are linked to positive qualities. To conclude, the study reflects the importance of understanding the local cultural and ecological contexts. It also suggests that these proverbs not only serve as a linguistic tool but also play a role in sustaining ecological and cultural knowledge, facilitating a deeper understanding of human-animal-environment interactions in the region. The way that people of the region utilize or perceive the animals is reflected within their language, carrying a more pragmatist approach towards the animals around them. This relationship sheds light on both the socio-economic realities and the cultural values of the community (Alghamdi, 2019).

Goatly (2017) researches the grammatical representation of nature in environmental discourse and poetry. The researcher argues that traditional environmental discourse often reinforces the view of humans as the centre of nature, emphasizing human power over the environment. He emphasizes the need for grammatical modifications in a more ecologically oriented way. These include the use of ergative verbs, which highlight the agency of natural elements, and nominalizations, which blur the distinction between processes and things. The activation of tokens and existents, as well as the emphasis on nature as an experiencer rather than a goal, are also discussed as grammatical strategies for representing nature more actively and dynamically. Personification, or the attribution

of human characteristics to natural landscapes, is also explored as a way to represent nature as more than inert matter. As notable examples, the analysis of works by Wordsworth, Edward Thomas, and Alice Oswald offer alternative ways of representing the human-nature relationship that is more in line with modern scientific understanding and ecological perspectives. Overall, the study underlines the importance of adopting a more ecologically-oriented grammar in environmental discourse and highlights the potential of poetry to offer alternative representations of the human-nature relationship.

Another researcher Ebim (2021) analysed Chinua Achebe's *Things Fall Apart* under ecolinguistics and showed how well the narrative could reflect the role of nature and environment in our lives. Ebim's remarks reveal that the writer placed nature as an active participant in the narrative, both rewarding and punishing humans. Nature influences daily life and cultural practices and plays a decisive role in agricultural and religious activities. During the analysis, the researcher generally focused on the phrases and wordage implying the power of nature, and people praying to nature for the better. The novel could be evaluated as illustrating how deeply human actions and natural forces are interconnected, each influencing the fate of the other in profound ways.

The ecolinguistics analysis of *The Wind Gourd of La'amaomao*, a folktale, highlights the profound beliefs of Hawaiians regarding culture and nature. The tale was analysed within Stibbe's ecolinguistics framework. The study identifies two primary linguistic approaches used in the text: ideological/discourse and evaluation/appraisal. The discourse within the narrative is mostly positive, emphasizing sustainability and illustrating a profound emotional bond between the community and their geographical settings. Furthermore, nature is consistently evaluated in a positive, grateful tone and such choice of words. These observations support sustainability, equality, and the acknowledgment of nature as an autonomous entity. This folktale also calls for a reimagining of environmental perspectives, challenging the dominant Western anthropocentric approach.

Akçeşme and Şarlar (2022) analysed the notable author Madeline Miller's novel *Circe* within the framework of ecolinguistics and focused on her use of similes and their functions. Circe is a goddess in Greek mythology and is generally renowned for her witted sorcery. She appears in male-dominant mythical stories as a side character; and conventionally is recounted in third-person narration. The author (Miller, 2018), wishing to break the rules, retells her story and portrays her world with an eco-friendly point of

view. According to the study findings, her use of figurative language encompasses anthropomorphic (human-like), zoomorphic (animal-like), floramorphic (plant-like), and inanimatemorphic (non-living object-like) representations. Miller frequently employs similes to draw parallels between entities in various aspects such as their appearance, attitudes, behaviors, emotional states, or general conditions. She uses similes effectively not just for creative expression but to increase awareness about ecological issues and challenge traditional views among species. She frequently uses similes to guide readers to see relationships between different species. Through her comparisons, Miller highlights the similarities between cultural and natural behaviors, suggesting a connection between them. Her approach shows both the good and bad “qualities shared by all species” (p. 1515), aiming to improve how they interact with each other (Akçeşme & Şarlar, 2022).

More recently, Hunt (2023) carried out a detailed study on the analysis of the different versions of the famous folk tale *Little Red Riding Hood*. She examined “the representations of nature and gender” (p. 2) in the story by five different authors from different years and tried to show how the story was altered in parallel with societal changes. The researcher utilized ecolinguistics analysis employing “linguistic strategies such as erasure, salience, identity, framing, and metaphor” (Hunt, 2023, p. 3). In the first edition of the stories, one can observe the traditional mindset towards women or a little girl as powerless and the wolf as savage and deserving to be killed. The researcher reveals that the stories in which the wolf is described as being sly and ill-intended do harm the whole of nature and promote the idea that humans have superiority over everything and have the right to kill anything that seems dangerous or profitable. Besides, nature, in these versions, is demonstrated as dark and dangerous and should be avoided. This negative representation of nature reinforces the notion that the natural world is something to be feared and conquered, rather than respected and appreciated. Alternative versions of *Little Red Riding Hood*, such as Bethan Woollvin’s *Little Red* and Bridget Irving’s *Little Red Hat*, offer different narratives and challenge these traditional gender roles and relations. However, they do not always succeed in representing gender and nature equally. Woollvin’s version focuses on Little Red as a strong and empowered young girl who outsmarts the wolf, but it still portrays the wolf as a dangerous predator. Irving’s version, on the other hand, presents a more positive representation of nature, with Little Red Hat enjoying her time in the woods and forming a positive relationship with the wolf. To

conclude, the researcher puts forward that later versions have the potential to offer more positive discourses even though some points need to be improved. Hunt (2023) emphasizes the significance of critical analysis of these stories and reconsidering their impact on how we view gender relations and nature.

In conclusion, these ecolinguistics studies show how language deeply affects our views and interactions with nature. From examining animal proverbs to analysing versions of *Little Red Riding Hood*, each study demonstrates how our words shape our understanding of the environment. These analyses challenge old stories and encourage new ways of thinking about nature, emphasizing the importance of being environmentally mindful in our everyday language to support a sustainable future.



CHAPTER III

METHODOLOGY

In this section; research design, universe and sample, data collection instruments, data collection tools and process, and data analysis will be given.

3.1. Research Design

Ensuring the reliability and validity of the results is necessary to provide a structured framework for collecting, analysing, and interpreting data. A well-defined methodology enhances the credibility of the research, allowing others to critically evaluate and build upon the study (Maxwell, 2008).

Qualitative design is considered suitable for this research since it is widely used in the social sciences to explore and understand people's experiences, behaviours, and interactions. Creswell and Poth (2018) define qualitative study as "beginning with assumptions and the use of interpretive/theoretical frameworks that inform the study of research problems addressing the meaning individuals or groups ascribe to a social or human problem" (p. 35). This research method is primarily valuable to understand and interpret people's experiences, behaviours, and interactions in their social realities.

Discourse analysis is also considered qualitative research since it examines how language is used in texts and conversations to construct meaning and social reality. It is often used to investigate how power, identity, and social norms are communicated and maintained through language (Fairclough, 2013). In alignment with these principles, the present study adopts a qualitative approach to analyse three children's storybooks written for ecological purposes. The analysis is framed within Stibbe's (2015) Ecolinguistic Discourse Analysis, a branch of Positive Discourse Analysis (PDA). This framework examines how language promotes ecological awareness and aligns with the broader goals of environmental education. By focusing on these storybooks, the study aims to enrich the range of teaching materials available to English language teachers for fostering ecological awareness. Given the contemporary need for education to address global challenges such as environmental protection, this research highlights the importance of providing teachers with diverse and relevant classroom resources.

The advantages of discourse analysis have been outlined by various researchers. According to Cheek (2004), “discourse analysis is a qualitative research approach that offers the potential to challenge our thinking” (p. 1140). She puts forward that discourse analysis goes beyond examining the content of texts for their syntactic and semantic structure; moreover, it focuses on how texts are constructed within their social and historical contexts (Cheek, 2004). As Sacks (1996), as cited in Bhatia (2017), notes, traditional content analyses often ignore the impact of certain words and phrases that shape perceptions of the speaker. Cheek (2004) concludes that discourse analysis assumes that language is not universally understood in the same way but is given specific meanings by speakers and listeners based on the context in which it is used. To clarify, “Texts represent and reflect a certain version of reality; they also play a part in the very construction and maintenance of that reality itself. There is a dynamic relationship between the text and the context in which the text is produced. Texts are both constitutive of and, in turn, constructed by their context” (Cheek, 2004, p. 1144).

In essence, texts are powerful tools that both reflect and shape our understanding of reality, influenced by and influencing the context in which they exist. In terms of a wide range of text types, discourse could be in the form of interview transcripts, newspaper articles, advertisement passages, or literary works, therefore choosing the necessary type remains crucial. In discourse analysis studies, the assumption that only a simple and plain meaning could be inferred from the text would be misleading. Rather, it is subjective to the reader; accordingly, the researcher tries to come up with widespread assumptions. As Cheek (2004) suggests, discourse analysis does not aim at finding the sole definitive meaning of a text; yet, at understanding how certain expressions and actions are enabled or constrained in specific contexts. Thus, a certain balance must be restored between the actual words and the meaning between the lines.

3.2. Universe and Sample

The universe of the study consists of children’s books and stories with ecological themes. These books have the potential to be integrated into language lessons in order to promote learners’ ecological awareness in addition to language learning. They are chosen based on their thematic relevance and practicality to adapt in EFL classrooms.

The sample of the study includes three different children's eco-centric storybooks. These are, namely, *The Sun Mother* story from *The Barefoot Book of Earth Tales* by Dawn Casey, *The Magic School Bus and the Climate Challenge* by Joanna Cole and Bruce Degen and lastly, *My Cousin Ah Meng* by Kathy and Peter Creamer. These stories were selected using a purposive sampling method, based on their relevant themes, age appropriateness, and acceptable language level. These books are suitable for the A2 language level in CEFR. Apart from these features, they seem very visually attractive to target learners. Each story/book carries a great value for fostering ecological awareness.

3.3. Data Collection Tools

The study is qualitative research conducted within the ecolinguistic framework established by Stibbe (2015) in Ecolinguistic Discourse Analysis as a branch of PDA. The data for the research were gathered through a comprehensive content analysis of selected children's books focused on ecology. Content analysis is a commonly used qualitative method that enables researchers to systematically explore textual data to reveal patterns, themes, and meanings (Krippendorff, 2018). Each book was examined to identify linguistic features, such as metaphors, framing, and evaluative language, helping to convey ecological themes and enhance ecological awareness. The analysis was developed by Stibbe's (2015) ecolinguistic framework, which highlights the connection between language and ecological ideology. A framework was created based on ecolinguistic principles, focusing on identifying language patterns that promote an understanding of ecological values. Additionally, the appropriateness of the books for EFL learners was ensured, taking into account language difficulty and potential use in the classroom. This method affirmed that the analysis was both comprehensive and aligned with the research objectives.

The first book *The Barefoot Book of Earth Tales* by Dawn Casey consists of various folk tales from around the world and these ancient folk tales, as pointed out by the author, "to celebrate our connection with nature, and remind us how important it is to look after this Earth, our home" (p. 4). Seven folktales from various cultures convey the belief that the Earth and all living beings are sacred, emphasising our individual responsibility to protect our part of the planet. Each folktale focuses on a different type

of nature such as oceans, mother Earth, and animals. Each tale is accompanied by an introduction of the country and culture and followed by an eco-activity. The author has won The Nautilus Gold Award in 2013, which is given to books that foster spiritual growth, mindful living, and positive social change. One representative story which is *The Sun Mother* from the Indigenous people of Australia will be analysed in this research.

The second book is *The Magic School Bus and the Climate Challenge* by Joanna Cole, illustrated by Bruce Degen. *The Magic School Bus* is an educational book series with different themes, prepared for children aged 7 to 10. This selected book adopts the adventure on the climate change topic, blending scientific exploration with storytelling. It is both informative and fictional in that it narrates a story of children travelling to the Arctic to eye-witness climate change and gives factual information about the problem and possible solutions simultaneously.

Lastly, *My Cousin Ah Meng* by Kathy and Peter Creamer is a storybook about the famous orangutan Ah Meng, a beloved figure at the Singapore Zoo. She became a symbol for endangered animals and gained fame with the *Breakfast with an Orangutan* program of the zoo in which visitors could meet and talk to her. She was a representative of the endangered Sumatran orangutans and helped raise awareness about conservation by meeting celebrities. The narrative tells her story from the first-person point of view and explores themes of environmental preservation, which carries educational purposes for young readers.

3.4. Data Collection

This study examines three books under the principles of Ecolinguistics Discourse Analysis developed by Arran Stibbe (2015) within Positive Discourse Analysis (PDA) by Martin (2004) and Macgilchrist (2007). By employing these frameworks, this analysis aims to reveal how sustainable life and environmental protection are reflected and promoted through the use of language. How a text constructs a powerful narrative fostering action towards the development is highlighted through PDA whereas how language choices reflect and shape ecological values is uncovered in Ecolinguistics Discourse Analysis. Therefore, these methodologies allow a comprehensive analysis of linguistic strategies used to defend environmental sustainability and emphasize collective responsibility.

