

Transformative Translation: Empowering Environmental Discourse Through Linguistic Innovation and Sustainable Translations

Noemi-Maria Sburlea¹
Daniel Deiica²

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Abstract: As environmental challenges intensify, effective communication is essential to facilitate global sustainability. Translators and translation scholars may need to reconsider traditional translation approaches and offer effective translation solutions to cope with the complexity of environmental discourse. This paper is part of a wider and ongoing research project and introduces a tentative transformative approach to translation, which combined with linguistic innovation, is aimed at offering solutions for achieving sustainable translations. Rooted in eco-linguistics, participatory translation, and cultural adaptation, this approach transcends linguistic and cultural barriers, fostering inclusive and impactful communication. Transformative translation acknowledges the deep connection between language, culture, and the environment, shaping perceptions and behaviours toward achieving sustainability. By involving stakeholders and emphasizing cultural adaptation, translators ensure relevance and engagement across diverse target text users. Integrating technology with human expertise further enhances accessibility and nuance in translations. This tentative transformative approach to translation bridges global and local contexts and empowers environmental discourse, contributing to global efforts to achieve sustainability.

1. INTRODUCTION

In the face of growing environmental challenges, effective communication is essential to foster global sustainability. However, traditional translation approaches may fail to capture the complexity and specificity of environmental discourse. The subtleties of environmental language, often involving scientific terminology, cultural nuances, and ethical considerations, can be lost or misrepresented in translation, leading to misunderstanding and reduced impact of sustainability efforts (Dash & Phil, 2019, pp. 1-6). This paper proposes a tentative transformative approach to translation that aims at empowering environmental discourse through linguistic innovation to offer sustainable translations.

Drawing on the principles of eco-linguistics, participatory translation and cultural adaptation, this approach aims to transcend linguistic and cultural barriers to create more inclusive, impactful and culturally sensitive translations. By rethinking how environmental messages are conveyed in different languages and cultures, this approach not only enhances understanding but also promotes deeper engagement with sustainability initiatives on a global scale (Al-Sofi & Abouabdulqader, 2019, pp. 1-13). Sustainable translations may be achieved by using a transformative approach to translation that prioritizes long-term cultural and environmental sustainability and ensures that translated content effectively communicates environmental issues while respecting the cultural and linguistic contexts of the target audience. This approach emphasizes the need for translations

Politehnica University Timișoara, Faculty of Communication Sciences, Traian Lalescu str., no. 2, Timisoara, ZIP 300223, Romania



West University of Timisoara, Doctoral School of Humanities, Oituz str., no. 4C, Mansardă, I, Timisoara, ZIP 300086, Romania

that not only convey accurate information but also promote sustainable behaviours and attitudes (Al-Sofi & Abouabdulqader, 2019, pp. 1-13).

Participatory translation is a collaborative translation process that involves stakeholders, including translators, subject matter experts, and community members, at every stage of the translation process. This approach ensures that translations are not only linguistically accurate but also culturally relevant and contextually appropriate, promoting inclusivity and increasing the impact of translated content (Kornacki, 2018, pp. 11-18). The term *participatory translation* was introduced by Miguel Angel Jimenez-Crespo, a translation studies researcher who has extensively explored the involvement of wider communities and audiences in the translation process (Jimenez-Crespo, 2017). His research emphasizes the collaborative nature of translation, particularly in digital environments where users and communities are actively involved in creating translations. This concept emphasizes the importance of including diverse perspectives to ensure linguistic accuracy and cultural relevance throughout the translation process.

Eco-linguistics is an interdisciplinary field that explores the relationship between language and the natural environment. It examines how language influences perceptions, attitudes and behaviours toward the environment and advocates the use of language that promotes ecological sustainability and environmental awareness (Dash & Phil, 2019, pp. 1-6). The term was coined by Michael Halliday, a prominent linguist, during his 1990 lecture entitled *New Ways of Meaning: The Challenge to Applied Linguistics*. In this lecture, Halliday discussed the role of language in addressing ecological issues and emphasized the need for linguistics to engage with environmental issues. Ecolinguistics, as defined by Ming Cheng, studies the relationship between language and the environment, focusing on how language reflects and influences our perceptions of the natural world (Cheng, 2022, pp. 189 – 192).

The successful integration of these key concepts in our study will help provide a comprehensive assessment of the accuracy and effectiveness of environmental translation and ultimately will contribute to making translations more sustainable.

2. MAKING ENVIRONMENTAL TRANSLATIONS SUSTAINABLE

This research assesses the quality of translation on environmental sustainability in Romanian. The main objective is to identify possible errors or inaccuracies that could affect the accuracy of the message. In addition, the study examines the various challenges faced by translators, including linguistic, cultural and technical issues.

