



Hacettepe University Graduate School of Social Sciences

Department of Translation and Interpreting

**ECO-TRANSLATION IN SCIENCE FICTION LITERATURE:
DUNE BY FRANK HERBERT**

Zeynep KORKMAZ PAŐA

Master's Thesis

Ankara, 2024

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KABUL VE ONAY

Zeynep KORKMAZ PAŞA tarafından hazırlanan "Eco-translation in Science Fiction Literature: *Dune* by Frank Herbert" başlıklı bu çalışma, 03.06.2024 tarihinde yapılan savunma sınavı sonucunda başarılı bulunarak jürimiz tarafından Yüksek Lisans Tezi olarak kabul edilmiştir.

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Zeynep KORKMAZ PAŞA

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ETİK BEYAN

Bu çalışmadaki bütün bilgi ve belgeleri akademik kurallar çerçevesinde elde ettiğimi, görsel, işitsel ve yazılı tüm bilgi ve sonuçları bilimsel ahlak kurallarına uygun olarak sunduğumu, kullandığım verilerde herhangi bir tahrifat yapmadığımı, yararlandığım kaynaklara bilimsel normlara uygun olarak atıfta bulunduğumu, tezimin kaynak gösterilen durumlar dışında özgün olduğunu, **Doç. Dr. Yeşim (SÖNMEZ) DİNÇKAN** danışmanlığında tarafımdan üretildiğini ve Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü Tez Yazım Yönergesine göre yazıldığını beyan ederim.

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ABSTRACT

KORKMAZ PAŞA, Zeynep. *Eco-translation in Science Fiction Literature: Dune by Frank Herbert*. Master's Thesis. Ankara, 2024.

Nowadays, any kind of contribution to raise awareness towards environment is deemed to be necessary as our planet is fighting against the problems of "global warming", "water scarcity" and "climate crisis". In eco-translation, the translator can play a crucial role for this aim in a society by being ecologically sensitive during the process of translation. In this regard, this study aims to investigate the strategies adopted for the translation of ecological items in Science Fiction works, to reveal some of the challenges that the translator might have encountered during the act of translation and to give insight into the roles of the translator to raise ecological awareness in a society by trying to determine whether the translator has been ecologically sensitive or not during this process. To this aim, in this study, 173 ecological terms in Frank Herbert's *Dune* and their Turkish translations by Dost Körpe have been comparatively analyzed in compliance with the translation strategies of Kansu-Yetkiner et. al (2018) adapted from Venuti, Newmark and Aixelà (literal translation, domestication, foreignization). It has been found out that the literal translation and the (domesticating) couplets/triplets are the most preferred translation strategies. In conclusion, it has been revealed that the translator has been ecologically sensitive during the act of translation.

Keywords: eco-translation, ecology, science fiction translation, *Dune*, environment

ÖZET

KORKMAZ PAŞA, Zeynep. *Bilim Kurgu Edebiyatında Eko-çeviri: Frank Herbert'in Dune adlı eseri*. Yüksek Lisans Tezi, Ankara, 2024.

"Küresel ısınma", "su kıtlığı" ve "iklim krizi" gibi gerçeklerle yüzleştığımız bu günlerde, şüphesiz, toplumda doğa ve çevre bilincini uyandırmaya yönelik atılacak her türlü adıma ihtiyaç vardır. Eko-çeviride çevirmen, ekolojik unsurların aktarılması konusunda hassas davranarak bu bilincin arttırılmasında etkin bir rol oynayabilir. Bu bağlamda, çalışmanın amacı, bilim kurgu eserlerindeki ekolojik terimlerin çevirisinde kullanılan çeviri stratejilerini incelemek, çevirmenin karşılaştığı olabileceği zorlukları değerlendirerek, çeviri sürecinde çevirmenin ekolojik anlamda hassas olup olmadığını tespit etmeye çalışarak toplumda ekolojik bilincin arttırılmasındaki rolünü saptamaktır. Bu amaçlar doğrultusunda dünyada ekolojik anlamda önemli bir kitap olarak bilinen Frank Herbert'in *Dune* adlı eserinde geçen toplam 173 ekolojik terim, çevirmen Dost Körpe'nin Türkçeye aktardığı terimler ile karşılaştırmalı olarak incelenmiştir. Ekolojik terimler, Kansu-Yetkiner ve diğerlerinin (2018) Venuti, Newmark ve Aixelà'dan çalışmalarına uyarladığı çeviri stratejileri (sözcüğü sözcüğüne çeviri, yerlileştirme, yabancılaştırma) doğrultusunda analiz edilmiştir. Analiz sonucunda en çok tercih edilen stratejinin sözcüğü sözcüğüne çeviri ve ikili/üçlü stratejiler (yerlileştirme) olduğu belirlenmiştir. Sonuç bölümünde de çevirmenin ekolojik anlamda hassas bir tutum sergilediği sonucuna varılmıştır.

Anahtar Sözcükler: bilim kurgu, eko-çeviri, ekoloji, *Dune*, bilim kurgu çevirisi, çevre

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LIST OF ABBREVIATIONS

Science Fiction: SF

Source Text: ST

Target Text: TT

Source Language: SL

Target Language: TL

Merriam-Webster Dictionary: MWD

Cambridge Dictionary: CD

Türk Dil Kurumu: TDK

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INTRODUCTION

Since the beginning of the history, human beings have destroyed the environment for various reasons. They have deteriorated the nature intentionally or unintentionally in order to provide their basic needs such as shelter, food and protection against challenging conditions. This destruction was recoverable in the early times as the earth has an enormous power to renew itself. However, with the increase in the population and the development of civilisations, the human impact on the environment has multiplied dramatically in time. The advancements in industry have resulted in permanent destruction on eco-systems and made it nearly impossible to be recovered.

The twentieth century is distinctive on account of the alteration pace on the ecosystems with such an intensity when it is compared to the previous centuries. There have been many reasons of this from cutting timber to mining ores, from generating wastes to growing crops and hunting animals for a long time (McNeill, 2000, p.4). Eventually, this irresponsible and ungrateful attitude of people have caused global warming and climate crisis which threaten all the living organisms on earth.

Nowadays people on different parts of the world suffer from flood, drought, famine and various diseases due to the human-induced climate crisis. What is more, recent studies show that the future generations will face much more severe conditions caused by our actions today. This situation can be described by the term “hyperobject” which was first used by Timothy Morton referring to the "things that are massively distributed in space and time relative to humans" (Cronin, 2017, p. 2). Cronin also uses this term for the notions of “climate change” or “global warming” and explains that we will encounter only some of the results of these hyperobjects in our lifetime while the next generations will have to resist to the circumstances which we induce today (Cronin, 2017, p. 3).

There is a close relationship between the increasing number of the people and their footprints on the planet. Whereas most of the people do not intend to destroy the planet deliberately, the results of their economic decisions and benefits may lead to serious threats to the environment (Speth&Haas, 2006, p.1). Most of the people are aware of the

environmental problems as well as the climate crisis and their possible outcomes. However, they tend to ignore the reality and their own responsibility about the issue and keep maintaining their lives in the same way. People expect the big companies, policy makers and governments to take action against climate crisis while they are making the most of their benefits. People ignore the need to change the systems which make the crisis inevitable. Regarding this subject, Klein stresses on the necessity of confronting the scientific reality of the climate crisis and suggests that the urgency of this issue could constitute a “mass movement”. This means that anyone who maintains his normal life can do something to shoulder his responsibility to fight the climate crisis just as Klein has written her book, *This Changes Everything* (2014, p. 6).

After the publication of *Silent Spring* in 1962, environmental movements started all around the world particularly in industrialized countries. Starting with the harmful effects of pesticides, demonstrations were carried out against various problems from deforestation to nuclear energy. The consequences of the environmental movement have been felt in many fields of political, economic and social life.

It is beyond any doubt that the literature is one of the most powerful tools regarding the dissemination of ideas in the societies. With the increase in the number of printed materials, the individuals could reach their favourite books easily. As a natural consequence of this, literature has had the key role in the environmental movement. Although nature writing has a long history, the themes such as the environmental problems and deterioration of the eco-systems have gained momentum after the publication of *Silent Spring*.

As a genre, SF has always been notable for thinking about the environmental future of the world throughout the history. Although it was not until the 21st century that the climate change was discussed as being the most prominent natural problem in literary works, science fiction (SF) books had already predicted the planet’s future by considering the conditions of the previous centuries. Frank Herbert's *Dune* series is one of the best examples of this.

According to Cronin, in consideration of the human activities “at the age of human-induced climate change” -Anthropocene- and the power of literary works on general public, it is inevitable to mention about translation (Cronin, 2017, p.3). The term “eco-translation” was first used by Clive Scott and referred to “ the translation of any text into eco-consciousness”, then, it is used to refer to “all kinds of translation practices and thinking about human-induced climate change”(Scott, 2015; Cronin, 2017, p.2).

Although there have been a wide range of translated literary works engaging in ecological problems for the past decades, it is surprising to see that ecology has recently started to be discussed among the scholars in Translation Studies. Eco-translation is a new field and there are very few academic studies on this topic. Some of the prominent ones will be named in the coming chapters.