3.5. Data Analysis

Following a Positive Discourse Analysis approach, this research can be classified as a qualitative study. The stories have been analysed separately to evaluate their writers' points of view and to measure their potential effectiveness in raising global awareness about the environment and environmental issues and the research questions have been referred to respectively in the final discussion. The data from the books has been analysed according to Stibbe (2015)'s ecolinguistics analysis, holding eight types of stories in our minds, namely, "ideologies, framings, metaphors, evaluations, identities, convictions, erasure, and salience" (p. 17). According to the researcher, these types of stories reveal themselves in the form of language we use and shape our understanding of the world around us. The analysis has been conducted step by step, giving examples of each category from the chosen books.

Briefly, Stibbe (2015) defines these categories as:

1. *Ideologies*: refer to a narrative depicting the past, present, and possible future of the world, as perceived by the members of a group. Distinctive language features employed by members of a group can be a good sign to infer their ideologies.

2. *Framing*: is explained as the application of a source frame (a packet of knowledge) to organize and understand a target phenomenon. Keywords evoking a specific source frame reflect the kind of framing in language.

3. *Metaphor*: means a form of framing where the source frame originates from an imaginable aspect of life that is notably different from the target domain. Metaphors show themselves in the word choice triggering the source frame.

4. *Evaluations*: create a narrative in people's minds about whether a particular aspect of life is good or bad. Appraisal patterns refer to language structures that portray things in either a positive or negative manner.

5. *Identities*: constitute a narrative in individuals' minds about the characteristics and attributes associated with a specific type of person. These can be observed in the wordage defining characteristic features.

6. *Convictions*: refer to the stories in individuals' minds regarding the truthfulness, certainty, uncertainty, or falseness of a specific description. Truthness patterns and linguistic structures convey whether a description is perceived as true, uncertain, or false.

7. *Erasure*: makes reference to the stories in individuals' minds that something is insignificant or not deserving of attention. Erasure patterns could be exemplified as linguistic structures that minimize or marginalize something within texts.

8. *Salience*: focuses on which features or problems are made visible or hidden in discourse. While certain characteristics of species and current ecological problems might be emphasized, some others might be minimized in an environmental text.

3.6. The Validity and Reliability of the Research

Creswell and Poth (2018) define validity in qualitative research as “an attempt to assess the accuracy of the findings” (p. 338) and they suggest various ways of validation techniques that could be adapted to the process, emphasising that a researcher better utilise minimum two strategies to construct a valid study. Therefore, multiple strategies were incorporated in this research. Initially, multiple data sources were analysed to confirm findings, including linguistic features, discourse patterns, and ecological themes within the texts. Such a triangulation method ensured a comprehensive understanding and validation of the results. Furthermore, detailed descriptions of the stories, their content, and linguistic patterns were provided in the analysis. Since the discourse analysis was based on grounded frameworks in the literature such as ecolinguistics and PDA, theoretical validity was established. In terms of contextual validity, the cultural, pedagogical, and ecological contexts of the stories were taken into account to ensure that the findings would be applicable to English language teaching. Finally, feedback from the thesis advisor helped to draw the outline of the research.

Reliability is emphasised by Creswell and Poth (2018) as standardizing the findings of the data analysis, using objective methodology. This research undertook several measures to establish reliability. Namely, a transparent methodology was followed from selecting three stories to data collection and analysis. Besides, a clear explanation

of Stibbe's (2015) ecolinguistic framework and PDA principles was provided in order to enable future researchers to replicate the study.



CHAPTER IV

FINDINGS AND INTERPRETATION

4.1. Ecolinguistic Analysis of the Story, *The Sun Mother*

The Sun Mother, the first story of the book *The Barefoot Book of Tales* by Dawn Casey (2013) is analysed under each category and supported with sample phrases from the text.

Ideology, as the first category in ecolinguistic discourse analysis, of the first story *The Sun Mother* is observed as the nature is acknowledged as a life-giver. It evokes the idea that nature, especially the sun, is above all powers of humanity, namely, the primary agent who brings the change. Each action is described so vividly that a reader can easily visualize the steps of creation. We, as humans, are descendants or a part of creation itself. The divine power, mentioned as the Great Spirit, controls The Sun Mother and her “children” (p. 11) from plants to animals, and lastly, human beings; besides, every part of life is interconnected closely. The sentences such as “The Earth is alive.” (p.15) and “The Earth is sacred.” (p.15) support this unity and sacredness. It could be interpreted as the story holding an eco-centric worldview where the natural world is intrinsically valued on its own, regardless of human utility. The story’s voice positions humanity within the circle of life and imposes that we, as humans, are equal to all other species in nature and we should do our best to preserve the beauty of nature since we share it with all the living or non-living things. This world is not something that we could own, but rather something we coexist within. The phrases from the Sun Mother to the first humans are “Look around you – this is the place you belong to. All around you are your family: the land, the wind and the waters, the plants and the animals. You are all part of the same spirit. Care for creation. Look after the land for your ancestors; look after the land for your children and for your children’s children” (p. 15). She gives her best advice both to the characters and also mostly to the readers to care for their past, present and future. Therefore, this anonymous folktale represents the common notion of the Australian indigenous groups and seeks to convey it to the new generations. In Stibbe’s words (2015), the ideology of the story “encourages the people to preserve the ecosystems that support life” (p. 24). The words like “warmed” (p. 8) and “brightened” (p. 15) reinforce the favourable atmosphere. So, the story could be acknowledged as having a beneficial discourse, similar to Chawla’s

(2001) comments on indigenous cultures surviving for years without harming the ecosystems they rely on. The language patterns showing ideology are compiled in Table 2.

Table 2. Ideology in *The Sun Mother*

Form of story: <i>Ideology</i>	Manifestation (in language)
“The Sun Mother” is acknowledged as a life-giver, and every part of life is interconnected closely. The ideology of the story “encourages the people to preserve the ecosystems that support life (Stibbe, 2015, p. 24).” The divine power, mentioned as the Great Spirit, controls The Sun Mother and her “children” (p. 11), emphasizing unity and sacredness. The story’s voice positions humanity within the circle of life, implying that humans are equal to all other species and must preserve nature.	- “I have woken you.” (p. 11) - “The Earth is alive.” (p. 15) - “The Earth is sacred.” (p. 15) - “You are all part of the same spirit.” (p. 15) - “Look after the land for your ancestors; look after the land for your children.” (p. 15)

Regarding the second category, framing; The Sun Mother and the Great Spirit are framed as individual entities; nature and its members are subordinates that need to be awakened. Each member is portrayed alive. Words such as “awake,” (p. 15) “light,” (pp. 8, 9) “bloomed,” (p. 9) “swam,” (p. 10) and “alive” (pp. 9, 11) carry positive associations related to life and creation. Therefore, these trigger words help the readers visualize the world alive, and in motion. Conversely, words like “darkness,” (pp. 8, 12) “cold,” (p. 8) and “hard” (p. 8) suggest difficulty when there is no life. The Earth before awakening is depicted as somewhere unpleasant and gloomy. Subconsciously, we are inclined to support and preserve the world we live in. Furthermore, the use of personal pronouns personifies nature. The sun is called “mother/she/her”, (pp. 8, 13) thus fostering a sense of closeness and familiarity. It gives a maternal, nurturing intent to her actions. This word choice brings the idea to the mind that nature needs a caretaker. Even in stories, there is always a female keeper similar to the general phenomenon of assigned gender roles by society. On the contrary, no gender pronoun is used to refer to the Great Spirit, as it is above all existence and cannot be associated with any gender. Overall, the linguistics items reflect that life on earth and all the creatures are framed as cherishing peacefully and united closely in Table 3. Caring for nature is essential and humans do not hold any superiority over other species and possess the right to exploit this beauty. Instead of framing humans as the smartest creatures on Earth or possible threats to nature, the story places, or reframes, humanity where it actually belongs, equal to every other member of

creation. Thus, the story triggers the idea of humans as keepers of nature rather than carrying a risk of exploitation. Stibbe (2015) suggests that promoting a solution instead of repeating the problem leads to more desired outcomes. Mentioning the problem first might cause sticking to the negative references and create a tendency towards ignorance. Rather, focusing on how to solve it could work out better for positive behavioural change.

Table 3. Framing in *The Sun Mother*

Form of story: <i>Framing</i>	Manifestation (in language)
The Sun Mother and the Great Spirit are framed as individual entities; nature and its members are subordinates that need to be awakened. Each member is portrayed alive. The Earth before awakening is depicted as somewhere unpleasant and gloomy. The sun is called “mother”, thus fostering a sense of closeness and familiarity.	- “awake” (p. 15) - “light” (pp. 8, 9) - “bloomed” (p. 9) - “swam” (p. 10) - “alive” (pp. 9, 11) - “darkness” (pp. 8, 12) - “cold” (p. 8) - “hard” (p. 8) - “mother/she/her” (pp. 8, 13)

Various metaphors have been used throughout the story to enhance the meaning and evoke a positive atmosphere. Metaphors establish a bridge between the source domain (the concept) and the target domain (the described action) (Stibbe, 2015). The story overall creates an imagery of an interconnected world. To exemplify, the life-giving power of the sun is presented with The Sun Mother. Her actions like “walking” (pp. 8, 10, 12) “touching” (pp. 8, 9), awakening (pp. 8, 9, 15) symbolize the process of creation. “Light washed over the world” (p. 8) represents both the literal and symbolic significance of sunlight for life. When it is dark, life almost stops and the creatures feel fear and discomfort, but this darkness is temporary like the hardships of life. Sunrise and sunset follow each other and maintain a balance between joy and displeasure. Furthermore, The Sun Mother tells the other creatures that “like seeds in the winter, you slept in the Earth” (p. 11) and “like seeds in the spring, I have woken you” (p. 11). These phrases emphasize the renewal of life by the seasonal cycle. The Earth and the Sun are personified such as “The Earth was asleep” (p. 8) and “The Sun Mother smiled/ walked /felt etc.” (pp. 8, 9) as if they were alive and could perform human-like actions and have feelings. She is affectionate and caring; thus, life actually originated from a benevolent source and deserves to be protected. Life on Earth and all its members are depicted as dynamic and lively with “the world was a dance of shimmering colour” (p. 10) and “each and every

bird joined in her song, singing out their joy to the world” (p. 12). Change and evolution are encouraged throughout the story when the animals ask for new features and experience transformation (mice turning into bats, etc.). This metaphor symbolizes the adaptability of nature and the need for change when necessary. The Sun Mother tells humans, “All around you are your family: the land, the wind, the water, the plants, and the animals. You are all part of the same spirit” (p. 15). The bond between nature and humans is strengthened by family ties and protecting life is not optional, but essential like a responsibility. All in all, the metaphors in the story shown in Table 4 encourage a beneficial ecological perspective as suggested by Stibbe (2015). It perceives life as sacred and closely connected with all its participants individually and all together. Nature calls for respect and care, fostering sustainability and promoting a harmonious relationship with our environment. The leading metaphor of the story could be similar to the metaphor “Nature is an organism / a person” mentioned by Stibbe (2015, p. 70). The personification in the story and placing humans as part of a larger family emphasize that all living beings are interconnected and humans are not separate from or superior to the natural world. They are responsible for caring for the world and sustaining nature without exploiting it.

Table 4. Metaphor in *The Sun Mother*

Form of story: <i>Metaphor</i>	Manifestation (in language)
Various metaphors are used to create an imagery of an interconnected world. The significance of sunlight for life is highlighted. The renewal of life is emphasized by the seasonal cycle. The Earth and the Sun are personified.	- “walking” (pp. 8, 10, 12) - “touching” (pp. 8, 9) - “awakening” (pp. 8, 9, 15) - “Light washed over the world” (p. 8) - “like seeds in the winter, you slept in the Earth” (p. 11) - “like seeds in the spring, I have woken you” (p. 11) - “The Earth was asleep” (p. 8) - “The Sun Mother smiled/ walked /felt” (pp. 8, 9) - “the world was a dance of shimmering colour” (p. 10) - “each and every bird joined in her song, singing out their joy to the world” (p. 12) - “All around you are your family: the land, the wind, the water, the plants, and the animals. You are all part of the same spirit.” (p. 15)

In the story, evaluations of good or bad and appraisal patterns in line with these evaluations recur frequently. Nature and the Earth are prominently appraised positively with the text using bright, colourful and caring phrases such as “...smelled

divine.../...beamed with delight / fresh green grass...” (p. 9). These positive evaluations highlight the beauty and importance of the natural world. The Sun Mother’s actions and bringing life to the sleeping nature portray the creation process as glorious. Nature is appreciated throughout the text including all its members. The diversity of species “smooth leaves, sticky leaves, silky leaves” (p. 9) and “flowers bloomed in purple, yellow, white and red” (p. 9) is expressed in abundance. Their strong connection to each other is underlined while each individual is valued inherently. Words carrying a negative connotation only appear with “complaints” (p. 9), “cried” (p. 12), “forgot how happy they were” (p. 13). Even when the animals feel discomforted by their forms, the problem is resolved as they wish and positive words come along such as “harmony of beings” (p. 14), and “content” (p. 14), so the story remains positive. Therefore, the Sun Mother is a life-giver but also cares about its creatures’ desires as well.