The investigation aims to improve translators' understanding of the translation process (Dejica & Dejica-Cartis, 2020a) by identifying specific areas where errors are likely to occur. By addressing these potential pitfalls, it can improve the accuracy with which environmental sustainability topics are communicated in Romanian. In addition, understanding the various challenges faced by translators can help develop better strategies and tools to support accurate and culturally relevant translations. Ultimately, this research aims to contribute to more effective communication on environmental sustainability by ensuring that important information is accurately conveyed to the Romanian-speaking public.

During this research, texts translated into Romanian will be analysed to identify potential areas that could pose challenges for translators. Particular attention will be paid to the use of specialized

environmental terminology, as inaccuracies or inconsistencies in this area can significantly affect the clarity, efficiency and sustainability of translations. The aim is to uncover these problems, to develop strategies, to address them, and ultimately to reconsider translation approaches that may increase accuracy and reliability in conveying complex environmental concepts to the Romanian-speaking audience. The past years witnessed growing concern about these issues both from scholars (Cronin, 2017; Dash & Phil, 2019) and from institutions (UNESCO, 2019; IUCN, 2021).

Michael Cronin's work, Translation Goes Green, explores the critical intersection between translation and environmental sustainability, emphasizing the role of translators in shaping ecological discourse. Cronin argues that translation is not just a linguistic exercise but a vital tool for promoting global awareness and action on environmental issues (Cronin, 2017). The author emphasizes the importance of culturally sensitive translations that resonate with local audiences while maintaining the integrity of environmental messages. By examining the challenges and responsibilities faced by translators in this context, Cronin's work emphasizes the need for innovative translation practices that contribute to a more sustainable future. This perspective aligns with the aims of this research, which seeks to identify and address potential pitfalls in translating environmental sustainability content into Romanian, ultimately increasing the effectiveness of these communication efforts.

Dash and Phil's article (2019) What is Ecolinguistics? explores the interdisciplinary field of ecolinguistics, which examines the relationship between language and environment. The article highlights how language influences environmental perspectives and behaviours and how linguistic analysis can contribute to understanding and addressing environmental issues. Dash and Phil (2019) emphasize the importance of integrating ecological awareness into language studies to promote sustainability and environmental awareness. Dash's exploration of ecolinguistics is directly relevant to our research objective of translating environmental texts into Romanian in a sustainable way. The interdisciplinary nature of ecolinguistics, which examines the intersection of language and environmental issues, aligns with our goal of ensuring that translations accurately convey complex ecological concepts while being culturally and contextually appropriate. Dash's focus on how language shapes ecological perspectives underscores the importance of linguistic choices in translation. This perspective is crucial for the development of specialized glossaries and standardized practices to ensure that environmental texts are both accurate and resonate with Romanian audiences. By understanding the linguistic elements that influence environmental awareness, translations can communicate messages more effectively and sustainably. Last but not least, Dash's focus on promoting ecological awareness through language studies supports our goal of promoting collaboration and knowledge sharing among diverse stakeholders. We believe that by integrating ecolinguistics principles into existing translation strategies, translators can increase the impact of translated texts, encouraging collective action towards sustainability. This participatory approach to translation aligns with our broader goal of making translators, translation scholars and students aware of the importance of informed decision-making translation practices which may lead to sustainable translations. By combining ecolinguistics principles with practical translation solutions, we aim at creating translations that are not only accurate but also relevant and culturally impactful, contributing to global sustainability efforts and encouraging a more informed and engaged audience.

UNESCO's Education for Sustainable Development Goals: Learning Objectives (2019) provides a detailed framework for integrating the Sustainable Development Goals (SDGs) into education curricula. This document specifies learning objectives for each SDG to cultivate knowledge, skills, values and attitudes that support sustainable development. It emphasizes the role of education in promoting sustainable development and provides practical guidelines for educators to smoothly incorporate

SDG topics into their teaching methods. This framework is highly relevant to our research since we focus on translating environmental texts into Romanian in a sustainable way. UNESCO's emphasis on education as a crucial component of achieving sustainability aligns with our goal of ensuring that translations are not only accurate but also pedagogically effective. By outlining clear learning objectives for each SDG, UNESCO provides a valuable reference that can guide the translation of educational materials, ensuring that they adhere to global sustainability standards. The focus of the framework on developing knowledge, skills, values and attitudes is integral to creating translations that are culturally relevant and resonate with Romanian audiences. By understanding the educational objectives behind the sustainability content, translators can tailor their work to meet the needs of learners in a better way, thereby promoting a deeper understanding of environmental issues and encouraging responsible behaviour. In addition, UNESCO's guidelines for integrating SDG themes into teaching offer practical insights that can improve translation practices. Incorporating these guidelines ensures that translated texts are not only informative, but also engaging and accessible to a diverse audience, including educators, students and the public, which is a key element for our tentative transformative approach, meant to maximize the impact of translations, contribute to global sustainable development efforts, and foster a more informed and active community.