THE PURPOSE OF THE STUDY

This study aims to examine how the nature is recreated in Turkish translation of *Dune* and decide whether the translator, Dost Körpe, has been ecologically sensitive or non-sensitive during the act of translation. The challenges of translating the ecological items in SF literature and the role of the translator to raise ecological awareness in the target culture are also investigated. In this study, Dost Körpe’s Turkish translation of *Dune* by İthaki Publishing House has been analyzed within the framework of eco-translation. Mixed method (qualitative&quantitative) is used for the analysis of the data. Firstly, Turkish translations of the ecological items are investigated in comparison with the ones used in the source text to determine whether the translator has used the literal translation, foreignization or domestication strategies in the TT. Secondly, the results of the analysis are presented quantitatively through figures and tables. This part of the analysis reveals whether the translator is ecologically sensitive or non-sensitive during the act of translation.

TEXT CHOICE

Dune has become a bestseller and sold more than twelve million copies since 1965. As the story takes place in a far future when the hostile weather conditions and water crisis make the imaginary planet Dune, too hard to survive for its residents, it is an influential work in both SF and ecological literature. The novel is so popular worldwide that it has been filmed many times and the last film was released in March 2024. Among the reasons why *Dune* is chosen for this thesis are that the novel has always been bestseller since its first publication, the novel has a large number of ecological terms some of which are also neologisms and it has been considered as a milestone in both the ecological and SF literature.

THE RESEARCH QUESTIONS

The research questions of this thesis are:

- 1-What might be the challenges of translating ecological terms in *Dune*?
- 2-Which translation strategies does the translator adopt for the ecological terms in *Dune*?
- 3-Is the translator ecologically sensitive during his act of translation? At what extent does the translator could transfer Herbert's depiction of the nature?
- 4-What might be the roles of the translator to raise ecological awareness in the SF works?

LIMITATIONS

Dune is a novel which densely includes ecological terminology to describe the natural surrounding of the fictive desert planet, Arrakis. The ecological terms to be analyzed in this SF novel is chosen randomly. The number of the examples in this study is not enough to make generalizations about the whole field but may set an example and provide information about the subject.

CHAPTER 1

THE THEORETICAL FRAMEWORK

1.1. ECOLOGICAL THOUGHT AND ENVIRONMENTALISM

Before 1970s only a small number of people concerned about environmental issues. Although there had been few attempts to save the planet, they were insufficient. One of the examples of this was the emergence of the national parks in Australia and the North America. These parks became popular in many countries, however they were too small and they had to retain their economic activities. Therefore, these developments were not enough for the environmental change (McNeill, 2000, p. 336).

In 1960s, the world experienced fierce circumstances and those resulted in the emergence of various ideas and movements all around the world. Woman's equality and environmentalism were two of the most successful of them. McNeill explains that the reason behind the success of environmentalism lies in the fact that the citizens of wealthy industrial countries could afford to worry for the issues -such as pollution and harmful chemicals- other than money (2000, p. 336-340).

In 1962, Rachel Carson, an American marine biologist, published her book *Silent Spring* and it became the symbol of modern environmental movement in the following years. The book is about the harmful effects of DDT and other pesticides, focusing on its impact on the bird population in particular. After the publication of *Silent Spring*, demonstrations against pesticides took place in many countries and DDT was finally banned in the USA in 1972 (Boslaugh, 2024). The impact of *Silent Spring* has been felt in various fields of political, economic and social life. Ecological turn has been experienced in nearly every field. This has paved the way for interdisciplinarity in environmental studies. Since 1970, the Earth Day has drawn the attention of more and more people from over 190 countries (<https://www.earthday.org/history/>). Moreover, many countries have launched their research programs for global change (McNeill, 2000, p. 336-341).

There are different definitions of environmentalists and one of them is:

“The very broad range of people who are concerned about environmental issues such as global warming and pollution, but who wish to maintain or improve their standard of living as conventionally defined, and who would not welcome radical social change.” (Garrard, 2004, p 18)

Buell also highlights the impact of environmentalism on the global culture and states that the environmentalism will have a significant effect on the discussions of setting the limits to technoeconomic growth on a global scale (Buell, 1995, p.3).

Arne Naess, a Norwegian philosopher, divides ecological thought and practices into two categories: Shallow ecology and deep ecology. The shallow ecology is “Fight against pollution and resource depletion”. Its main concern is the health and wealth of people in developed countries (Naess, 1973). As it can be understood, this approach is limited to the benefits of small group of people and it is anthropocentric. However, the deep ecology is biocentric total-field model and considers the individuals as a part of the environment and focuses on the intrinsic relations of them (Naess, 1973).

1.2. ECO-WRITING

Although the terms such as eco-writing, eco-fiction, eco-literature etc. emerged not until the 1970s, nature writing has a long history in literature. The history of nature writing dates back to the 1700s and it has an important place, particularly, in American literature. Henry Thoreau’s *Walden* (1854) is viewed prominent as an influential work of nature writing and green American thinking (Buell,1995, p.3). Also, the authors' of nineteenth century such as Ralph Waldo Emerson, Henry David Thoreau, Margaret Fuller, John Burroughs and John Muir have significant works which have an impact on modern ecological thought and environmentalism (Dwyer, 2010, p.2) and Aldo Leopold’s *A Sand County Almanac* (1949) is regarded as one of the earliest influential works in eco-writing.

In order to clarify the difference between the nature writing and eco-writing, it can be said that throughout the history, many authors were amazed by the beauty of the nature

and used lots of adjectives to describe it. Nonetheless, by the late 20th century, with the impact of environmental problems, not only their literary style but also their description for the world changed to a great extent. The world was depicted as a place where new generations suffered due to the actions of the previous generations (Badenes&Coisson, 2015).

According to Buell there are four criteria to be considered as an “environmentally oriented work”. These are; “1. The nonhuman environment is present not merely as a framing device but as a presence that begins to suggest that human history is implicated in natural history, 2. The human interest is not understood to be the only legitimate interest, 3. Human accountability to the environment is part of the text's ethical orientation and 4. Some sense of the environment as a process rather than as a constant or a given is at least implicit in the text.”(Buell,1995, p.7-8)

Environmentally oriented works have gained momentum after the publication of *Silent Spring* by Rachel Carson in 1962. Levin implies that Americans did not worry about the “unintended consequences of progress on the environment” before “the controversies over the construction of the Glen Canyon Dam on the Colorado River” and the publication of “*Silent Spring*” (2011). He emphasizes their impact on the language by asserting that:

“Both generated widespread media coverage, bringing complex and urgent environmental issues and the ecological vocabularies that helped explain them into the American lexicon.”
(Levin, 2011)

Ecologically oriented works can be in the form of “poetry, fiction, literary or philosophical essays, environmental activism or natural history” (Dwyer, 2010, p.3). Dwyer compares the effect of “fiction” and “non-fiction” works by concluding that fiction which is less didactic and delivers the messages by implication. Thereby it is more powerful than non-fiction and have a greater effect on environmental activists (Dwyer, 2010, p.7).

The term “ecofiction” emerged shortly after the ecology had been considered as a scientific paradigm and Levin defines it as “the variety of fictional works that address the relationship between natural settings and human communities that dwell within them” (Levin, 2011). There are also discussions about the “true” -based on the reality-and “false” -based on the fears for the outcomes of the current situations- ecofictions.

However, this distinction is not so clear and Dwyer offers to consider the author's agenda and his intended effect on readers as methods to determine if a book is "true ecofiction" (Dwyer, 2010, p.7). The terms related to eco-fiction such as climate fiction, climate change fiction and Anthropocene fiction will also be discussed in the following chapters.

1.3. ECO-CRITICISM

The term was first used in by Rueckert in an article called "*Literature and Ecology An Experiment in Eco-criticism*". As Rueckert states, he investigates the application of ecology and ecological concepts to the study of literature and tries to develop an ecological poetics (Rueckert, 1978).

Dwyer also defines eco-criticism as "a critical perspective on the relationship between literature and the natural world, and the place of humanity within—not separate from—nature" and goes on saying that:

"Eco-criticism arose from the development of a greater understanding of ecological processes, concern over the intensification of global environmental degradation, deep ecological philosophy, the green movement, ecofeminism, and the emergence of scholars whose formative years occurred during a time of great political, social, and environmental ferment in the 1960s and 1970s." (Dwyer, 2010, p.1)

Glotfelty highlights the connection between the physical world and the human culture and states that the interconnections between the nature and the culture is the subject of ecocriticism while negotiating between the human and the non-human (Glotfelty, 1996, p. xix). Badenes and Coisson have also confirmed the relationship between ecocriticism and culture and they point out that:

"Ecocriticism researches the cultural effects of green literary texts, be they canonical or not, on society, the interdisciplinary relationships these texts produce and the ideas that spring from these relationships in the Humanities." (Badenes&Coisson, 2015)

Glen A. Love believes that the lost social role of literary criticism could be recovered by the works in ecocriticism through "recognizing the primacy of nature and the necessity for a new ethic and aesthetic embracing the human and the natural" (1990).

Garces defines the eco-criticism as “the study of literature and environment from an interdisciplinary point of view” and focuses on the relationship between the language and “the environment which surrounds us” (2011). Garces shows this by explaining the characteristics of the “bioregion” which has a strong influence on our culture and language. It is understood that each word may have different connotations in each geographical region and namely, in each culture. Moreover, whereas a language has a special vocabulary for a specific ecological situation, other one could be lack of it. Before the emergence of the term “eco-translation”, Garces examines the position of the translator while translating this ecological reality. Her analysis points out the challenges of translators while recreating the landscapes portrayed in the ST. Thereby, taking the attention of ecocritics on translation, she calls for building a new area of research (Garces, 2011).