Moreover, the text primarily uses sensory-rich language for descriptions like “warm” (p. 8), “the first rays of dawn” (p. 12), “wiggled her toes” (p. 8), “the ice began to melt” (p. 10), “a great buzzing and humming” (p. 9), “the cool blue scent of eucalyptus trees” (p. 9). These vivid descriptions add richness and depth to the story and captivate the reader. As the Sun Mother utters “The Earth is alive. The Earth is sacred. Care for creation.” (p. 16), she fosters the high worth of nature and emphasizes our responsibility towards the world. Positive evaluations and clever word choices compiled in Table 5 could subconsciously create a feeling of respect and gratitude in readers’ minds.

Table 5. Evaluation in *The Sun Mother*

Form of story: <i>Evaluation</i>	Manifestation (in language)
Nature and the Earth are prominently appraised positively. The diversity of species is expressed in abundance. The text primarily uses sensory-rich language for descriptions.	- “smelled divine” (p. 9) - “beamed with delight” (p. 9) - “fresh green grass” (p. 9) - “smooth leaves, sticky leaves, silky leaves” (p. 9) - “flowers bloomed in purple, yellow, white and red” (p. 9) - “warm” (p. 8) - “the first rays of dawn” (p. 12) - “wiggled her toes” (p. 8) - “the ice began to melt” (p. 10) - “a great buzzing and humming” (p. 9) - “the cool blue scent of eucalyptus trees” (p. 9)

To create effective outcomes for the environment, Crompton and Kasser (2009) suggest that ecologic texts should promote characteristic features or *identities* that support

nature and all its participants. The biggest role in the story falls upon the Sun Mother, so her character is reflected in the story as being a creator and nurturer or caretaker. She looks after all the creatures, takes care of them and pays attention to their needs besides having a unique connection with each one of them. Presented as a motherly figure, her actions and sayings form a consistent identity throughout the story. Although she belongs to the family of spiritual beings since the Great Spirit calls her “daughter” (pp. 9, 14, 15), she behaves connected to the living beings she has awakened, like bridging between the holy and life on Earth. Species of all kinds including birds, insects, and reptiles are displayed as diverse, worthy and cheerful. They are not individually characterized but highlighted as unified and dependent on one another. As to humans, they are portrayed as an ingroup (Stibbe, 2015) of all the animals and plants. They share the world, come from the same origin or spirit and thus belong to the same family. However, the Sun Mother strongly advises humans to preserve the environment, she does not direct this advice to the other beings. This reminds us that humanity carries a potential risk of exploiters, yet no other creatures. To conclude, the story achieves to establish a strong connection between all the creatures and the divine with the excerpts shown in Table 6. The Sun Mother’s identity is consistently caring and affectionate while all the members of life constitute a family, no species is outgrouped.

Table 6. Identity in *The Sun Mother*

Form of story: <i>Identity</i>	Manifestation (in language)
The Sun Mother’s character is reflected in the story as being a creator and nurturer or caretaker. She belongs to a family of spiritual beings. Species of all kinds including birds, insects, and reptiles are displayed as diverse, worthy and cheerful.	- “As she lifted her foot, the first green shoots of grass on the planet were revealed.... Grass rippled in her tracks until the land was alive with green.” (p. 9) - “As she entered the first cave, her bright light woke up the sleeping spirits and she heard a great buzzing and humming.” (p. 9) - The Great Spirit: “Daughter, it is time for you to go into the caverns of the Earth...” (pp. 9, 14, 15) - “All around you are your family: the land, the wind, and the waters, the plants, and the animals. You are all part of the same spirit.” (p. 15)

Stibbe (2015) explains convictions as the extent to which people believe true, certain, uncertain or false about an action, behaviour or description; and how they shape

their wordage towards it is called facticity patterns. Facticity patterns reflect people's pre-assumptions and these could be analysed with visible linguistic clusters such as the chosen modal, applying to expert authority, the use of indefinite quantifiers and quoting other people's sayings. The text or the author creates a strong conviction about the Sun mother's role and action in awakening life. She is capable of initiating life and shows no signs of doubt in any of her steps. The story is based on the traditional folk story of creation and has a place in our minds. Another conviction could be that the Sun Mother assigns humans the duty to preserve the Earth. Even though the story unites each species altogether, humans are taken one step further in line with our main task. Certainty statements are overwhelming in the story given that the story is written in the present tense and uses several imperatives such as from the Great Spirit to the Sun Mother "wake the Earth" (p. 8). This is not a request or question, but an immediate order. Modals that imply low certainty like *might/could* are absent in the story. Instead, all the actions are given as facts and following actions. As the Great Spirit ranks highest, it could be interpreted as the authority figure in the story, consistent with the general notion. Thus, the story grows stronger in certainty. Furthermore, a sense of unity is emphasized with the use of quantifiers such as "every" (pp. 9, 10, 12, 13, 14, 15, 16), "each" (pp. 8, 12, 13, 14), "all" (pp. 8, 10, 11, 12, 14, 15), "many" (pp. 10, 14). The convictions in the story combined in Table 7 are densely certain and do not leave room for doubt, uncertainty or hedges. All actions are presented as facts even though the text is fictional.

Table 7. Conviction in *The Sun Mother*

Form of story: <i>Conviction</i>	Manifestation (in language)
The text or the author creates a strong conviction about the Sun mother's role and action in awakening life. She is capable of initiating life and shows no signs of doubt in any of her steps. Also, the Sun Mother assigns humans the duty to preserve the Earth.	- "Wake the Earth" (p. 8) - "With each step she took, fresh green grass sprang up in her footprints." (p. 9) - "With the touch of her foot, the ice began to melt and squeeze between her toes." (p. 10) - "Care for creation. Look after the land for your ancestors; look after the land for your children and for your children's children." (p. 16)

The seventh category in Stibbe's ecolinguistics analysis is erasure which examines whether a specific element is left behind, suppressed or ignored in the story. The framework suggests three ways to understand erasure patterns. The first one is identifying

“the void” (Stibbe, 2015, p. 149). As the name suggests, it is the search for open space between the structures. The Sun Mother story does not mention any difficulties in the creation process. Everything negative seems to have vanished from the story. Furthermore, none of the creatures take part in the process, they live by their nature. There is no rank between the creatures, humans are also presented as subordinate to divine and natural forces. This erasure highlights an eco-centric perspective, where the Earth’s well-being and the flourishing of life are established without any anthropocentric aspect which places humans at the centre. Secondly, masking means changing the real situation and serving accordingly. Unlike the traditional creation tales or more scientific explanations of the beginning of life on Earth and the need for evolution; this phase is distorted or adapted to the story. Animals in the story request form change as they wonder and desire what it is like to have different bodily parts as if it were not necessary for survival. Also, they do not have any quarrels or fights with one another and live happily ever after. They do not present individual characteristics but are referred to as a group, thus showing the Sun Mother’s work/children. Animals are given importance as they play a role in the continuation of the life cycle, but their relationship is masked as if they were in complete harmony. They are more like passive members of society and behave accordingly under the Sun Mother’s influence. Transitivity patterns of being active participants can be found as they move and express their emotions but they do not exceed their limits or show unexpected behaviour. The last element in erasure patterns is looking for the traces of the hidden structures. For example, animals, humans, plants or in other words, all the living beings exist in the story, however, their intelligence, especially humans, is degraded. They are given the role of caring for the Earth, but the story provides no details about it. It is possible to reach humans’ potential for exploitation, it is still visible but lowered to the minimum since, at the end, it says “It was a beautiful world. It still is.” (p. 16) as though we did no harm or damage. Everett and Neu (2000), as cited in Stibbe (2015), put forward that modern ecological texts depend on technological advances for ecologic problems. However, they emphasize that the erasure of locals and Indigenous groups in the texts widens the gap between the environment and humanity. Even though local groups are not mentioned in the story itself, the book starts with a pre-explanation of the origin of the story, gathered from Australian natives. Stibbe (2015) argues that vivid descriptions of nature could lead to improving gratitude for nature and stepping towards preserving it for its value. This text successfully creates a clear image of a colourful world thus creating admiration and respect among the readers, as seen in samples in Table 8.

Table 8. Erasure in *The Sun Mother*

Form of story: <i>Erasure</i>	Manifestation (in language)
The Sun Mother story does not mention any difficulties in the creation process. Everything negative seems to have vanished from the story. There is no rank between the creatures, humans are also presented as subordinate to divine and natural forces.	- “It was a beautiful world. It still is.” (p. 16) - “All around you are your family: the land, the wind, and the waters, the plants and the animals. You are all part of the same spirit.” (p. 15)

Salience and re-minding, as the final category in the analysis, focus on the ways that a text can explicitly or implicitly emphasize certain points and reveal previously ignored or erased elements and make them visible again. Re-minding is retaining the elements that have long been set aside, calling attention to them. The story itself reminds us how everything actually was when life just started. The fascinating nature, diverse species in harmony and the earth’s well-being capture us throughout the story. The creatures’ interdependence is also evident. Since, in reality, the situation is much different, the readers long for such a peaceful world while reading this story. Much as animals seem passive, they are the focal point as indispensable parts of the ecosystem. Lastly, humans are reminded of their essential role in preserving the world as we seem to forget it lately. The story consists of vivid depictions; therefore, many salience patterns could be explored in the text as shown in Table 9. The sun and its life-giving force have been highlighted most as the Sun Mother is always active, completing her duties similar to providing sunlight and supporting life for real. Van Leeuwen (2008) notes that activation fosters foregrounding the characters in texts. The Sun Mother is the primary active figure as she performs life-bringing actions “With each step she took, fresh green grass sprang up in her footprints” (p. 8), “With the touch of her foot, the ice began to melt and squeeze between her toes” (p. 10). As Lakoff and Wehling (2012) argue, using basic-level terms like detailed and solid descriptions contributes to the meaning and makes the text more salient, thus promoting ecological awareness. Such metaphors as the Earth’s “waking” (pp. 8, 9, 15) or the creatures being brought to life vividly depict the natural processes and help make the Earth’s ecosystems feel energetic and alive in the reader’s mind. Therefore, it could be acknowledged that the text achieves to create salience although it does not provide detailed representations of animals or humans; it still builds salience around their essential roles in the creation process.

Table 9. Salience in *The Sun Mother*

Form of story: <i>Salience</i>	Manifestation (in language)
The fascinating nature, diverse species in harmony and the earth's well-being capture us throughout the story. The creatures' interdependence is also evident.	- "The Earth is alive. The Earth is sacred. Care for creation." (p. 16) - "awakening" (p. 8) - "With each step she took, fresh green grass sprang up in her footprints." (p. 8) - "With the touch of her foot, the ice began to melt and squeeze between her toes." (p. 10)

All in all, this creation story from Australian native groups portrays a worldview where nature is alive, sacred, and interconnected with divine forces. The story continues the myth of creation but brings different aspects to the story by focusing on a positive atmosphere and reminding us of our position and role in sustaining life. It reinforces a deep respect for nature and places it in the foreground. The story could be called eco-centric, promoting nature in front as a living entity. Vivid descriptions, metaphors, and framing patterns contribute to making nature and its creatures salient in the minds of readers, fostering an appreciation for the Earth's ecosystems. The story could be evaluated as ecological, promoting the care for nature (Stibbe, 2015). Although humans are given a special role in caring for the environment, the story does not elevate them above other species, offering a balanced, respectful relationship with the Earth instead. This folktale serves as a reminder of our responsibility to protect the ecosystems and endorses a beneficial ecological discourse.

4.2. Ecolinguistic Analysis of the Storybook, *The Magic School Bus and the Climate Challenge*

The Magic School Bus and the Climate Challenge written by Joanna Cole and illustrated by Bruce Degen (2010) is the second story undergoing Stibbe's ecolinguistics analysis in this study. This analysis involves a thorough examination of the book, considering its portrayal of ecological issues and proposed solutions to determine whether the text supports protecting or harming nature (Stibbe, 2015).

To start with the ideology category, the book provides essential information about climate change through the story with engaging sticky notes written by the student characters such as "What is global warming? by Carlos" / "Meltdown by Shirley" (p. 10).