Language and Culture for Conservation by the IUCN (2021) highlights the critical role that language and culture play in biodiversity conservation efforts. The document emphasizes the need for integrating indigenous languages and cultural knowledge into conservation strategies to ensure the protection of ecosystems and biodiversity. It argues that recognizing and incorporating local cultural practices and traditional ecological knowledge can enhance the effectiveness of conservation initiatives, fostering more inclusive and sustainable environmental stewardship. The IUCN's Language and Culture for Conservation aligns closely with our research objective of translating environmental texts into Romanian in a sustainable way, by underscoring the importance of language and culture in effective conservation. The emphasis on integrating indigenous languages and cultural knowledge mirrors our goal of ensuring that translations are culturally relevant and resonate with the Romanian audience. The document's focus on traditional ecological knowledge and local cultural practices supports our goal to create sustainable translations that maintain the integrity and depth of environmental texts. Our transformative approach ensures that translated materials are not only accurate but also culturally sensitive, enhancing their impact and accessibility. Furthermore, the IUCN's emphasis on inclusive and sustainable conservation strategies aligns with our objective of fostering collaboration and knowledge-sharing among diverse stakeholders. By acknowledging the role of culture and language in conservation, our research aims to produce translations that facilitate informed decision-making and collective action toward ensuring sustainability. In summary, the IUCN's Language and Culture for Conservation provides valuable insights into the role of cultural and linguistic diversity in conservation, aligning with our research objective of translating environmental texts in a sustainable way.

By integrating such principles with practical translation strategies, we can enhance the cultural relevance and impact of translations, contributing to global sustainability efforts and fostering a more resilient and sustainable future. Addressing translation errors in environmental texts requires a transformative approach that ensures both accuracy and cultural relevance. The approach includes, but is not limited to a series of strategies identified in and adapted from the specialised literature or based on professional advice and recommendations:

• Standardize terminology: Develop and use a standardized glossary of environmental terms to ensure consistency and accuracy of translations. Standardized terminology helps maintain consistency across different documents and translations, reducing the risk of misinterpretation (Cronin, 2017).

- *Expert Collaboration*: Involve environmental science and translation experts to review and validate translated content. Their expertise ensures that technical terms and concepts are accurately represented and properly conveyed.
- Participatory translation: Implement a participatory approach in which community members and local stakeholders are involved in the translation process. Such a participatory approach enhances cultural relevance and ensures that translations address local environmental issues and practices.
- *Contextual adaptation*: Adapting translations to reflect the cultural and environmental context of the target audience. Adaptations may include localizing examples, adjusting terminology to align with local usage, and considering regional environmental concerns (Cheng, 2022).
- Ongoing feedback and revisions: Establish a feedback mechanism through which members of the target audience can provide input on the translated material. Ongoing feedback and revisions facilitate iterative improvements and address any inaccuracies or areas of confusion (Cronin, 2017).
- *Training and resources*: Provide translators with specialized training on environmental terminology and concepts. Offering resources such as glossaries, reference materials, and workshops can improve translators' understanding and accuracy.
- *Integrate technology*: Utilize translation tools and software equipped with environmental terminology databases. Machine translation and computer-aided translation (CAT) tools can help maintain consistency and efficiency in managing complex environmental texts.
- Implement rigorous quality assurance processes, including multiple rounds of review and editing by experienced translators and environmental experts. Quality assurance processes help to identify and correct errors before final publication.

By using such strategies, essential information is conveyed to different types of audiences in an accurate and effective way, which ultimately makes environmental translations sustainable.

3. EVALUATING AND ACHIEVING TRANSLATION QUALITY IN ENVIRONMENTAL TEXTS: METHODS AND DESIGN

The general aim of our research project is to assess and improve the quality of environmental translations, and ultimately make them sustainable. In our endeavour to create a transformative approach to translation, in addition to the activities presented in the first part of the article, we will use error analysis on a corpus of environmental texts translated from English into Romanian, interview experienced translators and consult environmentalists to assess the extent to which the translations capture the intended meaning of environmental texts. In this way, we will use mixed research methods (Wisdom & Creswell, 2013), both quantitative and qualitative, which are also applicable in the field of translation studies.