It can be said that whereas the ecological issues go beyond political boundaries, it has been predominantly a white movement and it is more developed in the USA than the UK (Love, 1990; Mishra, 2016; Glotfelty, 1996). However, in the future, the ecocritical scholars are expected to be more multicultural, international and interdisciplinary (Glotfelty, 1996, p.xxv).

Turkish scholars have started to study in the field since 2000s. In this regard Ergin emphasizes the importance of the conferences held by Doğuş University (2005) and Hacettepe&Ankara University (2009) about the ecocriticism. Oppermann, Özdağ, Özkan and Slovic co-edited the book, *The Future of Ecocriticism: New Horizons* (2011), after the conference held by Hacettepe&Ankara University with the same title. In 2012, Oppermann's *Ekoleştirir: Çevre ve Edebiyat* (2012) was also published. Moreover, the digital journal called *Ecocene: Cappadocia Journal of Environmental Humanities* published by the Environmental Humanities Center, co-directed by Oppermann and Akıllı, makes great contributions to the field with an interdisciplinary perspective. Recently, there have been many other important studies in the field in Türkiye (Ergin, 2020).

1.4. TRANSLATION AND ECOLOGY

As it has been mentioned in the previous chapter, we need to think about and focus on all the human activities which may be related to the new era called Anthropocene (the age of human induced climate change) (Cronin, 2017, p.3). The power of the translated materials in the dissemination of environmental movements cannot be underestimated. Therefore, the translator can be considered as a dominator for raising the environmental awareness in the target culture.

According to Aksoy, the multidisciplinary nature of Translation Studies has made it a field where environmental issues are discussed and the relationship between the translation and eco-criticism is the result of translation's connectedness with the culture (2020). Despite the importance of the subject, there are very few studies about the translation analysis of ecological components. In this part of the study, new approaches about "the translation of ecology" and the emerging concepts in the field will be explained.

1.4.1. Eco-Translatology

In 2001, in a lecture, Hu mentioned about the Darwinian notions of "adaptation" and "selection" in the field of translation. In the following years, he developed the concept of "eco-translatology" which is an ecological approach to translation, and became popular among the translation scholars, especially in China (Yu, 2016).

In his "Translation as Adaptation and Selection" Hu focuses on the terms "adaptation", "selection" and "translational eco-environment" in particular (2003). He attributes the "translational eco-environment" to almost every component in the translation process. His list includes "worlds of the source text, the source and target languages, the linguistic, communicative, cultural, and social aspects of translating, the author, client, and readers". Hu defines the translation as "a selection activity of the translator's adaptation to fit the translational eco-environment" with regard to "translational eco-environment" (Hu,

2003). He also suggests a simple formula in order to provide a more understandable explanation of this:

“Process of Translation = Translator's Adaptation + Translator's Selection” (Hu, 2003)

According to Hu, there are two stages of translating process. The first stage is the fact that "the translational environment selects the translator" whereas the second stage is that the translator selects the form of the TT or makes decisions on it (2003). Translator's this activity of "selection" is also linked to "Darwin's principle of natural selection" as we are part of the world. If the translators fail to adapt to the translational eco-environment, "they are likely to be eliminated" (Hu, 2003).

1.4.2. Eco-Translation

The term "eco-translation" was first used by Clive Scott in 2015 in a lecture. In the following years some translation scholars have also contributed to the development of the eco-translation as a subdiscipline in Translation Studies. As it is a new field, the number of the related works is rather limited.

By the term "eco-translation", Scott refers to the "the translation of any text into eco-consciousness" and state that eco-translation requires the "psycho-physiological involvement of the translator" (Scott, 2015). According to Scott while reading is "an environmental activity", translation is "an ecological enterprise" which can foster the ecological consciousness and even create "further ecologies" out of the ST (2015). Scott explains it by his following remarks:

“Translation is an ecological enterprise in three senses: in the sense that translation is the way in which we feel our way into the environment embodied in the ST; in the sense that the text of the ST itself, in its very textuality, is an environment of which reading is the act of inhabitation; and in the sense that the text is a material object in the environment of reading.”
(Scott, 2015)

Scott associates "reading" to the notion of "living space" which is also described as the "domestic interior" and translation is associated to renewing the living space or

constructing a new one. He suggests “multiplication of the versions” which refers to the modification of some components in the ST in eco-translation (Scott, 2015).

Cronin implies that he has extended the term by proposing that “eco-translation” covers every kind of translation process which is about the “challenges of human-induced environmental change” (2017, p. 2). Drawing attention to the increasing impact of humans on the environment in the last decades, Cronin reminds the shift -in the status of the humans- from “being a biological agent to becoming a geological force” (2017, p.9). Accordingly, he also argues that the long existing distinction between the Human&Social Sciences and the Natural&Physical Sciences should be no longer acceptable. As the Translation Studies is a part of Human and Social Sciences, it is not possible for it to remain indifferent to this shift (2017, p.3).

Cronin describes three principles “in the formulation of a new political ecology of translation” (Cronin, 2017, p.3-15). These are place, resilience and relatedness. The first principle, “place” is similar to the importance of the locally produced things in ecology in order to save the future of the planet. This principle can also be described as avoiding “McDonaldisation” of the words and providing local references instead, while translating. That is a way to proliferate the creativity in a language (2017, p.16). Second principle is the “resilience” which is described by the examples of untranslatability. The untranslatability of language is related to the nature of the language to survive over time, which requires “new ways of rendering”(2017, p.19). However the examples show that the more the language resists to be translated, it is more likely to be translated. Therefore, this cycle can fuel the advancement of the language itself. The last principle is “relatedness”. Cronin aims to attribute this principle in ecology to “the relatedness to the non-human” instead of “the relatedness to the historical contexts, languages and cultures” which has already been confirmed before. At this point, intersemiotic communication has been highlighted (2017, p.19).

Cronin also draws an attention on the ecological results of excessive information which has resulted “a shift from production to promotion in economy”. As the information providers need to take the attention of people all around the world, there is no surprise

that the amount of translated materials increase dramatically as a result of this situation. The increase in the demand of translation has also caused the involvement of the technology more than ever before (2017, p.22). Nonetheless, it can be understood that even when the technology is used, information is not something immaterial, it is something occupying a place (hard drives, computers etc) indeed. Cronin tries to remind the role of the translators at the age of anthropocene with those remarks (p. 22).

Badenes and Coisson examine the effect of the ecology, an interdisciplinary aspect of environmental studies, on culture and describe its relationship with the translation, the crucial element of the transference of that culture (2015). They state that combining ecology and translation could constitute a new approach, attract attention on ecology and raise ecological awareness. Their study reveals the points where the translation silenced or discovered the voice of nature (2015). In eco-translation, Badenes and Coisson offers 3 different approaches for translators;

“In order for translators to effect such systemic changes, ecotranslation puts forth the adoption of three different approaches: Rereading and retranslating literary works where nature, having its own voice in the source text, was silenced in translation; translating works that present an ecological cosmovision and have not yet been translated; and translating via manipulation works that do not originally present an ecological vision with the aim of creating a new, now ecological, text.” (2015)

It is understood that in the first approach, the translator can recreate the TT by revealing the voice of nature while retaining the figures of speech and semantic components of the ST. In the second approach it is creating the first translation of the ST which has already carried an ecological dimension in the source culture. The translator is expected to reveal this dimension in the TT and contribute to the ecological consciousness in the target culture. The third approach is about the manipulation of the texts through translation with an ecological view (Badenes&Coisson, 2015).

1.4.3. The Development of Eco-translation in Türkiye

Although there is no current academic thesis published so far in the field of Eco-translation, there are some significant articles published by translation scholars in Türkiye. In this part of the study, a brief information is provided about the development of the field in Türkiye.

Aksoy's work which focuses on "the reflection and recreation of the physical landscape in literary texts and in their translations" examines the English translation of Yaşar Kemal's *Ortadirek* and reveal the preferences of the translator to recreate the author's ecological vision in the TT. At the end of the paper, the translator's preferences are evaluated in order to determine whether the translator has complied with the Hu Genshen's concept of "adapting the textual ecology" (Aksoy, 2020).

Tekalp discusses "how an ecocritical text is recreated in a new cultural and ecological environment" by analyzing the translation of Elif Şafak's *Bit Palas*. The translations of some ecological terms "çöp (garbage), koku(smell), böcek (insect) and bit (louse)" are examined and their frequency analysis has been carried out to give insight into the transference of the ecological terms in the TT (Tekalp, 2021).

Kansu-Yetkiner et al. examined 10 English classics of children's literature about "the adventure in nature, human-nature struggle, human-animal friendship" and their Turkish translations between 1923 and 2013. Their study reveals the translation methods used for "the transfer of environment/nature information as a culture bound element". They have found out that whereas the literal translation was the most used method in the Republican period, domestication was used mostly in the other periods (2018).

In her descriptive study, Hastürkoğlu examines the Turkish translations of *To A God Unknown* by John Steinbeck (2020). She shows the diachronic distribution of the methods in the translation of "culture-specific items related to ecology" through semantic categories of "flora, fauna, names of the places, land forms, weather conditions, and natural formations" (2020). According to Hastürkoğlu literal translation method is used mostly in the translation of ecology-related items and three translations of the novel (with

an emphasis on the latest one) have been carried out with an “ecological sensitivity” (Hastürkoğlu, 2020).