It focuses on our environmental responsibilities against global warming and climate change. The negative effects of human actions on ecosystems are underlined such as “melting” (pp. 8, 10, 11), “burning” (pp. 20, 21, 22, 24, 28), “warming” (pp. 7, 8, 11, 12, 14, 15). These depictions create a sense of urgency and danger while supporting the idea that this could be reverted by controlling nature-damaging acts through individual and collective efforts such as reducing greenhouse gas emissions, consuming energy and shifting towards renewable energy sources. The tone of the story puts the blame on human actions as an active cause of rapid climate change as seen in statements like “A lot of extra CO₂ is made when people burn fossil fuels” (p. 19). This also reminds us of our responsibility to reduce the damage to nature. The causes of global warming, such as fossil fuels and greenhouse gases, are clearly presented, along with solutions like renewable and alternative energy sources. In the countryside, they see various types of alternative energy resources such as solar generators, windmills and solar cells. They are explained simply and made clear for the target age group, “Solar cells make energy directly from the sun - with no moving parts” (p. 27). The author promotes global actions against climate change and tries to build a collective awareness towards malicious actions. The short notes “A little can do a lot” (pp. 28, 31, 33, 35) promote how individual actions contribute to reducing global harm and persuade the readers to take personal and collective steps with the pronouns “we/us” (p. 36). In these notes, the modal “should” (p. 23) emphasize the necessity of taking action. Moreover, metaphors like “heat-trapping gases act like a blanket for the Earth” (p. 15) effectively simplify the complex concept. The illustrations parallel to the story such as catching a sunbeam and coming back to the Earth serve the same purpose. Humorous lines such as “Class, the climate in the Arctic is usually very, very cold. ... And I didn’t even bring a sweater! (p. 9), “Does anything explain what happens in this classroom?” (p. 14) make the narrative more engaging and enjoyable. In the end, they start by turning their school into more nature-friendly such as “using power strips with switch on and off buttons”, and then reach out to the mayor of the town “Mayor Rivera? May our town get a windmill, please?” (p. 32) and finally contact the president. The story, in general, reflects the ideology of ecological preservation and sustainability with sample phrases shown in Table 10. It carries a positive attitude for the future and advocates the preservation of the environment “We told everyone, let’s cut down on greenhouse gases now!” (p. 33) and gives more tips on how to do that such as “Don’t leave the fridge open too long.”, “Buy things with less packaging” (p. 33) etc. and approaches the issue as a serious fact to address without doubt.

It promotes beneficial discourses that encourage individuals, especially children, to engage with climate change and make use of necessary knowledge. By using simple language, adding humour as well as scientific facts, the authors seek to convey the importance of sustainable actions and small steps growing into bigger actions.

Table 10. Ideology in The Magic School Bus and the Climate Challenge

Form of story: <i>Ideology</i>	Manifestation (in language)
The story reflects the ideology of ecological preservation and sustainability. It focuses on our environmental responsibilities against global warming and climate change. The negative effects of human actions on ecosystems are underlined, as well. The author promotes global actions against climate change and tries to build a collective awareness towards malicious actions. It emphasizes the necessity of taking action.	- “We had to start saving energy right away. Conserve, conserve, conserve! Recycle, recycle, recycle!” (p. 33) - “We told everyone, let’s cut down on greenhouse gases now!” (p. 33) - “Don’t leave the fridge open too long.” (p. 33) - “Buy things with less packaging.” (p. 33) - “Mayor Rivera? May our town get a windmill, please?” (p. 32) - “A lot of extra CO₂ is made when people burn fossil fuels.” (p. 19) - “A little can do a lot” notes (pp. 28, 31, 33, 35) - The use of the pronouns “we/us” (p. 36) - The modal “should” (p. 23)

The story employs framing and reframing techniques to make complex environmental issues relatable. Several phrases gathered in Table 11 can be identified as the source frames and negative and positive reframing. For example, the term “greenhouse effect” (p. 15) originates from the same structure from gardening and it resembles to gases that are trapped in the atmosphere, such as “...traps heat like a blanket / ...acts like the glass in a greenhouse” (p. 15) to emphasize excessive heating. Thus, it transfers to a negative consequence (negative reframing) from a neutral state. Another framing is the use of fossil fuels. The author says “Humans have been on Earth for about 100.000 years. For most of that time, they didn’t make enough CO₂ to change the climate.” (p. 22) emphasizing that this use was not harmful to nature. Then, she makes a transition and says “Then, about 150 years ago, people invented machines that burned fossil fuel. Since then, more and more people have been burning fossil fuel” (p. 22). From an understandable level of use, people pass to excessive levels, and this evokes negative reframing. As a solution to this issue, the concept of alternative energy forces such as sun, water and wind is used to promote eco-friendly energy sources or, in other words, positively reframed. The text makes efforts to reframe actions that are eco-friendly as

simple, effective and easy to do in “A little can do a lot” notes (pp. 28, 31, 33, 35). Taking steps towards being greener is regarded as a necessary and immediate solution rather than an optional decision. The terms “alternative energy” (p. 22, 23, 24, 30, 37), “greenhouse gases” (pp. 15, 17, 18, 19), “reducing CO₂” (p. 23), “climate change” (p. 21), “biofuels” (p. 28) reflect development and focus on environmental protection with the help of sustainable actions.

Table 11. Framing in The Magic School Bus and the Climate Challenge

Form of story: <i>Framing</i>	Manifestation (in language)
Several phrases can be identified as the source frames and positive reframings. Source frame “a real greenhouse” Negative framing of fossil fuel use, and then making positive reframing by offering alternative resources	- “greenhouse effect” (p. 15) - “...traps heat like a blanket / ...acts like the glass in a greenhouse” (p. 15) - “Humans have been on Earth for about 100.000 years. For most of that time, they didn’t make enough CO₂ to change the climate.” (p. 22) - “Then, about 150 years ago, people invented machines that burned fossil fuel. Since then, more and more people have been burning fossil fuel” (p. 22) - “A little can do a lot” notes (pp. 28, 31, 33, 35) - “Alternative energy” (p. 22, 23, 24, 30, 37) - “greenhouse gases” (pp. 15, 17, 18, 19) - “reducing CO₂” (p. 23) - “climate change” (p. 21) - “biofuels” (p. 28)

Analysing the story in terms of metaphors, source frames and target domains includes an investigation into how it portrays nature and environment (Stibbe, 2015). A couple of sample metaphors shown in Table 12 are encountered such as “Heat-trapping gases act like a blanket for the earth” (p. 15). As Semino (2008) argues, using common daily items for creating a metaphor makes the narrative familiar. The blanket metaphor connotates that the atmosphere is protective but could be risky if there cumulate too many gases. Therefore, it is necessary, but could potentially lead to a more serious problem by capturing gases excessively. Another metaphor in the story is the sentence “Global warming is a dangerous loop” (p. 11). Loop means a cycle, each event following one other. Thus, if we cannot come up with effective solutions for our harmful actions on the ecosystem, natural destruction is inevitable. Nature is depicted like an organism, and all elements of it are interconnected as the story proceeds in a cause-and-effect relationship, the students in the story first start with how the earth was before and how it

is now. They go further step by step and finally reach the solutions; reminding us of our responsibilities as individuals and communities. Accordingly, humans are an indispensable part of nature, and each member shares the responsibility for preserving it. Other living beings are illustrated but they do not hold a big role in the story, they act like more passive members in nature. But our actions have an impact on their well-being, so people are in charge of the Earth's and all its members harmony. As suggested by Stibbe (2015)'s ecolinguistics framework, the text has a tendency towards "The Earth is a spaceship" (p. 69) metaphor regarding humans being in control but we should be aware of our limits and know where to stop as resources are limited in a spaceship. Overall, the metaphors used in the text foster a connection between readers and the environment. They emphasize the importance of sustainability and shared action, promoting a beneficial perspective (Stibbe, 2015). The text lays out the interconnectedness of life and highlights the need for immediate steps towards the environment.

Table 12. Metaphor in *The Magic School Bus and the Climate Challenge*

Form of story: <i>Metaphor (a type of Framing)</i>	Manifestation (in language)
Using the blanket metaphor connotes that the atmosphere is protective but could be risky if there cumulate too many gases. The metaphor "loop" means a cycle, each event following one other. Thus, if we cannot come up with effective solutions for our harmful actions on the ecosystem, natural destruction is inevitable. Humans being in control but we should be aware of our limits and know where to stop as resources are limited in a spaceship.	- "Heat-trapping gases act like a blanket for the earth" (p. 15) - "Global warming is a dangerous loop" (p. 11)

The evaluations and appraisal patterns in the story *The Magic School Bus and the Climate Challenge* indicate the author's perspective towards climate change. The text's tone is optimistic, emphasizing solutions rather than dwelling on problems. Positive appraisal items presented in Table 13 are observed when the story advances to the solutions for this serious threat. The characters find learning and exploring exciting. They are curious and ready to take action against climate change, as seen in lines like "Ms Frizzle, how can we change things all over the world?" (p. 30), and "I conserve paper by writing on the back" (p. 31). These phrases show their enthusiasm towards education and behavioural change; supportive dialogues demonstrate the need for collective action

“They got their whole school inspired. / They got our whole town involved” (p. 35). The author also reveals her hope for the battle against climate change as these characters do not waste any time to start. The diverse alternative ways to produce energy promote an optimistic view as at the end of the story a character asks “Will the earth really be okay Ms. Frizzle? -I hope so, our only chance is to work together - every person, every city, every country.” (p. 36), The good news is all kinds of alternative energy is available now” (p. 37). The words “good news, available” (p. 37), “reducing CO₂” (p. 23) evoke a positive development and the story is centred on solutions rather than only the problem itself. Only one character expresses a negative attitude towards Mrs. Frizzle’s teaching style and utters, “Does anything explain what happens in this classroom?” (p. 14), “Can I switch to another school?” (p. 17), “We are being Frizzled again” (p. 19). However, after gaining sufficient information, this child takes an active role in learning and steps towards declining our impact on climate change. He resembles ordinary people around us as we humans tend to be indifferent to the things we are not aware of. Moreover, negative appraisal items could be results of climate change such as pollution, extreme weather, and loss of living species, triggering undesired outcomes. Glaciers melting, polluted air and a gas-filled atmosphere vividly express the current state and help express negative appraisal as well as raise attention to be more concerned. Ecolinguistics analysis supports that a society’s attitude towards nature lies in the language they choose (Stibbe, 2015). Therefore, examining these appraisal patterns and evaluations gives insight into how the story conveys the message, informs and urges its readers to take a step.

Table 13. Evaluations in The Magic School Bus and the Climate Challenge

Form of story: <i>Evaluations</i>	Manifestation (in language)
The characters find learning and exploring exciting. They are curious and ready to take action against climate change. They have enthusiasm towards education and behavioural change; supportive dialogues demonstrate the need for collective action. The story is centred on solutions rather than only the problem itself. Negative appraisal items are presented as the results of climate change.	- “Ms Frizzle, how can we change things all over the world?” (p. 30) - “I conserve paper by writing on the back” (p. 31) - “They got their whole school inspired. / They got our whole town involved” (p. 35). - “Will the earth really be okay Ms. Frizzle? -I hope so, our only chance is to work together - every person, every city, every country.” (p. 36) - The good news is all kinds of alternative energy is available now” (p. 37). - “Reducing CO₂” (p. 23) - “Does anything explain what happens in this classroom?” (p. 14) - “Can I switch to another school?” (p. 17) - “We are being Frizzled again” (p. 19).

The characters in *The Magic School Bus and the Climate Challenge* have also been examined to reveal how identities and their relationship are portrayed. The three main identities of the story are the students, the teacher and their interaction with nature and their sample lines are exhibited in Table 14. To start with, Ms. Frizzle's students are depicted as curious and active members of their small society. They represent an ingroup of humanity similar to the target readers of the story. They are eager to learn about climate change and they quickly internalize what they have experienced during their amazing trip, and take immediate action afterwards; e.g. "How can we change things all over the world?" (p. 30). This journey connects them with nature and creates a feeling of responsibility. Their enthusiasm could be associated with the necessity of youth involvement in climate matters and assigns this duty to the readers, as our future generation. Even one student, who could be regarded as slightly indifferent or an outgroup, shows interest in taking further steps. At the beginning of the story, he says "I hate it when she says stuff like that!" (p. 8) after Ms. Frizzle's words "Let's get really up-to-date information" (p. 8). But later on, he takes part in actions against climate change. Therefore, proper education does create a difference. This corresponds to Crompton and Kasser's (2009) argument that environmental education must accomplish a behavioural change for sustainability. The storyline depicts a change in this character's identity from partly ignorant to a conscious citizen after witnessing the damage and people's harmful acts. Furthermore, the use of pronoun "we" creates a sense of integrity between the characters and the readers, forming an ingroup, and reminding our responsibilities towards the Earth (Stibbe, 2015). While students are willing to learn, their teacher, Ms. Frizzle provides them with much more experience than they could ask for. She is their guide and mentor, very well-informed about nature and the climate change problem as well as solutions towards it. Ms. Frizzle is portrayed as an idol teacher, who thinks outside the box and also has some superpowers as a fictional character "Ms. Frizzle herded us onto the bus. She pushed a few buttons and pulled a few levers. Then we were on our way to the Arctic Sea." (p. 9). Apart from the presence of the transforming bus, every other information she provides in the story is a concrete fact such as "Most of today's warming is caused by the increasing level of heat-trapping gases in the atmosphere." (p. 15). After informing her students, she raises their awareness of the issue and directs them to step in "We all need to take care of our Earth!" (p. 36). The significance of ecological education and putting the learners in charge could be grasped through her identity. Lastly, nature including plants, animals and the climate is portrayed as an integral part of our lives

“Warming causes stronger hurricanes, more forest fires, causes animals and plants to die or to move, and it hurts food crops” (pp. 8-9). The idea that our impact on nature has been growing bigger day by day and if we fail to come up with alternative resources, we will lose our home eventually has been emphasized throughout the story. The storyline creates a strong connection between nature and the students; respectively among the readers. This also promotes ecological awareness and gives them reasons to fight against climate change.