If the quantitative analysis focuses on the quality assessment (Al-Qinai, 2000; House, 1997) of environmental translations, the qualitative one will reveal the results we obtained from interviews and consultations with experts. For the interviews, we will use experienced translators specializing in environmental translations. These discussions are designed to reveal the complexity of environmental texts and the various challenges they face during the translation process. Some of the following provisional questions will be centered around these main topics:

- *Challenges faced*: What specific challenges do you face when translating environmental texts?
- *Managing specialized terminology*: How do you deal with the complexity of specialized vocabulary and technical terms in environmental texts?

- *Cultural and contextual factors*: What are the cultural or contextual factors that may create translation problems in environmental texts?
- *Dealing with ambiguities*: How do you deal with ambiguities or gaps in the source text when translating?
- *Tone and style*: Did you find it difficult to convey the tone or style of the original text? If so, how do you address these challenges?
- *Time management*: How do you manage time constraints and deadlines while ensuring high-quality translations?
- *Collaboration and resources*: Do you collaborate with subject matter experts or use additional resources to help your translations? How do these collaborations improve the translation process?
- *Technological tools*: Are there specific technology tools or resources that you find particularly useful in overcoming translation challenges?

The answers to these questions will help us identify recurring issues such as terminology gaps or conceptual misunderstandings, the strategies preferred by translators for managing and translating technical language correctly, how cultural differences (Dejica, 2009) and local contexts influence translation accuracy, the methods in which translators resolve uncertainties, ensure clarity in the target text, or manage tone and style in translation, the strategies used to the balance efficiency and thoroughness in the translation process, the role of external expertise in improving translation quality and the use of technology in facilitating accurate and efficient translations. Ultimately, these answers will contribute to achieving sustainable translations.

In addition to gathering information from translators, consultations with ecologists will provide a scientific perspective on the effectiveness and sustainability of translations. The ecologists will examine the translated texts and assess their accuracy in conveying key environmental concepts and terminology. The discussions will center around three main topics: technical accuracy, conceptual integrity and impact on understanding. The answers will help us assess if the technical and scientific details in the translations match the original environmental data and findings and if the fundamental environmental messages and concepts are preserved and accurately represented in the target language, and how translations facilitate understanding of environmental issues among the target audience.

Following the interviews and consultations, the data collected will be systematically analysed to identify common patterns, best practices and challenges in translating environmental content to make it sustainable. This analysis will involve comparing the effectiveness of different translation strategies and assessing the accuracy and clarity of the translated texts in relation to the original environmental concepts and messages. The research will also explore the interplay between translators' experiences and environmentalists' assessments to develop a holistic view of translation quality.

The findings of this research aim to provide concrete recommendations for improving translation practices and making environmental texts sustainable. By identifying best practices and addressing common problems, the study will offer solutions to improve the accuracy, clarity and cultural relevance of environmental translations. The insights gained will be valuable to translators, environmentalists and policymakers, contributing to more effective communication of environmental issues and promoting better understanding among diverse audiences. Ultimately, the research aspires to raise awareness of the importance of the concept of sustainability not only for environmental translations but also for other types of specialized translations (Dejica, In Press).

4. CONCLUSION AND FURTHER DIRECTIONS OF RESEARCH

The growing recognition of environmental sustainability as a critical global issue underscores the need for accurate and culturally sensitive communication between languages. Our tentative transformative approach to translation is aimed at bridging global and local contexts and empowering environmental discourse, contributing in this way to current global endeavours for achieving environmental sustainability. The scientific validation of our transformative approach in the final stages of our research project will hopefully consolidate our efforts in making translations sustainable and contribute in this way to international desiderata in making our environment more sustainable.

Close partnerships and ongoing communication between researchers and stakeholders are essential to producing high-quality, contextually relevant translations. This multidimensional (Dejica & Dejica-Cartis, 2020b), collaborative approach enables a deeper understanding of the specific needs and cultural contexts of the target audience, ensuring that translations are not only accurate but also meaningful and actionable. By integrating perspectives from both researchers and local experts, translations can more effectively convey the complexities of environmental sustainability, encouraging the successful implementation of sustainability initiatives.

Different dimensions of sustainability – such as ecological resilience, social inclusion and economic viability – will also be addressed in our research, to ensure that translations support comprehensive and holistic solutions. Exploring how these dimensions intersect can provide valuable insights into how sustainability research can be adapted to different contexts and needs. We will show how specialized terminology, cultural adaptation, and technological tools can influence the quality and effectiveness of translations.

We hope that our research results will be instrumental in improving the dissemination and application of sustainability knowledge. By improving translation practices, researchers and practitioners can bridge communication gaps and ensure that environmental messages are conveyed and implemented in a sustainable way. Ultimately, addressing these research needs will help advance global sustainability efforts, supporting a more resilient and sustainable future through more informed and contextually appropriate translations.

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