Marmara and Demirel have investigated the role of the eco-translation in the age of Anthropocene (2020). They emphasize the need to locate human-beings biodemocratically in the system and understand it in order to overcome the problems of Anthropocene. They focus on particularly translating animals which refers to the intersemiotic communication of Cronin, and offer a concept of “engaged translation” for which they have been inspired by Carol J. Adams’ “Engaged Theory”. According to them, the translator can be the mediator in the interconnectedness of the species through eco-translation (2020).

CHAPTER 2

SCIENCE-FICTION LITERATURE

2.1. THE DEFINITION OF SCIENCE FICTION

Many scholars have tried to define and classify the genre of SF. This is a hard task because there is not a general consensus on the definition of the term. D'Amassa describes science-fiction as being a subdivision of fantastic literature. He also adds that although being the youngest, science-fiction is more popular than the other two subdivisions which are fantasy fiction and supernatural horror (D'Amassa, 2005, p.iv).

On the other hand, Aldiss describes science-fiction as a new sub-species of Gothic which was formed around suspense, mystery and few ominous elements in the eighteenth century (Aldiss, 1988, p.17). According to Aldiss:

“Science fiction is the search for a definition of mankind and his status in the universe which will stand in our advanced but confused state of knowledge (science), and is characteristically cast in the Gothic or post- Gothic mode.” (Aldiss, 1988, p.30)

Aldiss also highlights the flexibility of the SF by telling about the fact that SF can be both conventional and innovative. SF is a mode; it is flexible and changes by time (Aldiss, 1988, p. 15). Another point Aldiss suggests is the fact that there is no obligatory for SF to be real, except making it clearer to the people (1988, p.14).

Just like Aldiss, Mendlesohn thinks that SF is not a genre; it is a discussion or a mode instead. In order to explain this, Mendlesohn demonstrates the samples taken from Egan's *Schild's Ladder*. Despite being a SF, the *Schild's Ladder* has examples of romance, horror, thriller and mystery as well (Mendlesohn, 2003, p.2-3).

As can be seen, there are no clear judgements about the definition of SF. Robert also draws attention to this disagreement among the thinkers and define the SF as 'a form of

cultural discourse involving a world-view differentiated from the actual world in which its readers live' (Roberts, 2006, p.2).

2.2. THE HISTORY OF SCIENCE FICTION

After this brief information about what SF is, now a short history of SF will be given in order to understand the genre better. It is known that the origins of the SF works go back to the ancient times and early examples are from the outside of the United States. Nonetheless, thanks to the technological developments and the power status of the USA, now, it is seen as a popular art form there (Aldiss, 1988, p.14).

It can be said that there is no consensus among the scholars and authors about the first SF work just like the definition of the term itself. However, Lucian of Samosata's *Ikaromenippos*, Thomas More's *Utopia* and Mary Shelley's *Frankenstein* are seen as the most suggested precursors in the field.

Roberts marks that Lucian of Samosata is considered to be "the father of the SF". His *Ikaromenippos* and *Alethes Historia* are the most prominent of his works contributing to this reputation of him (Roberts, 2006, p. 27). In his *Ikaromenippos*, the journey starting from the Moon and ending up at the Heaven means a journey moving from Science to Theological Fiction. On the other hand, *Alethes Historia* which is about a sea voyage across the Atlantic, has been a matter of debate among critics as having an unserious discourse while narrating the "sky island", namely the Moon. Roberts argues that instead of being the proto-SF, Lucian is anti-SF which also emphasizes his engagement to the SF (p.25-30).

Roberts considers the Copernican revolution significant in the development of SF as it led the Catholic Church to lose its control over the science. However, he points out that Bruno is more appropriate for a symbolic starting point in SF history than Copernicus (Roberts, 2006, p. 36).

According to Stableford, in the seventeenth century, the speculative fictions of the writers, which were about the new discoveries and technologies, had been made in the form of the existing genres before the SF gained recognition (Stableford, 2003). Also, he indicates that the utopian fantasies in the form of imaginary voyage, paved the way to the SF works in the following years. However, most of the subsequent works centered around the religious, social and political matters while placing the scientific and technological advancements behind (2003).

In the eighteenth century the effect of “Enlightenment” on SF is inevitable since “the importance of experimental and evidential science” surpassed the “former religious myths and superstitions” (Roberts, 2006, p.64). Moreover, as a natural consequence of the dominance of the French philosophers in the era, most of the SF works were in French as well (p. 64).

Aldiss states that both the evolutionary revolution and the Industrial revolution occurred during the eighteenth century and some important cultural events such as the "American Declaration of Independence, French Declaration of the Rights of Man and the abolition of slavery" accompanied them. It was the time that the SF emerged (Aldiss, 1988, p.34-35). In spite of the fact that the Gothic novel was the precursor of the SF, it started to lose its popularity in the early nineteenth century. However, the elements such as horror, terror and mystery have found favor in SF novels so far (p. 44). It can be understood that despite having the predecessors in the field, Mary Shelley and Edgar Allan Poe were the leading SF writers in the early nineteenth century.

At this juncture it is necessary to mention Jules Verne, who is considered to be one of the most prominent novelists of SF adventure story (D’Ammassa, 2005, p.iv). Verne wanted to combine scientific fact with adventure fiction and his *Voyages extraordinaires (Extraordinary journeys)* which was published by Hetzel became a best-seller SF novel around the world. This collaboration of the writer and the publisher lasted for more than forty years and they published over sixty works during those years (Evans, 2024).

Another important name to be mentioned in the late nineteenth century is the English novelist H.G.Wells who produced his SF masterpieces between 1895-1905 (Roberts, 2006, p.144). According to D’Ammassa, H. G. Wells popularized many of the major

themes in SF. His novels involve predictions about the future or people's possible reactions to the situations such as time travels and invaders from other planets (D'Ammassa, 2005, p.iv). Wells' *The Time Machine* and *The War of the Worlds* are among the SF classics today (Nicholson, 2024).

When we consider SF magazines in the history, Attebery states that the first English SF magazine was *Amazing Stories* by Hugo Gernsback which was founded in 1926 and describes the period between 1926-1960 as the Magazine era (2003). The form and the subject of the SF works were influenced considerably by the magazines and those magazines, *Astounding Science Fiction* in particular, played a significant role in "creating a sense of SF as a distinctive genre" (2003). Attebery also underlines the relationship between the SF and American culture by indicating the fact that most of the publishers of those magazines locate in the USA (2003).

According to D'Ammassa Pulp Fiction magazines which were popular during 1920s and 1930s in the United States had badly written scientific romance stories and mostly targeted the adolescent males. It was not until the 1940s that the readers of those magazines could also find finely written SF stories (D'Ammassa, 2005, p.iv-v). Some of those writers continued their writings on paperback books in the 1950s (p.iv-v).

It can be said that the second era of the SF magazines started with *Astounding* by Campbell since Gernsback stood for the first (Attebery, 2003). The period between the 1930s and 1950s is called as the "Golden Age" in SF. Attebery highlights that most of the well-known SF writers took part in *Astounding* at that time (2003).

Roberts also implies the impact of John W. Campbell, in particular, by referring to the Golden Age in SF as follows "that period when the genre was dominated by the sorts of stories that appeared in Campbell's *Astounding* from the late 1930s into the 1950s" (Roberts, 2006, p.195).

Attebery underlines another topic which has been less mentioned in the field that readers of those magazines had chance to shape the form of the genre via fan letters and fan clubs. As a result of these informal associations *Science Fiction League* was formed in 1934 (Attebery, 2003). Although the League broke up in a short time, its impact along with the

fans' contributions afterwards, played an important role in the transformation of the genre (2003). Another important step was the application of the scientific principles to the society which was exemplified in the stories about *Heri Seldon* by Isaac Asimov. This application focusing on social dynamics in the stories encouraged writers to include religion, politics and other collective activities in their works which resulted in a richer form of the genre (Attebery, 2003).

Roberts cites that the term "New Wave" which had originated in the French cinema was used to describe the "loose affiliation of the writers from the 1960s and 1970s" in the field. Associated with the *New Worlds* magazine in the beginning, "New Wave" movement was a reaction against the conventions of traditional SF. J. G. Ballard, E. C. Tubb, Brian Aldiss, John Brunner, Samuel R. Delany, Thomas M. Disch and John Sladek were the significant writers in this era (2006, p. 231). It can be inferred that the aim of the *New Wave* was to move towards avant-garde literary techniques in terms of form, style and aesthetics in order to improve the stylistic qualities of SF (2006, p. 231). According to Roberts Heinlein's *Stranger in a Strange Land*, Frank Herbert's *Dune*, John Barth's *Giles Goat Boy, or the Revised New Syllabus of George Giles Our Grand Tutor*, Michael Moorcock's *Jerry Cornelius* sequence, Philip K. Dick's *The Three Stigmata of Palmer Eldritch*, *Do Androids Dream of Electric Sheep?* and *Ubik* were the most influential SF works in the 1960s. Furthermore, *The Lord of the Rings* by J.R.R. Tolkien which was published in 1950s had also an important impact in 1960s (Roberts, 2006, p.230-232).