Table 14. Identity in The Magic School Bus and the Climate Challenge

Form of story: <i>Identity</i>	Manifestation (in language)
The students are depicted as curious and active members of their small society. They represent an ingroup of humanity similar to the target readers of the story. Using the pronoun ‘we’ creates a sense of integrity between the characters and the readers, forming an ingroup, and reminding our responsibilities towards the Earth (Stibbe, 2015). Ms. Frizzle is portrayed as an idol teacher, who thinks outside the box and also has some superpowers as a fictional character. Nature including plants, animals and the climate is portrayed as an integral part of our lives.	- “How can we change things all over the world?” (p. 30). - “I hate it when she says stuff like that!” (p. 8) - “Let’s get really up-to-date information.” (p. 8). - the use of pronoun “we” - “Ms. Frizzle herded us onto the bus. She pushed a few buttons and pulled a few levers. Then we were on our way to the Arctic Sea.” (p. 9). - “Most of today’s warming is caused by the increasing level of heat-trapping gases in the atmosphere.” (p. 15) - “We all need to take care of our Earth!” (p. 36) - “Warming causes stronger hurricanes, more forest fires, causes animals and plants to die or to move, and it hurts food crops.” (pp. 8-9)

Convictions reveal the character’s opinions of whether a description is correct, definite or doubtful. As to conviction patterns in the mentioned story in Table 15, they are highly observable in their sentences related to climate change. For example, Mr. Frizzle’s remarks on greenhouse gases and the risks they pose reflect a high level of certainty and foster the seriousness of the problem “A lot of extra CO₂ is made when people burn fossil fuels” (p. 19). As discussed by Martin and Rose (2003), linguistic features imply the likelihood of an action in the speaker’s mind. Her use of the predicate “is made” (p. 19) leaves no room for a possibility like a modality “may or could”. Stibbe (2015) argues that ecolinguistics texts should reflect the idea that “climate change is caused by humans. (p. 129)” to some extent. This story presents this by all means through Ms. Frizzle’s descriptions. Her sense of conviction is conveyed through her sayings which call

immediate attention “One way is to use alternative energy. Another way is to use alternative energy!” (p. 22). The author made use of facticity patterns in the story to convince the readers of the validity of the information as seen in “Global warming is melting permafrost” (p. 12) or “The greenhouse effect makes the Earth warmer” (p. 18). These statements are informative and declare certainty, making the readers less doubtful. In contrast, the phrase for the picture of Boulder Glacier in Glacier National Park in 1932 compared to today “By the time we grow up, it may be called Glacier-less National Park.” (p. 10) is ironic and the author makes a wordplay implying the clear facts and more or less inevitable outcomes in future. Ms. Frizzle is the expert on the issue and conveys scientific facts. She builds a bridge between the problem and its caretakers who are the characters in the story and, by extension, the young readers. The story provided concrete, easy-to-understand scales and measurements to compare and illustrate the enormity of environmental changes such as “an area the size of Texas and California” (p. 9) or “44,000 pounds a year per person” (p. 23). These calculations strengthen the effects’ precision and increase the information’s reliability. Moreover, the book acknowledges that climate change is a serious issue, and phrases such as “ice melting, seas rising, and more freak weather!” (p. 8) present a strong presupposition of the reality of global warming. The causes and effects are conveyed as facts rather than controversial statements. Mr. Frizzle’s explanations are always direct and unhedged whereas some students show hedging in their questions like Dorothy saying “Aren’t there natural ups and downs in climate?” (p. 14) as she is new to the issue. Her teacher addresses this question sensibly and creates a sense of curiosity among the students. Overall, the story manages to combine the facticity patterns and enhances the readers’ comprehension of climate change. A sense of urgency and credibility has been established through Ms. Frizzle’s efforts and the scientific facts that she has provided.

Table 15. Conviction in The Magic School Bus and the Climate Challenge

Form of story: <i>Conviction</i>	Manifestation (in language)
Mr. Frizzle's remarks on greenhouse gases and the risks they pose reflect a high level of certainty and foster the seriousness of the problem. Her use of the predicate " <i>is made</i> " leaves no room for a possibility like a modality "may or could".	- "A lot of extra CO ₂ is made when people burn fossil fuels" (p. 19) - "One way is to use alternative energy. Another way is to use alternative energy!" (p. 22) - "Global warming is melting permafrost" (p. 12)
Similar to Stibbe's (2015) argument, (ecolinguistics texts should reflect that "climate change is caused by humans. (p. 129)), the book presents this by all means through Ms. Frizzle's descriptions. But her sense of conviction is conveyed through her sayings which call immediate attention.	- "The greenhouse effect makes the Earth warmer" (p. 18) - "By the time we grow up, it may be called Glacier-less National Park." (p. 10) - "44,000 pounds a year per person" (p. 23)
Facticity patterns in the story are also used.	- "ice melting, seas rising, and more freak weather!" - "Aren't there natural ups and downs in climate?" (p. 14)

Additionally, erasure refers to ignorance of an identity or actions in a narrative and pretending as if a specific thing does not exist. Based on the same story, a couple of erasure patterns displayed in Table 16 are encountered in terms of the effects of climate change on our social life. The story strongly demonstrates the causes and their current effects on nature but does not mention their effects on people's lives. The blame is on humans for sure but we are also affected by the consequences as a whole community. The story refers shortly to the effects on farming and animal habitats "It makes some places too dry. It used to be our farm, now it is a desert." (p. 12), "It changes the ocean chemistry and harms coral reefs and the other sea life." (p. 12). These kinds of effects are shown as brief notes with illustrations. The exploration of animals as beings affected by environmental changes remains unsatisfactory. We can see their traces, they are not completely excluded but the text lacks "profound reality" (Baudrillard, 1994, p.6) which is "vivid representations" through language (Stibbe, 2015, p. 150). But it is a picture book, so it could be easier for readers to create visual images. Thus, the story focuses on the ways to cope with climate change more than presenting its possible negative results overall. While the story emphasizes individual efforts, it downplays the responsibility of corporations and developed countries, despite their significant role in driving global warming. The reason why individual efforts are prioritized could be that the book targets young readers and emphasizes that their efforts, small or big, could contribute significantly. Thus, it would be wrong to say that there is a complete void in terms of

corporate or national responsibility; however, it is acceptable to say their role in climate change is shown at a minimum level, especially towards solutions instead of causes of the problem. As Stibbe (2015) suggests, this could lead to masking the larger causes. But, at the end of the story, the characters seek to reach the mayor of their town, and their president to take steps towards solutions “Hi, Mayor Rivera! May our town get a windmill, please?” (p. 32). Even though their part in climate change causes is limitedly displayed, they help the characters and hear their voice by participating in their play about climate change. Nature is given enough importance since its well-being with all its members is the central focus. Although there are some signals of partial void and masking of collective causes, the text achieves to draw attention to the environment, and the seriousness of the climate change issue, and shows that practical actions could make a notable difference.

Table 16. Erasure in *The Magic School Bus and the Climate Challenge*

Form of story: <i>Erasure</i>	Manifestation (in language)
The climate change effects on people’s lives have been erased and effects on farming and animals are briefly mentioned.	- “It makes some places too dry. It used to be our farm, now it is a desert.” (p. 12),
Bigger stakeholders’ role in climate change is shown at a minimum level, especially towards solutions instead of causes of the problem.	- “It changes the ocean chemistry and harms coral reefs and the other sea life.” (p. 12)
The role of companies or developed countries have not been sufficiently emphasized though their actions create a bigger difference in the rise of global warming.	- “Hi, Mayor Rivera! May our town get a windmill, please?” (p. 32)

The last category of Stibbe’s ecological analysis (2015) is salience and salience patterns. This means bringing the erased part of an issue back into attention by reminding them. The story *The Magic School Bus and the Climate Challenge* highlights the significance of climate change but mentions the human-nature relationship insufficiently. This gap is filled by Ms. Frizzle’s explanations and the characters’ actions pointing out humans’ responsibility such as reducing the use of fossil fuels and preventing deforestation. Thus, our roles as individuals sharing the world have been reminded through Ms. Frizzle. However, as it is mentioned in the erasure part, the role of bigger stakeholders should have been reminded more explicitly as well. In terms of salience patterns shown in Table 17, the focus is on global warming, greenhouse gases and

alternative energy resources. This enhances the understanding of causes and solutions towards climate change among the readers. The illustration of ice melting, seas rising, and loss of animal habitats reinforces the urgency in the readers' minds. Vivid imaging and descriptions of sinking islands, forest fires and migrating animals also help to take immediate action. By using vivid imagery and suitable language for readers' language and age level, the story achieves to adapt the abstraction level for its target audience, making the scientific facts easy to understand and follow. In addition, the working principles for alternative energy resources are shown in illustrations and explained simply and this makes the story more salient for readers. The characters in the story as well as the people and animals in the illustrations are shown active. For example, animals are moving somewhere more suitable because of climate change, people move their houses where they can live in better conditions. The characters also do their best to fight climate change such as recycling and energy saving. Therefore, each member has a dynamic role in the process and the readers could feel empathy towards their environment and be eager to participate in actions towards local and global well-being. The repetition of harmful actions of humans and results in climate change could promote a positive behavioural change and salient actions like recycling could be reinforced. Since the story repeatedly mentions how everyday choices matter in "A little can do a lot" (pp. 28, 31, 33, 35) notes, it could raise awareness among the target audience. To sum up, the text effectively emphasizes the importance of ecological responsibilities through salience patterns. As the text is written to inform young readers and raise their awareness of climate change issue, what they can do as kids in small steps to take action against global warming is demonstrated clearly. Here, the text reaches its goal by focusing on the actions of school-aged learners and how their efforts pay off.

Table 17. Salience in The Magic School Bus and the Climate Challenge

Form of story: <i>Salience</i>	Manifestation (in language)
Our roles as individuals sharing the world have been reminded through Ms. Frizzle.	"We all need to take care of our Earth!" (p. 36)
The focus is on global warming, greenhouse gases and alternative energy resources.	"Let's cut down on greenhouse gases now!" (p. 33)
It shows how everyday choices matter.	The explanation of solar cells and wind turbines (p. 24, 25, 26) "A little can do a lot." notes (pp. 28, 31, 33, 35)

In conclusion, the analysis of *The Magic School Bus and Climate Change* reveals that the storybook is an efficient educational material, inspiring young readers to get involved in environmental issues through a coherent, comprehensible and interactive narrative. In general, the story carries features of beneficial discourses (Stibbe, 2015), promoting the principles of ecological conservation and sustainability. It conveys an optimistic outlook on the future and emphasizes the importance of protecting the environment. With the help of Ms. Frizzle's interesting explanations and the characters' participation, it vividly highlights the critical situation of environmental well-being and underlines individual responsibility and small actions against climate change. Since environmental care is framed as a shared duty and achievable steps are explained and illustrated, the story effectively boosts a sense of ecological responsibility and hope for a more sustainable future among its young readers. It aims to raise awareness among the target audience by making complex concepts simple through the effective use of salience patterns. In the end, the book encompasses much more than dull informative content, it is full of scientific facts combined with an engaging narrative. The book fulfils the criteria for ecologically favourable text within the framework of ecological analysis by Stibbe (2015).

4.3. Ecolinguistic Analysis of the Storybook, *My Cousin Ah Meng*

The third ecolinguistics analysis under Stibbe's framework (2015) is for the book *My Cousin Ah Meng* by Kathy Creamer and Peter Creamer (1998). The book is written for ecological purposes as a call for protecting nature and wildlife.

In terms of finding out the ideology of the book, linguistic patterns such as vocabulary and connotations, the pronoun and modal choices, and the use of figures of speech are analysed and shown in Table 18. The prevailing ideology throughout the story is environmental conservation and conscious coexistence with nature. Ideologies, as defined by Stibbe (2015) "are belief systems about how the world was, is, will be, or should be, which are shared by members of particular groups in society" (p. 23). They are cognitive by nature, existing in individual minds but also shared among groups (Stibbe, 2015). Similarly, van Dijk (2011) describes ideologies "as a form of social cognition, stating that they consist of beliefs shared by and distributed over the minds of group

members.” (p. 382). These principles are reflected in the text by fostering a collective belief in the responsibility of humans to protect the environment and inhabit in the same planet harmoniously with other species. The text employs emotional words to promote this ideology such as “precious environment” (p. 29) and “endangered animals” (pp. 28-31). These phrases highlight nature’s value and create a sense of urgency. The authors reflect the belief that humans are responsible for protecting nature, which is seen in several lines such as “I do hope you were listening, especially you, young ones who will inherit a dwindling wildlife population if nothing more is done to protect and conserve it for the future!” (p. 29) and “All wildlife today is threatened and it’s up to you human beings to protect us by spreading the word and making people more aware of our precious environment” (p. 29). The story also blames humans for the destruction of nature with Ah Meng’s words “Every year, about 27 million acres of rainforest are destroyed by the human activities of farming, mining, logging and forest fires” (p. 27). She holds humans responsible for the loss of her home and says “We could have lived there quite happily if the humans hadn’t kept cutting down our trees for firewood every day” (p. 21). Ah Meng narrates how humans jeopardize the ecosystem and the lives of many species. When she remembers the forest fire that wiped down her home, she uses vivid descriptions like “hot yellow fire” (p. 21) and “hundreds of animals died in the flames” (p. 21). Instead of just giving plain information like the number of forest fires in a year, this memory makes it more solid and understandable for its readers. As to the interdependence of all living beings, the story underscores that humans and orangutans are interconnected as shown in Ah Meng’s statement “You are all closely related to me! Amazing, isn’t it?” (p. 8). This relationship bonds us all together as we share the world, and assigns humans as the duty of guardians of nature. Furthermore, humans’ harmful actions toward nature are criticized through Ah Meng’s words and she asks humans to stop the damage and make a move towards supporting the ecosystem. The language she uses makes the narrative both informative and emotionally engaging for the audience. Furthermore, the pronouns “we” and “you” are chosen, thus it could potentially separate humans from the rest of the living beings; but Ah Meng calls us “You, human animals...” (p. 27), which directly places us in the same category as them. Modals such as “must” and “should” emphasize the necessity of taking immediate action, but Ah Meng do not use these modal verbs. Instead, she says “It is up to you to protect us by spreading the word and making people more aware” (p. 29). Even though there is no obligation here, there is an implication that humans hold the responsibility. Moreover, Ah Meng is personified throughout the story.