According to Roberts super-hero comics were popular in SF literature in the last decades of twentieth century (2006, p.326). Miracleman, also known as Marvelman is considered to be the first British superhero comic character. It was created by Mick Anglo in 1954 in Britain and also became famous in the USA in the following years (Sanderson&Mangels, 2013). "Watchmen" by Moore and Gibson was the most significant of the graphic novels in 1980s and "superhero" character is seen as a world's saviour who has the role of a messiah trying to prevent the apocalypse in the novel (Roberts, 2006, p. 326).

Between 1980-2000 the number of SF magazines declined and the paperbooks became popular mostly among adolescent males. However, the tendency towards SF via mass-media, surpassed the popularity of the books in the following years (Clute, 2003).

As can be deduced what has been said, the SF has transformed into a genre that has been dominated by the visual-media since then (Roberts, 2006, p.264). Roberts touches upon two different observations about the written SF works in the last decades of the twentieth century. The first observation is the fact that the number of the SF novels and stories increased at a huge number and many outstanding works were published in those years. As a result, SF novels became “one of the most successful branches of publishing” (Roberts, 2006, p. 295). On the other hand, the second observation shows the fact that it was no longer the “novel” which was the prime mode of SF, visual SF works dominated in the field (p.295).

Regarding the twenty-first century SF literature, Roberts emphasizes the power of “fandom” on the determination of “good” and “bad” SF among wide range of books. This business is unelaborate as the fans look down on some of the good authors or sometimes praise the weaker ones more than the successful authors (Roberts, 2006, p.344).

The Hugo and Nebula Awards are known as the most prestigious awards given in the field. The Hugo Awards have been presented annually by the members of the World Science Fiction Society since 1955 while the latter has been presented by the Science Fiction and Fantasy Writers of America. The Nebula Awards are given only for the best works published in the USA. Frank Herbert’s *Dune* received the first Nebula Award and shared the Hugo Award with Roger Zelazny’s *This Immortal* (The Editors of Encyclopedia Britannica 2009, 2014; Kevin, 2024).

Geoff Ryman, Roger Levy, Paul McAuley, Jon Courtenay Grimwood, Eric Brown, Neil Gaiman, Peter F. Hamilton, Neal Asher, Michael Chabon, Richard Morgan, James Lovegrove, Liz Williams, Alistair Reynolds, Justina Robson, and Steph Swainston can be regarded as the most outstanding SF writers today (Roberts, 2006, p. 344).

2.3. ECOLOGY IN SCIENCE-FICTION LITERATURE

Since the global warming and the climate change are unavoidable facts for the world, authors have started to engage in writing about the future of the world more than ever before. Especially, SF writers have been interested in the topic in the last decades. Nonetheless, there are different definitions of these fiction works dealing with the ecology and climate change. They are called by various names such as climate fiction, climate change fiction, eco-fiction and Anthropocene fiction. Some of these fiction books are also listed under the title of “post-apocalyptic fiction” which is a subgenre of SF setting in a world after the tremendous disasters. Therefore, there is no consensus among the authors on whether those are distinct genres or subgenres of SF literature.

Climate fiction (cli-fi) is the most popular of these terms mentioned above. It is used for the literary works dealing with the climate change. The term was first used by Dan Bloom in 2007 as a sub-genre of SF (Glass, 2021). In the following years the term took place in NPR, the *Christian Science Monitor*, *the Guardian*, *the Financial Times*, *Vice*, and the *New Yorker* (Trexler, 2015, p.8).

Mehnert also defines climate change fiction as “literature dealing explicitly with anthropogenic climate change”. Climate change fiction not only shows the consequences of the environmental crisis to the people, it also has an influential role in “shaping the conception of climate change” (Mehnert, 2016, p.4).

Trexler and Clarke suggest that the climate fiction existed before the awareness for the global warming or climate crisis. Clarke highlights the “climatological approach” adopted by Ballard in *The Drowned World* (1962) and *The Crystal World* (1966) even before the term “global warming” was coined in 1975 (Clarke, 2013). It is beyond any doubt that although they are considered as post-apocalyptic fiction works by many authors and critics, Herbert’s *Dune* and Ballard’s *The Drowned World* are the early examples of this subgenre (Clarke, 2013; Trexler, 2015, p. 8). Moreover, in her *Imagining the Future of Climate Change*, Streeby emphasizes the influence of *Dune* on the fiction works of Octavia E. Butler and Bacigalupi (2018, p. 23).

As it can be concluded, there are different views on this new genre among the scholars. While some of them insist that these (cli-fi or the others mentioned above) are distinct genres, Pawel Frelik helps us to illuminate the situation:

“Whether labeled climate fiction, fiction of the Anthropocene, eco-fiction, or any other of a handful names in circulation, the prominent majority of texts dealing with climate change, anthropogenic warming, and catastrophic weather are really science fiction (SF). Certainly not all the texts quite fit this taxonomic qualification, and one can always find exceptions, but, by and large, climate fiction is science fiction.” (Frelik, 2017)

Frelik also associates the reasons behind some authors’ denying the fact that climate fiction is SF to the political motivations as the term SF was used to refer to the stories of the “1930s pulps or 1950s B-movies”. According to him, the authors writing about the climate crisis are afraid that their connection with the SF will devitalize their seriousness (Frelik, 2017).

2.4. SCIENCE FICTION LITERATURE IN TÜRKİYE AND ITS TRANSLATION

The history of SF literature in Türkiye, dates back to the Ottoman era, however, it is notable that this genre which has its origins in Anglo Saxon culture, was introduced in the Turkish literature via translations (Mollamustafaoğlu, 1991). In their study, Koçak and Aydın also agree that SF has survived through translations, retranslations and reprints in Turkish culture. Although there are some well-known Turkish SF novels such as *Son Güneş'in Çocukları* (Bucak, 1994) and *Dönüşüm* (Çatallar, 1996), the number of the SF translations in Türkiye has always been more than them (Koçak&Aydın, 2017).

It is known that the earliest SF translations in Türkiye were published in the Tanzimat Reform Era of Ottoman Empire and the first examples were the translations of Jules Verne in the 19th century (Koçak&Aydın, 2017). The first modern SF series were published in 1950s and they were listed among the works of children's literature most of which were the translations (Küpçü, 2011). It can be said that the SF works has gained

momentum since then and the academic studies about this genre started to appear in 1970s. The name of the genre, Science Fiction, which was first used by Hugo Gernsback in 1927 was translated as "Bilim Kurgu" by Orhan Duru in 1973. There were also different suggestions such as "hayal-bilim" (imaginative science) or "kurgu-bilim" (fictive science) to name this genre but "bilim kurgu" gained recognition over them through the years and it was approved by TDK (Mollamustafaoğlu, 1991).

As the number of the translated SF works has increased, the scholars in the field of Translation Studies have started to pay attention to the topic as well. Focusing on the SF translations in Türkiye and its challenges, Mollamustafaoğlu complains about the mistranslations and omissions which occur more frequently in the works of SF than the other genres. He touches upon the reasons which can cause these problems and puts an emphasis on the scientific terminology of SF works. Moreover, the worlds and circumstances in SF works can be different from the ones in the real world and the SF authors may invent idioms and linguistic units in their works which sometimes may cause translation errors (Mollamustafaoğlu, 1991). These new words and expressions are known as neologisms that make the readers to be adapted to the invented, alien worlds of the novels.

In the field of Translation Studies, there are many scholars who focus on translation of these neologisms (Ay, 2019; Apaydın, 2020; Aksoy&Söylemez, 2023). The neologisms are deemed necessary for the SF readers for the persuasiveness of the texts, thus, it would not be wrong to say that they should be conserved by the translators in the TT whenever possible. However, sometimes translating them can be a hard task for the translators as the existing neologisms in the TL sometimes do not correspond to the same thing concerned. Hence, the translators can also resort to source-oriented strategies to make them understandable for their readers in the SF literature (Aksoy&Söylemez, 2023).

Newmark's classifies the neologisms in twelve categories. These categories are: 1) Existing lexical items with new senses include words and collocations, 2) New forms include new coinages, derived words, abbreviations, collocations, eponyms, phrasal words, transferred words, acronyms, pseudo-neologisms and internationalisms (1988, p. 140).

Newmark further suggests that there are other translation possibilities of a SL neologism and puts forward following translation procedures for the neologisms: transference, TL neologism, TL derived word, naturalisation, recognized TL translation, functional term, descriptive term, literal translation, translation procedure combinations (couplets, triplets etc.), through-translation, internationalism (1988, p. 150).

CHAPTER 3

METHODOLOGY

3.1. ECOLOGICAL ITEMS AS A SUBCATEGORY OF CULTURAL WORDS

The concept of “eco-translation” is a new issue, however, the translation of “ecological items” has been analyzed as a subcategory of cultural words for decades. The scholars of Translation Studies have used different terms for the culture related words such as “realia”, “cultural terms/words”, “culture specific elements/items” and “culturally bound items”, etc. Furthermore, various classification of cultural words are provided by different scholars. In this part of the study, some examples of the classification of ecological items in Translation Studies will be discussed and the categorization used in this study will be explained further.

The term “realia” has been used as a lexical unit referring to the elements which denote to the social, cultural and historical things specific to the source culture (Vlahov & Florin, 1980, s. 47; Kharina, 2018). These elements does not have equivalent in the TL and they are considered to be the main reasons for the translation problems or the mistranslations by many scholars. Vhalov and Florin classify “realia” into three categories: geographic, ethnographic and social and political realia. The first category, geographic realia, is related to the ecological items and it includes “physical geography, meteorology, geographical objects associated with human activity and endemic species” (as cited in Kansu-Yetkiner, 2018; Kharina, 2018).

Newmark defines culture “as the way of life and its manifestations that are peculiar to a community that uses a particular language as its means of expression” and highlights the importance of cultural similarity between the source and the TL in order for a problem-free translation (1988, p.94). Another determinant of the translation problems is the cultural focus on a particular subject which causes a great number of words or

terminology. Newmark classifies the cultural words into five categories: 1) Ecology: flora, fauna, winds, plains, hills, 2) Material culture: food, clothes, houses and towns, 3) Social culture: work and leisure, 4) Organisations, customs, activities, procedures, concepts, 5) Gestures and habits (Newmark, 1988, p. 95).

According to Kansu-Yetkiner et al., despite many scholars' consideration of the ecological elements such as geographical formations, climate, fauna and flora as subcomponents of culture, solely, the evaluation of these ecological elements' role in the intercultural transfer is neglected (2018). In an attempt to draw attention on the intercultural transfer of environmental awareness through translation, they define eight semantic categories:

- 1) Fauna such as animals and their body parts,
- 2) Flora such as plants, vegetables, fruits and everything about greenery and plant cover,
- 3) Land forms: The places that can be seen on the map such as mountains, hills, seas, rivers; the places that are not on the map such as cliffs, fjords, seaside cliffs, ridges, caves, beaches, shores; human-made or animal-made land forms such as barrages, dams, ponds and dam reservoirs,
- 4) Names of the places: The proper and common names of the places such as towns, villages and cities,
- 5) Natural habitats of animals: The places where animals live such as nests, dens, hollows, farms, holes,
- 6) Climate and weather conditions: Types of precipitation such as rime, dew, frost, hail, snow, rain; movements of air such as wind and storm; types of winds such as breeze, northeaster and northwester,
- 7) Natural Formations: The concrete materials found in nature such as sand, rocks, stones, water, soil, wood,
- 8) Natural disasters such as hurricane, avalanche, earthquake, landslide, flood, sluice (Kansu-Yetkiner,2018).

Hastürkoğlu (2020), has used a similar categorization in her thesis while investigating the translation strategies used for the translation of the ecology-related culture specific

items in the Turkish translation of *To A God Unknown* . Her categories are namely; flora, fauna, names of the places, land forms, weather conditions, and natural formations.

Within this framework, as Herbert's *Dune* is rich in terms of ecological items and it is a SF work, it is considered necessary to add new titles (geological protective outerwear and gears, figures of speech inspired by ecology, the titles of people related to the ecology) to the above-mentioned classifications. In this study, with an aim to investigate the transference of ecological awareness through the translation of SF books, following categorization is used for studying the ecological items:

CATEGORIES:	CONTENT:
1-Flora	Plants, vegetables and fruits etc.
2-Fauna	Animals, the words related to animals.
3-Natural Formations	a)Water related items, b)Sand/rock related items, c) Celestial objects.
4-Land Forms	Hills, mountains, deserts, basins, crevasses etc.
5-Names of the Places	The proper and common names of the places such as planets, cities, basins etc.
6-Climate and Weather Conditions	Types of precipitation and winds
7-Ecological Protective Outerwear And Gears	Stillsuits, desert boots, seals, sandcrawlers etc.
8- Titles of People Related to the Ecology	Sandwalkers, spice drivers, weather scanners, dune men etc.
9- Figures of Speech Inspired by the Ecology	Ecological items that are used to form onomatopoeias, metaphors, similes etc.

3.2. THE STRATEGIES USED FOR THE TRANSLATION OF ECOLOGICAL ITEMS

As it is mentioned above ecological items in literary texts have been treated as a subtype of cultural elements in Translation Studies. Focusing on the transference of the cultural and social values of the ST to the TL, Venuti defines translation as follows:

“Translation is a process by which the chain of signifiers that constitutes the source-language text is replaced by a chain of signifiers in the target language which the translator provides on the strength of an interpretation.” (1995, p. 17)

According to Venuti, the foreign text has its own cultural and linguistic materials, however, the translation replaces them forcibly while creating an intelligible text for the reader. This is due to domesticating most of the foreign text on the purpose of making it familiar to the TT readers. On the other hand, Venuti implies that foreignizing translation strategy puts an emphasis on the difference of the foreign text but it, solely, spoils “the cultural codes” in the TL (1995, p. 18-20).

Aixelà also examined the strategies for the translation of culture specific items and offered two main groups; conservation and substitution. According to Aixelà conservation strategies include repetition, orthographic adaptation, linguistic translation, extratextual gloss and intratextual gloss and the substitution strategies include synonymy, limited universalization, absolute universalization, naturalization, deletion, autonomous creation (1996, p. 61-64). It can be inferred that Aixelà’s “conservation” is similar to Venuti’s “foreignization” while “substitution” is also similar to the “domestication.”

Classifying the ecology under the categorization of cultural words, Newmark suggests twelve translation procedures for them. These translation procedures are: transference, cultural equivalent, neutralisation, literal translation, label, naturalisation, componential analysis, deletion, couplet, accepted standard translation, paraphrase, gloss, notes etc. and classifier (1988, p. 103). According to Newmark target culture will be more/less familiar with an ecological term depending on its geographical and political closeness to the

source country. He states that all of these ecological words can be transferred in the TT, however, in case of a need, a culture-free term can be added to it (1988, p. 96).

In their study, Kansu-Yetkiner et al. (2018) investigate the translation strategies adopted while the intercultural transfer of the words having nature-environment information. Adopting the foreignization and domestication strategies of Venuti (1995) along with the translation strategies proposed by Newmark (1988) and Aixelà (1996, p. 60-65) for the translation of culture specific items, they classified the translation strategies into 3 main groups: literal translation, domestication and foreignization. Their first category, literal translation, includes the words translated by their denotational meanings in the TL, the second category, domestication, consists of the strategies of synonym, limited universalism, absolute universalism, paraphrase, adaptation, omission, explicitation, componential analysis and the third category, foreignization, consists of extratextual gloss, intratextual gloss, orthographic adaptation/transcription, repetition, calque, couplets-triplets and loan words (2018). Examining the strategies used for the translation of “ecology-related cultural terms” Hastürkoğlu (2020), also, adopts the same strategies (literal translation, domestication, foreignization) in her study.

Inspired by the above-mentioned studies of Turkish scholars (Kansu-Yetkiner et al., 2018; Hastürkoğlu, 2020) the same translation strategies (literal translation, domestication and foreignization) will be adopted for the translation analysis of ecological terms in this study. However, the strategies of intratextual/extratextual gloss and loan words in the subcategory of foreignization are excluded as there are no explicit examples of them in the study. Additionally, it is deemed necessary to add the strategy of hyponymy (Chesterman, 1992, p. 102) as the translator resorts to using ecological terms (hyponyms) which have more specific meaning than the original terms in some of the examples. Moreover, the strategy of couplets/triplets is divided into two categories as foreignizing couplets and domesticating couplets to be more specific since there are various examples of them in both of the categories.

In this respect following strategies will be adopted for the examination of Turkish translation of ecological items in *Dune*:

3.2.1. Literal Translation

The translator uses the closest denotational meaning of the original term. It is generally the first meaning written in the dictionaries (For example: storm→ fırtına).

3.2.2. Domestication Strategies

The translator uses these strategies to bring the term closer to the target culture.

3.2.2.1. Synonymy

The translator uses the synonym of the word which has the same or the closest denotation to the original term in order to avoid repeating the same word (For example: wasteland→ çöl).

3.2.2.2. Hyponymy

Adopted from the Chesterman's semantic strategy of hyponymy (1997, p. 102), it refers to replacing the superordinate term with its specific kind (hyponym) in the TL (For example: flowers→ papatyalar).

3.2.2.3. Limited Universalization

The translator replaces the original term, which is less known in the target culture, with a similar and better known word (For example: cranberry→ kızılıcık).

3.2.2.4. Absolute universalization

The translator uses a more comprehensive and neutral term, instead of the specific ecological item which is not known in the target culture (For example: daisy→çiçek).

3.2.2.5. Adaptation

The translator uses a word which is culturally equivalent to the original term in the TL (For example: maker→yaradan).

3.2.2.6. Explication

The translator uses a non-existent ecological item in the TT (For example: it→rain).

3.2.2.7. Paraphrase

The translator reflects the same or the similar content by explaining the term in a different form (For example: geriatric spice→yaşlanmayı geciktirici baharat).

3.2.2.8. Componential analysis

The translator replaces the original word with the one which is not the exact equivalent of it, but, its meaning is close to the original word. This new word's denotation can be found in the semantic field of the original one (For example: smoke tree→sarı ağaç).

3.2.2.9. Omission

The translator does not translate the ecological item and deletes it in the TT (For example: bug-hustling sound→ böcek sesleri).

3.2.2.10. Domesticating couplets/triplets

The translator adopts more than one domestication strategy or its combination with literal translation to translate the original term (For example: spiked paintbush→ dikenli fırça çalıkları).

3.2.3. Foreignization Strategies

The translator uses foreignization strategies to make the text closer to the source culture.