She expresses her emotions about what happens around her like the forest fire, her being captured by a hunter, and then talks about her favourite keeper at the zoo. With such emotions, she is more relatable to us, influencing our conscience and motivating us to take action for her. As she says “Be my voice” (p. 31), the readers tend to take responsibility and act in favour of nature. The text portrays humans as both destroyers of ecosystems and potential protectors, emphasizing the role they play. From Stibbe’s (2015) ecolinguistics perspective, the text clearly promotes the protection of nature and forms a beneficial discourse for environmental awareness.

Table 18. Ideology in *My Cousin Ah Meng*

Form of story: <i>Ideology</i>	Manifestation (in language)
The prevailing ideology throughout the story is environmental conservation and conscious coexistence with nature.	- “endangered animals” (pp. 28-31)
The phrases highlight nature’s value and create a sense of urgency.	- “I do hope you were listening, especially you, young ones who will inherit a dwindling wildlife population if nothing more is done to protect and conserve it for the future!” (p. 29)
Humans are responsible for protecting nature.	- “All wildlife today is threatened and it’s up to you human beings to protect us by spreading the word and making people more aware of our precious environment.” (p. 29)
The story also blames humans for the destruction of nature.	- “Every year, about 27 million acres of rainforest are destroyed by the human activities of farming, mining, logging and forest fires.” (p. 27)
Vivid descriptions make her memory more solid and understandable for its readers.	- “We could have lived there quite happily if the humans hadn’t kept cutting down our trees for firewood every day.” (p. 21)
Humans and orangutans are interconnected and belong to the same category.	- “hot yellow fire” (p. 21)
	- “hundreds of animals died in the flames.” (p. 21)
	- “You are all closely related to me! Amazing, isn’t it?” (p. 8)
	- “You, human animals...” (p. 27)
	- “It is up to you to protect us by spreading the word and making people more aware.” (p. 29)
	- “Be my voice” (p. 31)

Stibbe’s (2015) second category, framing, refers to associating ideas about a concept using certain trigger words. As described by Fillmore and Baker (2010), frames are “packages of knowledge, beliefs, and patterns of practice” (p. 314) that shape our understanding of concepts. These frames can influence how concepts are perceived, incorporating “memories, emotions and ... values” (Blackmore & Holmes, 2013, p.14) and “structures of ideas that we use to understand the world” (Lakoff & Wehling, 2012,

p. 4). If these associations lead to unpleasant or unfavourable ideas, then reframing, the use of different trigger words, could help to evoke positive connotations. *My cousin Ah Meng* story applies to different kinds of framing and reframing examples shown in Table 19. The ideology of protecting nature is maintained in the “zoo” frame in that zoos are regarded as homes for endangered animals as well as educational places for people to raise awareness about these species. Ah Meng states “Zoos are really not for animals, they are for people! They are here to educate everyone about wild animals such as orangutans, as conservation has to start with knowledge” (p. 28). In addition to reframing zoos as centres for raising awareness rather than for entertainment purposes, the book title *My Cousin Ah Meng* creates another frame by using the kinship term “cousin”. In the following pages, Ah Meng says “You are all closely related to me! Amazing, isn’t it? And when I see some of you really close up, it’s so perfectly obvious that we must be cousins!” (p. 7). The book is enriched with pictures related to the storyline and on this page, the similarity between some orangutans and people is illustrated. The family relationship frame is supported by Ah Meng’s words and related pictures, which creates a sense of unity and pushes us to take action. Furthermore, negative reframing is also observed throughout the text where deforestation by human actions is described as endangering the survival of all species instead of a sign of economic development or industrialisation. This is emphasized in “Every year, about 27 million acres of rainforest are destroyed... damaging our future” (p. 27). However, the text generally takes on a hopeful perspective in that it starts with environmental loss but passes towards actions to take against this loss. Ah Meng mentions the programs aimed at protecting endangered animals such as “captive breeding programs” or “adopting an animal” (p. 30). These programs are presented as effective solutions and can be managed individually such as “Many zoos help endangered animals through research and captive breeding programmes. At some zoos, as in Singapore, you can actually ‘adopt’ an animal, and there are many different activities to get you interested and involved in conservation” (p. 30). Ah Meng assigns humans to take care of the world and advises particularly young people to change and stop harmful actions against nature, as seen in statements like “especially you, young ones who will inherit a dwindling wildlife population” (p. 27). Besides individual efforts, bigger stakeholders are held responsible for prohibiting illegal animal trade and providing legal solutions with effective laws, for example, “There are all sorts of laws made by different countries to protect endangered animals, but they are all too frequently broken” (p. 30). By integrating fiction with factual information, the story both criticizes

destructive human actions and proposes serious and individual solutions, motivating young readers to become advocates for environmental conservation. The phrases also reflect ecolinguistics principles by promoting discourses that support ecological preservation (Stibbe, 2015). The understanding that frames shape our perception and ecological texts should promote ecological protection is evident in the story (Stibbe, 2015; Lakoff & Wehling, 2012).

Table 19. Framing in *My Cousin Ah Meng*

Form of story: <i>Framing</i>	Manifestation (in language)
Zoos are framed as homes for endangered animals as well as educational places for people to raise awareness. The family relationship frame is supported by Ah Meng's words and related pictures, which creates a sense of unity and pushes us to take action. Deforestation by human actions is described as endangering the survival of all species. The programs prepared for the protection of endangered animals are presented as effective solutions and can be managed individually. Bigger stakeholders are held responsible.	- "Zoos are really not for animals, they are for people! They are here to educate everyone about wild animals such as orangutans, as conservation has to start with knowledge." (p. 28) - "You are all closely related to me! Amazing, isn't it? And when I see some of you really close up, it's so perfectly obvious that we must be cousins!" (p. 7) - "Every year, about 27 million acres of rainforest are destroyed... damaging our future." (p. 27). - "Many zoos help endangered animals through research and captive breeding programmes. At some zoos, as in Singapore, you can actually 'adopt' an animal, and there are many different activities to get you interested and involved in conservation." (p. 30) - "especially you, young ones who will inherit a dwindling wildlife population." (p. 27) - "There are all sorts of laws made by different countries to protect endangered animals, but they are all too frequently broken." (p. 30)

The story makes use of metaphors in the story with the sample lines in Table 20 and personifies the orangutan Ah Meng in order to support our connection to her and provide a deeper understanding of what she mentions. Nature, or endangered animals like orangutans in this context, finds voice through Ah Meng and she is personified throughout the narrative with human-like features such as being a mother of five, having characteristic traits, and being a celebrity with "beautiful flame-haired" (p. 3) and "sparkling personality" (p. 3). These phrases strengthen her portrayal and persuade us to think that she is more than an animal waiting for her visitors in a zoo. Moreover, the

source frame “being a family” targets our relationship with other living beings. As Stibbe (2015) argues, identifying the source frame and the target domain is required to analyse metaphors, and then it follows uncovering patterns of reasoning by mapping elements of the source frame onto the target domain. When she declares “You are all closely related to me! We must be cousins!” (p. 7), the author seeks to remind humans of our evolutionary process and charges us with our long-ignored environmental responsibility. Frames from concrete, imaginable areas of life to conceptualize abstract domains can be utilized to form metaphors (Stibbe, 2015). The Earth as a whole and the forests have been compared to homes for various species and emphasize providing life-support for humanity. Life on Earth is depicted as interconnected between all living beings and shared by its inhabitants. Lastly, rich metaphors are utilized to express Ah Meng’s dreams of her natural habitat such as “the treetops bathe in a warm blue sky” (p. 19), “graceful birds with strange-looking beaks” (p. 19), “hundreds of shiny jewel-coloured beetles” (p. 19) and “the canopy is a tangled sea” (p. 19). These metaphors demonstrate the beauty of nature itself and provoke our minds to create vivid imagery. She mentions that there are no trees like the forest in their enclosure at the zoo, but justifies the reasons and speaks in favour of being in a zoo for survival. Given these points, through detailed metaphors and personifications, the story creates a vivid and emotional narrative that positions Ah Meng as a relatable, respected, and sympathetic figure. As Stibbe (2015) indicates, an ecological analysis should promote beneficial discourses for the environment. This story uses appropriate metaphors to promote eco-friendly behaviours.

Table 20. Metaphors in *My Cousin Ah Meng*

Form of story: <i>Metaphors</i>	Manifestation (in language)
Ah Meng is personified throughout the narrative with human-like features.	- “beautiful flame-haired” (p. 3) - “sparkling personality.” (p. 3)
The source frame “being a family” targets our relationship with other living beings.	- “You are all closely related to me! We must be cousins!” (p. 7)
Rich metaphors are utilized to express Ah Meng’s dreams of her natural habitat.	- “the treetops bathe in a warm blue sky” (p. 19), “graceful birds with strange-looking beaks” (p. 19) - “hundreds of shiny jewel-coloured beetles” (p. 19) - “the canopy is a tangled sea” (p. 19)

Evaluations and appraisal patterns gathered in Table 21 are blended into the story to show good or bad associations in mind. For example, zoos are positively demonstrated in the text as places of education and animal protection such as “Zoos are really not for animals, they are for people!” (p. 28) and “Zoos can bring attention to the problems involved by trying to protect endangered animals” (p. 28). They are praised for being home to endangered species rather than the common notion of zoos, prisons for animals. Thus, zoos are highlighted as essential in environmental actions. On the contrary, human activities like deforestation and illegal animal trade are evaluated as damaging. Humanity is criticized through Ah Meng’s words “destroying the rainforests” (p. 25) and “27 million acres of rainforest are destroyed every year by the human activities of farming, mining, logging and forest fires” (p. 27). Also, she remembers the cruel hunting where she lost her mother and then was sold illegally. The description of her mother’s death, “a dreadful bang!” (p. 22) and their falling from the tree, is an example of negative appraisal. As Martin and White (2005) argue, appraising items such as “destroying” (p. 25) or “a dreadful bang” (p. 22), carrying implicit negative connotations, could trigger strong responses against destructive human behaviours. These phrases reinforce negative evaluations of human actions. However, humans are not only negatively portrayed, Ah Meng addresses to youth to speak for animals and help them “So I’m asking you, dear Cousin, to please be my voice and speak for Ah Meng” (p. 31). According to Alexander (2009), positive appraisal patterns emerge when words like “help, protect, or aware” come together, creating a mutual effect that fosters optimism and action. In this sense, humans are both potential destroyers and protectors of nature. Ah Meng’s sentence “It’s up to you human beings to protect us by spreading the word and making people more aware.” (p. 29) emphasizes humans’ role in environmental actions. To conclude, these evaluation and appraisal patterns underline humans’ role in protecting nature, encouraging readers to act responsibly. According to Martin and White (2005), the use of metaphors and appraising items affects the readers’ perception of nature and impacts their attitude towards it either critical or supportive. The text effectively integrates these elements to combine empathy with reality and raise awareness towards environmental issues.