3.2.3.1. Calque

The translator translates every component of the original word literally. In other words, s/he borrows the term through word-for-word translation (For example: burro bush→eşekçalısı).

3.2.3.2. Orthographic Adaptation

The translator does not translate the word into the TL and transcribes it with the alphabet of the TL instead (For example: mish mish→mişmiş).

3.2.3.3. Repetition

The translator transfers the original term to the TL without making any change (For example: Chusuk→Chusuk).

3.2.3.4. Foreignizing couplets/ triplets

The translator adopts more than one foreignization strategy or its combination with literal translation to translate the original term (For example: Harg Pass→Harg Geçidi)

CHAPTER 4

ANALYSIS

4.1. ABOUT THE AUTHOR AND THE TURKISH TRANSLATOR

4.1.1. The Author: Frank Herbert

The American author Frank Herbert, Jr. was born on October 8, 1920 in Takoma, Washington. He grew up in Takoma and Burley where his extended family lived. His father was Frank Herbert, Sr. and his mother was Eileen Marie Herbert who was Irish. Herbert was such a talented child that he learnt reading and started writing stories at an early age. He was also interested in taking photographs, camping, hiking, hunting, fishing, sailing and swimming. Herbert read the works of Shakespeare, Ezra Pound, Guy De Maupassant, Marcel Proust, Herman Melville and many others in his childhood and he was influenced by Shakespeare most. He started to type his stories at the age of 14. His childhood memories always took part in Herbert's stories (Herbert, 2004).

He graduated from Stewart Intermediate School in 1935. He studied at Lincoln High School and also worked for the successful school newspaper called *The Lincoln News*. In the following years he improved himself more and more in journalism. However, due to the workload and family problems he dropped his classes and moved to Salem. Herbert graduated from Salem High School in 1939. After that, he moved to California and became a copy editor at *Glendale Star*. He moved back to Salem in 1940 and could finally work at *The Oregon Statesman* after all his efforts. While writing feature stories he learnt about the importance of defining the characters which helped him in his future novels. He was also interested in flying and he took aerial photographs while flying (Herbert, 2004).

Herbert married to Flora Parkinson in 1941 in Tacoma and had his first child in 1942. He also joined the U.S. Navy and served as "a Photographer Second Class V-6 in the U.S. Naval Reserve" in Virginia (Herbert, 2004). He had an accident and left the army. At the same time, Herbert and Flora got divorced in 1943. Then, Herbert worked at the *Oregon Journal* for two years. While working there, he also made money by selling his short stories. In August 1945, he started to work at *Seattle Post-Intelligencer*. Herbert started to study at the University of Washington while working for the newspaper. He met his second wife Beverly Forbes there. They both liked reading and they wrote several stories. Beverly wrote romances and Frank wrote pulp adventures. Herbert dropped out of college in 1946 and married to Beverly. They had two sons: Brian and Bruce. They moved to California in 1949 and Herbert started to work at *Santa Rosa Press Democrat*. Herbert was influenced by the views of his friends, Dr. Ralph Slattery and Irene Slattery. Ralph and Irene were interested in Carl Gustav Jung, Freud, Alfred Adler and Zen Buddhism. Their effect on the author can be seen in different parts of his novels, especially in *Dune* series (Herbert, 2004).

Herbert worked as a reporter and news announcer in 1950s. His short story *Looking for Something*, which was published in the *Startling Stories* in 1952, was his first SF sale. *Survival and the Atom* published by *Press Democrat* in 1952, was comprised of Herbert's articles about the nuclear energy. He worked as a speech writer for Guy Cordon who was a US Senator from Oregon and joined his staff. This position enabled him to access to the Legislative Reference Service and use any books or documents in the library. He did much research and studied a lot. He also wrote SF stories. *Pack Rat Planet* (1954) and *Rat Race* (1955) were published in *Astounding Science*. *Occupation Force* was published in *Fantastic* in 1955. His *Under Pressure* was serialized in *Astounding Science Fiction* (from November 1955 to January 1956). The novel was also published as a book with the new title "*The Dragon in the Sea*". He worked as a speech writer for the Phil Hitchcock (who was a state senator) and a public information officer for Phil Roth (the Republican candidate for the US Congress) in 1950s. At the same time he wrote his *A Game of Authors*. His SF short stories: *Old Rambling House*, *You Take the High Road* and *A Matter of Traces* were published in 1958 and, *Missing Link* and *Operation Haystack* were also published in the following year. He had financially hard times. In 1960, he worked as a night picture editor for *San Francisco Examiner* (Herbert, 2004).

Finally, in 1963 he completed his trilogy: *Dune World*, *Muad'Dib* and *The Prophet*. Before *Dune* was published as a book, it was serialized in *Analog*. *Analog* won Hugo Award for the best SF magazine in 1964. First, in 1965, *Dune* (comprised of *Dune World*, *Muad'Dib* and *The Prophet*) was published by the Chilton Publishing House in hardcover. A year later, Ace books published it in paperback. *Dune* won the Nebula Award for Best Novel (shared with Roger Zelazny's...*And Call Me Conrad*) in 1965 and the Hugo Award for the best SF novel of the year in 1966. It was the first novel to win the both of the awards (Herbert, 2004).

Do I Wake or Dream?, his story about artificial intelligence, was serialized in *Galaxy* in 1965. Its expanded version *Destination: Void*, was published as a book in 1966. His second SF book about the ecology, *The Green Brain (Greenslaves)* was published in *Amazing* as a short story and Ace Books published it in 1966. His novel *Heisenberg's Eyes* was also published in 1966. His novel *The Santaroga Barrier* was serialized in *Amazing* from October 1967 to February 1968. Finally, it was published in paperback in 1968. *The Heaven Makers* was published in 1968 too, a year after its serialization in *Amazing*. The following year, *Dune Messiah* was also published (Herbert, 2004).

Frank Herbert became "one of the principal speakers at Earth Day ceremonies" in 1970. He also contributed to the environmental book called "*New World or No World*". *Dune* became best seller SF novel in 1970s. *Whipping Star* was published in 1970 and *Soul Catcher* was published in 1972. *Hellstrom's Hive (Project 40)* was serialized in *Galaxy* from November 1972 to March 1973 and it was finally published as a book in 1973. After its French edition, it won the Prix Apollo award in 1978. While being a successful author, Herbert also became a visiting professor in the University of Washington in 1971 and worked there for a year. *The God Makers* (The novel version of *The Priests of Psi*) was published in 1972. Herbert and his friend Roy Prosterman travelled to Pakistan, India, Bengal, Thailand, Indonesia and Vietnam in 1972. He wrote and filmed a documentary film called *The Tillers* based on this travel and it appeared on TV. Meantime, *The Worlds of Frank Herbert* (1971) and *The Book of Frank Herbert* (1973) which were the collection of his stories were also published (Herbert, 2004).

Children of Dune was published in 1976 (after the serialization in *Analog*) and became a bestseller. Also, *The Dosadi Experiment* was serialized in *Galaxy* and published in 1977. Similar to the previous books in the series, *God Emperor of Dune* became best seller as soon as it was released in 1981. *Heretics of Dune* was published in 1984 and the last book of the series, *Chapterhouse: Dune*, followed it in 1985. With the success of *Dune* series in 1980s, Herbert appeared on TV shows and gave interviews on radio programmes. Moreover, many articles were written about him and *Dune* series. Meanwhile, he also completed his collaborative novels (*Pandora Sequence*) with Bill Ramsom. *The Jesus Incident* was released in 1979, after its serialization in *Analog*. *The Lazarus Effect* was also published in 1983. The final book of this sequence was *The Ascension Factor* (1988) (Herbert, 2004).

Some of his other SF books published in the 1980s are *Direct Descent* (1980), *The White Plague* (1982), *Eye* (1985), *Man of Two Worlds* (1986). And some of his short stories are: *The Priests of Psi* (1960), *Egg And Ashes* (1960), *A-W-F Unlimited* (1961), *Mating Call* (1961), *Try To Remember!* (1961), *Mindfield* (1962), *The Mary Celeste Move* (*Analog*, 1964), *The Tactful Saboteur* (*Galaxy*, 1964), *Committee of the Whole* (*Galaxy*, 1965), *The GM Effect* (*Analog*, 1965), *Escape Felicity* (*Analog*, 1966), *By the Book* (*Analog*, 1966), *The Primitives* (*Galaxy*, 1966), *The Featherbedders* (*Analog*, 1967), *The Mind Bomb* (*If*, 1969), *Seed Stock* (*Analog*, 1970), *Murder Will In* (*Five Fates Anthology*, 1971), and *Death of a City*, (*Future City Anthology*, 1973) (Herbert, 2004).

Herbert's wife, Beverly, died in 1984. Frank Herbert got married to Theresa Shackelford who was Putnam book representative. Herbert suffered from cancer. He passed away on February 11, 1986 (Herbert, 2004).

4.1.2. The Turkish Translator: Dost Körpe

Dost Körpe was born on March 9, 1972 in İstanbul. He graduated from Nişantaşı Anatolian High School and studied at the Department of Business Administration at

Boğaziçi University. He also studied English Language and Literature at İstanbul University. He is a writer, poet and translator. He won Yunus Nadi Unpublished Short Story Award in 1991. His first book, *Zaman Sona Ermeli* was published in 1993. His other books are: *Günah Yiyen* (1997), *Kıyı* (1998) and *Nötralizör* (2010). Furthermore, his stories were published in various Turkish magazines (Yalçın, 2010, p. 652).