Table 21. Evaluations in *My Cousin Ah Meng*

Form of story: <i>Evaluations</i>	Manifestation (in language)
Zoos are positively demonstrated in the text as places of education and animal protection. Humanity is criticized through Ah Meng's words. The description of her mother's death and their falling from the tree is an example of negative appraisal. Humans are not only negatively portrayed, Ah Meng addresses youth to speak for animals and help them.	- "Zoos are really not for animals, they are for people!" (p. 28) - "Zoos can bring attention to the problems involved by trying to protect endangered animals." (p. 28) - "destroying the rainforests" (p. 25) - "27 million acres of rainforest are destroyed every year by the human activities of farming, mining, logging and forest fires." (p. 27) - "a dreadful bang!" (p. 22) - "So I'm asking you, dear Cousin, to please be my voice and speak for Ah Meng." (p. 31) - "It's up to you human beings to protect us by spreading the word and making people more aware." (p. 29)

Concerning identity construction, the *My Cousin Ah Meng* story itself creates ecological identity with the sample phrases shown in Table 22 and through the orangutan Ah Meng speaking for herself, her kind, and accordingly, other members of nature as seen in "I do hope you were listening, especially you young ones who will inherit a dwindling wildlife population if nothing more is done to protect and conserve it for the future!" (p. 27). As she mentions her previous life and compares it to the present, she constructs a complete identity in readers' minds. The narrative unites humans and orangutans, establishing an ingroup such as Ah Meng's saying "it's so perfectly obvious that we must be cousins!" (p. 7). The text highlights the similarities between Ah Meng's life and human behaviour. For example, Ah Meng carries similar characteristics to humans like the need for family, the desire for peace, and the affection for her offspring, for instance, she says "I've grown to be a bit moody, grumpy and cantankerous; quite similar to how you grey and wrinkly humans behave!" (p. 13). This connection is in line with Bowerbank (1999) ideas about nature writing—it tells both a personal story and a story of nature, showing how they are closely linked. Her transition from a joyful young to a wise elder mirrors the human's ageing process, forming a closer connection. Moreover, orangutans are also regarded as another ingroup in the animal world, as seen in "You may think of orangutans as just another group of funny animals, but orangutans are highly intelligent members of the great ape family" (p. 4). With these words, the author tries to convey that orangutans deserve much more attention than they get. They need our attention, empathy and understanding. People who care for them like the zoo keepers, visitors, or the vet are ingrouped together as a portrayal of those who care about the protection of nature.

However, the narrative also establishes an “outgroup” consisting of individuals who engage in harmful activities toward animals, such as poachers, those responsible for deforestation, and illegal pet traders (pp. 24, 25). Oktar (2001) explains that people’s desire to see themselves as a part of a group helps constitute their identity. This outgroup representing those who harm the environment is compared with people protecting endangered species. In this way, the story aims to encourage the readers to take part in the favoured group. All in all, the story constructs an ecological identity, prioritizing endangered species. The text effectively creates an ingroup that includes both humans and orangutans, urging readers to see the dependence between all living beings and the urgent need for environmental actions. The outgroup of environment destroyers is criticized and active participation in eco-friendly acts is encouraged through Ah Meng’s narrative.

Table 22. Identity in *My Cousin Ah Meng*

Form of story: <i>Identity</i>	Manifestation (in language)
The story itself creates ecological identity through the orangutan Ah Meng speaking for herself, her kind and, accordingly, other members of nature. The narrative unites humans and orangutans. Orangutans are also regarded as another ingroup in the animal world.	- “I do hope you were listening, especially you young ones who will inherit a dwindling wildlife population if nothing more is done to protect and conserve it for the future!” (p. 27)
The narrative also establishes an “outgroup” consisting of individuals who engage in harmful activities toward animals.	- “It’s so perfectly obvious that we must be cousins!” (p. 7)
	- “I’ve grown to be a bit moody, grumpy and cantankerous; quite similar to how you grey and wrinkly humans behave!” (p. 13).
	- “You may think of orangutans as just another group of funny animals, but orangutans are highly intelligent members of the great ape family.” (p. 4).
	- Poachers, those responsible for deforestation, and illegal pet traders. (pp. 24, 25)

The sixth category of Stibbe’s ecological discourse analysis framework (2015) focuses on convictions and facticity patterns gathered in Table 23. The use of modality expresses the narrator’s belief in the convictions he/she presents. For example, Ah Meng utters “You human animals are supposed to be more intelligent than us, so why can’t you see that you share this beautiful planet Earth, with millions of different animals?” (p. 25). Here, the author uses “be supposed to”, which bears expectancy to some extent, but as understood, people do not behave as they should. Thus, the author is convinced that humans destroy the environment. This belief is also clear in the statement “Every year,

about 27 million acres of rainforest are destroyed by human activities like farming, mining, logging, and forest fires.” (p. 27). The text presupposes human destruction as ongoing and provides certainty with the predicate “are destroyed” as high commitment (Richardson, 2007). Besides, quantifiers are also employed to emphasise the damage by humans such as “about 27 million acres of rainforest” (p. 27) and the importance of forests by hosting “over half the world’s animals” (p. 25). These numbers highlight the significance of the issue as a piece of solid evidence (Machin & Mayr, 2012) and persuade readers to take serious steps. Unless we start soon, we may lose some species and decrease biodiversity as Ah Meng warns us against. However, this shows a low commitment (Richardson, 2007), we still have the chance to change things as the text uses hedges with “may” in the statement “If nothing is done, you may have to go to museums to see animals like us because we shall all be extinct!” (p. 27). Therefore, it reminds us of some actions we can take, it is not too late, but we do not have much time to waste. The readers can easily infer that the author has strong convictions about the importance of protecting endangered animals. Various linguistic usages help to underline the urgency of the issue and instil in readers the opportunity to reduce the damage. Ah Meng’s story is actually a call for help from nature, seeking to extend the readers’ feeling of empathy towards endangered species. By presenting the orangutan as both a beloved figure and a representative of endangered species, the text encourages its readers to recognize their role in preserving the planet for future generations.

Table 23. Conviction in *My Cousin Ah Meng*

Form of story: <i>Conviction</i>	Manifestation (in language)
The author uses “be supposed to”, which bears expectancy to some extent, but as understood, people do not behave as they should.	- “You human animals are supposed to be more intelligent than us, so why can’t you see that you share this beautiful planet Earth, with millions of different animals?” (p. 25)
The author is convinced that humans destroy the environment. Quantifiers also support this idea.	- “Every year, about 27 million acres of rainforest are destroyed by human activities like farming, mining, logging, and forest fires.” (p. 27)
A low commitment is given to the extinction of some species.	- “about 27 million acres of rainforest” (p. 27) - “over half the world’s animals” (p. 25) - “If nothing is done, you may have to go to museums to see animals like us because we shall all be extinct!” (p. 27)

The seventh category in Stibbe's ecological analysis is erasure, which means ignoring some parts of life which are considered insignificant or the main actors of destructive behaviour that might be backgrounded in a text (Stibbe, 2015). In the same story, some aspects of life are erased or not mentioned sufficiently as seen in Table 24. One representative example of erasure is the animals' natural habitat. Whereas Ah Meng partly describes where she was born and talks about the fire that burnt down the forest, these descriptions are brief and not at the centre of the story such as "I have bad dreams too, about the hot yellow fire that came one day and burned for weeks in our forest. Hundreds of animals died in the flames and our beautiful rainforest was destroyed" (p. 21). The narrative could have provided a detailed explanation of the causes of the fire and the effects of the loss of natural habitat. The rainforest is not depicted enough, besides humans' effect on it holds a small place towards the end of the story, which makes the readers underestimate its importance for the environment "Did you know that over half the world's animals live in tropical rainforests and there are many different trees and plants that can be used to make modern medicines for both humans and animals?" (p. 25). Here, the author could have added a few more lines and explained it better for young readers. It could be inferred that there is a void between the importance of rainforests and their impact on our lives. One more gap (a void by Stibbe's term) appears when Ah Meng gives pieces of advice on stopping ecological destruction and harmful acts by humans. She mentions taking stronger laws for illegal trade, but she prioritizes what could be done individually like adopting an animal at a zoo. But she does not diversify the solutions, focuses on stopping destruction more. Schleppegrell's argument (1997) that erasing the main causes of ecological destruction leads to mistakes in the search for solutions, which could be valid for this narrative. Meanwhile, Ah Meng's feelings about her natural habitat are somewhat repressed. She longs for it as seen in "I can't remember very much about my life then, because I was only a baby. But sometimes, I have dreams about being high up" (p. 19). However, she also feels pleased to live in the zoo as she was saved from illegal hunting and bad owners; for example, "My people gave me to the Zoo where I am much happier because I am with my own kind" (p. 24). She also says that her little son was born in captivity, so he won't miss the forest as he has never experienced it before. Even though she presents this as a positive aspect, it is actually an upsetting fact regarding captivity. This is a way of masking technique since the zoos are presented as highly significant for the protection of endangered species, overlooking the controversial aspect of keeping animals in captivation where they do not have the same freedom. They even

can't act by their nature such as "You may have noticed that no leafy branches are growing on the trees in our enclosure. This is because we have stripped them bare with our habit of making new nests every evening to sleep in. We do this naturally in the wild, as we move around from place to place in the rainforest. The trees in the rainforest will recover and grow new branches. But in our enclosure, the trees don't have a chance to do so" (p. 8). These statements do not address the emotional burden of zoos on wild animals, erasing their feelings and focusing on their survival. In conclusion, while the story successfully portrays the importance of wildlife and efforts of protection through Ah Meng's words, it partially erases the causes and effects of environmental destruction and the discussion of the captivity of animals.

Table 24. Erasure in *My Cousin Ah Meng*

Form of story: <i>Erasure</i>	Manifestation (in language)
The animals' natural habitat is erased partially. Humans' effect on it holds a small place towards the end of the story, which makes the readers underestimate its importance for the environment. The solutions are not diversified, it focuses on stopping destruction more. Ah Meng's feelings about her natural habitat are somewhat repressed. Masking technique for missing natural habitat. Overlooking the controversial aspect of keeping animals in captivity.	- "I have bad dreams too, about the hot yellow fire that came one day and burned for weeks in our forest. Hundreds of animals died in the flames and our beautiful rainforest was destroyed." (p. 21) - "Did you know that over half the world's animals live in tropical rainforests and there are many different trees and plants that can be used to make modern medicines for both humans and animals?" (p. 25) - "I can't remember very much about my life then, because I was only a baby. But sometimes, I have dreams about being high up." (p. 19) - "My people gave me to the Zoo where I am much happier because I am with my own kind." (p. 24) - "You may have noticed that no leafy branches are growing on the trees in our enclosure. This is because we have stripped them bare with our habit of making new nests every evening to sleep in. We do this naturally in the wild, as we move around from place to place in the rainforest. The trees in the rainforest will recover and grow new branches. But in our enclosure, the trees don't have a chance to do so." (p. 8).

Lastly, the ecological discourse analysis focuses on salience and reminding, bringing the erased areas back with the patterns of salience. What is reminded in this story is our ongoing ignorance of ecological destruction and the urgency of endangered species

via the phrases in Table 25. Through Ah Meng, the author reminds the readers of the significance of wildlife in modern life “Did you know that there are many different trees and plants that can be used to make modern medicines for both humans and animals?” (p. 25). As she directs her rhetorical questions to the reader, she manages to draw attention to our necessity for the rainforest. Her personality is made salient in the story with a striking resemblance to humans in terms of physical and personal characteristics, making her more relatable such as “I’ve grown to be a bit moody, grumpy and cantankerous; quite similar to how you grey and wrinkly humans behave!” (p. 13). Rather than her real way of life in the wild, she is used to living in the zoo and acts domesticated because zoos are evaluated as critical in these ecological efforts. Her human-like personality is constructed through her clear descriptions of her daily life at the zoo and having a family as she has three daughters and two sons. Her phrases to warn people like “I do hope you were listening...” (p. 28) evoke a feeling of immediateness among the readers and make her the spokesperson on behalf of all wildlife. Given these points, the salience patterns in the text focus more on Ah Meng and their lives at the zoo as a whole kind. Zoos are presented as a getaway for the survival of endangered species. However, it also raises questions about the moral value of captivity and whether zoos could be a long-term solution or a temporary measure in this situation. Finally, the narrative calls for both awareness and action, encouraging readers to consider their role in preserving nature before it is too late.

Table 25. Salience in *My Cousin Ah Meng*

Form of story: <i>Salience</i>	Manifestation (in language)
Our ongoing ignorance of ecological destruction and the urgency of endangered species are reminded in the story.	- “Did you know that there are many different trees and plants that can be used to make modern medicines for both humans and animals?” (p. 25)
Her personality is made salient in the story with a striking resemblance to humans in terms of physical and personal characteristics, making her more relatable.	- “I’ve grown to be a bit moody, grumpy and cantankerous; quite similar to how you grey and wrinkly humans behave!” (p. 13)
She evokes a feeling of immediateness among the readers and makes herself the spokesperson on behalf of all wildlife.	- “I do hope you were listening...” (p. 28)

In conclusion, *My Cousin Ah Meng* by Kathy Creamer and Peter Creamer (1998) serves as a persuasive call to action for environmental protection through a creative and emotionally engaging narrative. The book employs Stibbe’s (2015) ecolinguistics

framework effectively to promote eco-friendly ideologies, framing zoos as educational centres, and advocating for human responsibility in preserving biodiversity. The personification of Ah Meng and the use of vivid metaphors strengthen the connection between readers and the natural world, urging them to empathize with endangered species. While the text succeeds in fostering awareness and providing actionable solutions, it also reveals some voids, such as insufficient focus on the natural habitats of wildlife and a limited exploration of the emotional and ethical implications of captivity. Despite these limitations, the narrative accomplishes to construct ecological identities, blending factual information with narration, and motivating readers to see themselves as protectors rather than destroyers of nature. Ultimately, the story emphasizes humanity's interdependence with all living beings, instilling an urgent call to action and adopting a hopeful attitude for positive environmental change.

4.4. A Comprehensive Discussion of the Stories

The analyses of *The Sun Mother*, *The Magic School Bus* and *the Climate Challenge*, and *My Cousin Ah Meng* highlight the powerful role of ecolinguistics analysis in choosing and using texts that enhance ecological awareness and encourage sustainable behaviours among learners. This discussion brings together the findings, addressing the research questions respectively and offering a comprehensive understanding of their potential for educational and ecological contributions.

The main aim of this study is to bridge the gap in incorporating global issues, especially ecological themes, into language classrooms. As mentioned before, Cates (2000) emphasises the need for diverse materials covering global problems. Therefore, this study comes up with three valuable literary materials available for classroom integration. All three texts demonstrate how language teaching materials can act as tools for promoting ecological consciousness while improving learners' language skills. They reflect the goal of the study which is to explore how ecolinguistic frameworks can be applied to assess texts, providing teachers with practical insights for material selection and teaching methods.

To address the first research question of this study, these three stories are analysed under Stibbe's ecolinguistics analysis framework (2015) and findings show that all three

stories present unique ecolinguistic characteristics that serve as important criteria for assessing and choosing teaching materials that promote ecological awareness. *The Sun Mother* story is filled with eco-centric ideologies, portraying nature as sacred and highlighting the interconnectedness of all life. The recurring themes of respect, coexistence, and balance address ecolinguistics principles that emphasize harmony over human beings at the centre of all life. This text employs vivid imagery, metaphors, and sensory descriptions. These language elements could draw readers into a world where everything is interconnected, inspiring a deep respect and admiration for nature, and making it a valuable resource for nurturing essential ecological values. *The Magic School Bus and the Climate Challenge* offers a well-structured and engaging method for teaching complex environmental topics. By using framing and reframing techniques, it simplifies abstract ideas such as the greenhouse effect and renewable energy, making them more easily accessible to young learners. Its focus on solutions places a sense of agency and urgency in handling climate change. The story aligns with principles that encourage ecological involvement. Furthermore, *My Cousin Ah Meng* storybook combines emotional storytelling with factual information, giving a voice to Ah Meng and fostering a bond between readers and endangered species. By underlining detrimental human actions, but still carrying hope for solutions, positive ecolinguistic practices have been encouraged throughout the text. The interconnectedness of all living beings is emphasized, nurturing a sense of shared responsibility.

In terms of the second research question on exploring linguistic features that promote ecological awareness, the three stories display various strategies for fostering ecological awareness and shaping learners' viewpoints. First of all, the personification of the Earth and the Sun Mother establishes an emotional connection with nature, highlighting its sacredness and interconnectedness in *The Sun Mother* story. It also presents humans as equal members of the ecosystem, encouraging a perspective that opposes humans' dominance or exploitation of nature. Sensory detailed expressions create vivid imagery, strengthening engagement with the natural environment. In *The Magic School Bus and the Climate Challenge*, metaphors simplify complex scientific concepts, making them more accessible and easier to remember for young readers. Positive phrases emphasize the impact of individual actions against climate change while illustrations of environmental damage underline the urgency of collective efforts. Essential environmental principles are frequently reinforced with advice on recycling to

influence behaviour. In the last story *My Cousin Ah Meng*, Ah Meng is depicted as a relatable, emotional character to support empathy. Vivid descriptions effectively illustrate environmental devastation to promote awareness and action. Moreover, the use of first-person pronouns highlights shared responsibility, creating an inclusive and engaging narrative.

Finally, regarding the third question on how these stories could influence learner behaviour constructively, it can be inferred that each story is distinctly significant in its own way. *The Sun Mother's* eco-centric worldview inspires respect for the wisdom of indigenous people and highlights humanity's role as guardians of nature. By depicting humans as part of a shared world, it fosters a sense of belonging and responsibility. Therefore, when readers are captured by the story, they are more likely to internalize these thoughts. Similarly, *The Magic School Bus and the Climate Challenge* emphasizes practical solutions to climate change, empowering learners with performable steps like reducing energy consumption and supporting renewable energy. Its optimistic tone encourages engagement and reinforces the belief that collective action can bring about meaningful change. The third story *My Cousin Ah Meng* could create an impact on readers by hearing Ah Meng's voice and this could motivate them to take action. Since humans are shown as both destroyers and potential protectors, it makes learners reconsider their roles and responsibilities.

The findings highlight that ecolinguistic analysis is an effective tool for enhancing language education. These narratives illustrate how storytelling can develop both language skills and ecological awareness, making them valuable for integrating global issues into the curriculum. Through vivid metaphors, practical frameworks, and emotionally engaging stories, these texts increase a sense of agency, empathy, and responsibility among learners. They not only inform but also motivate, helping to shape socially conscious global citizens. As Schultz (2001) emphasizes the strength of language in influencing people's thoughts, and respectively, their behaviours, the stories examined here demonstrate how language can influence ecological viewpoints, paving the way for a more sustainable and interconnected future. As Stephens (2006) underlines, there is a scarcity of books that place nature at the centre while putting humanity aside, these storybooks effectively fulfil this need. After being evaluated using Stibbe's (2015) categories for ecolinguistics analysis, the stories exhibit key features that promote ecological awareness, thus they are suitable for classroom use at an appropriate level.

Even though foreign language skills are not the primary focus of this study, some implications could be achieved through the analysis. Firstly, these storybooks will provide contextually rich materials that will help in enhancing vocabulary, grammar, and communicative skills in an interesting and relevant manner. Language learning integrated with ecological content allows students to practice the language in meaningful, real-life contexts, such as discussing environmental topics or proposing solutions. Moreover, the learner is introduced to various cultural and linguistic representations through the texts, helping them to broaden their understanding and critical thinking in a foreign language. Therefore, the integration of these texts into language learning could accomplish both enhancing ecological awareness and improving language proficiency as well.



CHAPTER V

CONCLUSION AND IMPLICATIONS

5.1. Conclusion

This study explores how ecological awareness can be incorporated into English as a Foreign Language (EFL) teaching by applying the principles of ecolinguistics. Using Stibbe's (2015) ecolinguistics framework, an analysis was conducted on three storybooks; *The Sun Mother*, *The Magic School Bus and the Climate Challenge*, and *My Cousin Ah Meng* to assess how their linguistic characteristics promote environmental awareness and shape the attitudes and behaviours of learners.

In particular, *The Sun Mother* is a creation story from Australian native groups and it presents a worldview in which nature is alive, sacred, and linked with divine forces. While continuing the myth of creation, it introduces different elements by emphasizing a positive atmosphere and highlighting our role in nurturing life. It fosters a deep respect for nature, placing it at the forefront. The narrative can be described as eco-centric, depicting nature as a living entity. Rich descriptions, metaphors, and framing techniques enhance the narration of nature and its inhabitants in readers' minds, as well as encouraging appreciation for the Earth's natural cycle. The story can be seen as ecological, advocating for the protectors of nature (Stibbe, 2015). Although humans are assigned a unique role in environmental care, the story does not position them above other species, instead promoting a balanced and respectful relationship with the Earth. This folktale serves as a reminder of our duty to protect ecosystems and supports a constructive ecological dialogue.

Secondly, the analysis of *The Magic School Bus and Climate Change* showed that this storybook could serve as an effective educational tool, encouraging young readers to engage with environmental issues through a clear, relatable, and interactive narrative. The story embodies positive discourses (Stibbe, 2015), advocating for ecological conservation and sustainability. It presents an optimistic view of the future and stresses the importance of environmental protection. Ms. Frizzle's captivating explanations and the involvement of the characters vividly illustrate the urgent state of environmental health and emphasize personal responsibility and small actions in the fight against climate change. By framing environmental care as a collective responsibility and providing clear, illustrated steps, the

story fosters a sense of ecological duty and hope for a more sustainable future among its young audience. It seeks to raise awareness by simplifying complex concepts through effective salience patterns. Ultimately, the book offers much more than just solely informational content; it combines scientific facts with an engaging narrative. The book meets the criteria for ecologically favourable text as outlined in Stibbe's (2015) ecological analysis.

My Cousin Ah Meng story serves as a compelling call to action for environmental protection through a creative and emotionally engaging narrative. The book effectively utilizes Stibbe's (2015) ecolinguistics framework to promote eco-friendly ideologies, portraying zoos as educational centres and advocating for human responsibility in preserving nature. The personification of Ah Meng, along with vivid metaphors, enhances the connection between readers and the natural world, encouraging empathy for endangered species. While the text successfully raises awareness and offers actionable solutions, it also has some gaps such as a lack of focus on the natural habitats of wildlife and a limited exploration of the emotional and ethical implications of captivity. Despite these shortcomings, the narrative effectively builds ecological identities, combining factual information with storytelling, and inspires readers to view themselves as protectors rather than destroyers of nature. Ultimately, the story highlights humanity's interdependence with all living beings, instilling an urgent call to action and fostering a hopeful outlook for positive environmental change.

The findings emphasized the valuable potential of these texts to enhance ecological awareness in EFL classrooms. Each story utilizes various linguistic devices, including metaphors, framing, and evaluation, to effectively communicate ecological themes. These elements not only make the material more engaging but also enable learners to properly understand abstract issues. By presenting vivid imagery and clear explanations, the stories simplify complex environmental issues, foster emotional connections, and motivate learners to critically engage with ecological challenges. Additionally, they encourage readers/learners to reflect on their own perspectives and attempt to come up with alternative ideas for environmental sustainability. The study supports the broad goal of bridging the gap in integrating global issues, particularly environmental topics, into language teaching as well as offering a framework for using literary texts as effective pedagogical tools.

By emphasizing the relationship between language, ideology, and ecological principles, this research makes a significant contribution to the relatively new area of ecolinguistics in education. The findings emphasize how literary texts could serve as effective classroom material to convey ecological themes by making complex topics easier to grasp. These narratives, with their engaging stories and ecological themes, highlight the interconnectedness of human and non-human life, thus supporting the aim of nurturing global citizenship and environmental responsibility among learners. Furthermore, they are inspirational for learners to evaluate their own behaviours and roles, belonging to greater society. By addressing the shortcomings in current teaching methods, this study emphasizes the significance of ecolinguistics in exploring meaningful and contextually rich educational material. Providing EFL teachers with practical ecological-themed literary materials is essential for enabling them to successfully integrate these materials into lessons, both to teach language skills and to foster ecological awareness.

5.2. Implications

The practicality of Ecolinguistic Framework: Stibbe's (2015) framework has turned out to be effective in evaluating the selected texts, highlighting how language choices shape perceptions, attitudes, and behaviours regarding environmental issues. This framework offers a holistic approach for educators to choose materials that promote ecological awareness.

Literary Texts in Promoting Awareness: The stories demonstrate how literary texts can change perspectives and promote sustainability. For example, *The Sun Mother* highlights the interconnectedness of life, *The Magic School Bus and the Climate Challenge* simplifies scientific concepts into understandable solutions, and *My Cousin Ah Meng* builds empathy for endangered species.

Suitability for English Language Teaching: These texts not only help to develop language skills but also address the urgent need for global citizenship education by enhancing ecological consciousness, making them particularly suitable for EFL classrooms.

Potential for Behavioural Change: With their positive framing and doable messages, these stories provide opportunities for learners to adopt ecological values and

turn them into sustainable behaviours. These findings emphasize the role of language education in developing linguistic skills and fostering global ecological responsibility, offering important insights for educators, researchers, and policymakers.

5.3. Suggestions for Researchers

Future research should widen the focus of ecolinguistic analysis to encompass a broader array of genres and formats, including poetry, essays, and digital content to reveal diverse linguistic tools that can enhance ecological education. Besides, studies that directly evaluate the effects of ecolinguistically analysed materials on learners' attitudes, knowledge, and behaviours can be implemented. In these studies, researchers could utilize surveys, interviews, or observational methods to measure both short- and long-term outcomes.

As well as researchers, this study has some suggestions for English language teachers. For example, they could design activities centred around these stories to enhance engagement with ecological themes. Although this study concentrated on A2 learners, they can adjust materials for various levels by simplifying language for beginners or including analytical tasks for advanced students. Assisting learners during the process can result in engaging meaningfully with the content. Apart from English teachers, working with science or geography teachers can help to develop interdisciplinary projects that combine language learning with ecological education. This approach can give students a comprehensive understanding of environmental issues.

More significant suggestions can be brought about for policymakers to integrate ecolinguistics into the curriculum. Storybooks with ecological themes can be integrated into reading lists, making sure that teachers and students have access to high-quality, pre-evaluated resources for teaching ecological awareness alongside language skills. Other than that, teachers could be provided with training to integrate ecolinguistics into their teaching, focusing on the selection, adaptation, and evaluation of materials that align with ecolinguistic principles. Teachers can take a role in the design of new teaching materials suitable for Stibbe's ecolinguistic framework, including textbooks, storybooks etc. Lastly, the most important step should be giving priority to global issues, especially ecological challenges as a key component of the curriculum to foster global citizenship and sustainability goals.

5.4. Limitations and Future Directions

This study encountered several limitations, such as the small number of storybooks analysed and its focus on A2-level learners. Future research could widen the variety of texts analysed and investigate how ecolinguistics applies to different educational levels. By addressing these limitations and considering the suggestions, the results of this study can lay the groundwork for enhancing the incorporation of ecological themes into language education, ultimately helping the creation of a more sustainable and interconnected world.



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