Körpe translated the works of many acclaimed authors into Turkish. Some of his translations are: *Gotik Öyküler* (Lovecraft, 1994), *Edgar Alan Poe Bütün Hikayeleri* (2000), *Cthulhu'nun Çağrısı* (Lovecraft, 2000), *Bridget Jones'in Günlüğü* (Fielding, 2000), *Bridget Jones'in Günlüğü II* (Fielding, 2000), *Barbarları Beklerken* (Coetzee, 2001), *Kutsanma Ayini* (Barker, 2001), *Antilop ve Flurya* (Atwood, 2005), *Cehennem Kulübü* (Straub, 2005), *Kan Kitapları 1* (2004), *Bir Baş Yapıtın Öyküsü* (James, 2008), *Aşk ve Gurur ve Zombiler* (Austen, 2009), *Koko* (Straub, 2009), *Film Kulübü* (Gilmour, 2010), *Su Geçirmez İncil* (Kaufman, 2011) *Barbarları Beklerken* (Coetzee, 2010), *Gibi* (Smith, 2010), *Aşk Yaşamdan Önce Gelir* (Dickinson, 2011), *Bir Evliliğin Öyküsü* (Greer, 2011), *Sıcak Bedenler* (Marion, 2011), *İşgal Altındaki Şehir* (Peace, 2011), *Sapphique - Incarceron* (Fisher, 2012), *Kızıl Ölümün Maskesi* (Poe, 2013), *Tatlı Perşembe* (Steinbeck, 2013), *Dune Mesihi* (Herbert, 2016), *Dune Çocukları* (Herbert, 2016), *Otomatik Portakal* (Burgess, 2016), *Hayalet* (Nesbo, 2017), *Kurtarıcı* (Nesbo, 2017), *Dune Tanrı İmparatorluğu* (Herbert, 2017), *Steve Jobs* (Isaacson, 2018), *Dune Sapkınları* (Herbert, 2020), *Dune Rahibeler Meclisi* (Herbert, 2020), *Bir Başyapıtın Öyküsü* (James, 2020), *Görünmez Adam* (Wells, 2021), *Güneş de Doğar* (Hemingway, 2021), *Ölülerle Uzlaşmak* (Atwood, 2021), *Kendine Ait Bir Oda* (Woolf, 2022), *Vahşetin Çağrısı* (London, 2023), *Şeytan Çıkarın* (Blatty, 2023), *Yüksek Şatodaki Adam* (Dick, 2023).

4.2. DUNE

4.2.1. Dune Series and Its Ecological Importance

Frank Herbert's *Dune* series is an epic work of SF literature which has sold millions of copies since 1965. The elements of religion, politics, ecology and evolution are found in the books. The series consists of six books which are *Dune*, *Dune Messiah*, *Children of Dune*, *God Emperor of Dune*, *Heretics of Dune*, and *Chapterhouse: Dune*. In this study, *Dune*, the first book of the series, which has won both Hugo and Nebula Awards, will be examined.

Dune takes place 20.000 years later from now, on a desert planet called Arrakis. It is about the adventures of Paul Atreides who has messianic powers and is called Kwisatz Haderach according to a legend. The novel focuses on the power relations and ecological features on Arrakis while telling about the challenges and the success of Paul Atreides. There have been many discussions about the novel since it reflects some similarities to the real problems of the world, world politics and the practices of religions.

Ecology is one of the most explicit subjects in the book. According to his own article, *Dune Genesis* (1980), Herbert had been inspired by the real dunes on Oregon before he wrote the series. Herbert went to Florence, Oregon in 1957 to make research and write an article about a US Department of Agriculture project. After a flight tour over the dunes, Herbert was shocked to see the situation. Due to the coastal winds, the dunes on Oregon were too destructive for the people, buildings, roads and homes. The program of US Department of Agriculture aimed to plant European Beach Grass on these areas in order to stabilize the dunes and prevent the damage around. Herbert's article about this program was never published (Notarianni, 2021). However, its influence on *Dune* series can be seen in many aspects. The sandstorms of Arrakis, poverty grasses, dunes and sand waves are only few examples of the similarities between Arrakis and Oregon.

It is worth highlighting the appendices part of the book which comprises of 4 sections: The Ecology of Dune, The Religion of Dune, Report on Bene Gesserit Motives and Purposes and The Almanak en-Ashraf (Selected Excerpts of the Noble Houses). Appendix I, "The Ecology of Dune" has the story of Pardot Kynes who was the first Imperial Planetologist of Arrakis. His mission of terraforming Arrakis and using the Fremens as tools to conduct this mission can be seen there. In this part of the book there

is a brief information about the climate, animals and plants of Arrakis. The gradual terraforming process of Arrakis is also described.

Furthermore, the novel has two more explanatory parts: Terminology of the Imperium and the Cartographic Notes for the Map which are also useful for this study. Terminology of the Imperium provides definitions for the terms which cannot be found in the dictionaries or have different meanings. Most of the fictive ecological items' definitions can also be found in this terminology. Cartographic Notes for the Map has definitions especially for the ecological items under the category of Names of the Places. During the translation analysis of the ecological items these two parts will be utilised.

It's also worth mentioning at this juncture that, there is an illustration of the desert planet, Dune on the front covers of both English and Turkish versions. Although the positioning of the items and sizes are different, it can be said that same ecological elements (desert, first moon, second moon, sandworm, dunes) take place on both of the covers. This can also be considered as a peritextual factor confirming the fact that ecology plays a crucial role in the novel and its also recognized by Ithaki Publishing house.

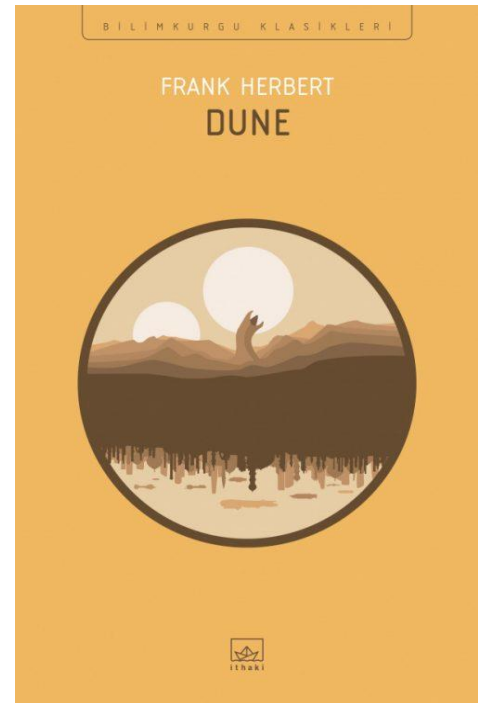
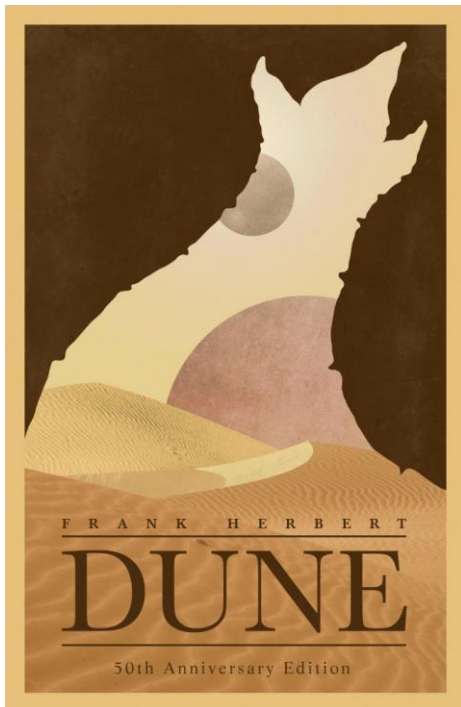


Figure 1: Front cover of *Dune* by Hodderbooks Figure 2: Front cover of *Dune* by İthaki

4.2.2. The Summary of Dune

Paul is the son of Duke Leto who is the head of the House of Atreides. Paul's mother Jessica who has some special powers, is a Bene Gesserit lady and concubine of Duke. Jessica trains Paul and tries to teach him to use "the voice" and some other special powers like hers. Paul has dreams about the future and Jessica suspects if he is the Kwisatz Haderah (Kwisatz Haderach is a male Bene Gesserit whose powers are thought to be stronger than the females'). One day, the Reverend Mother who was the teacher of Jessica at Bene Gesserit school and, now, is the Truthsayer of the Emperor, comes and tests Paul with "gom jabbar" (a special kind of poisonous needle) to understand if he is the Kwisatz Haderach. Paul succeeds in the test which makes Jessica and the Reverend Mother think that he can be the one.

Atreides family has lived on Caladan for years. However, the Padishah Emperor, Shaddam IV, gives the control of Arrakis from the House of Harkonnens to the House of Atreides, while giving the control of the Caladan to the Harkonnens. Harkonnens are the mortal enemy of Atreides family. As the desert planet Arrakis, also called Dune, is the land of melange, an invaluable drug, Harkonnens do not want to leave it to the Atreides. Nevertheless, since Duke Leto is a popular man, the Emperor is anxious about his growing power among the Great Houses of Lansraad. Therefore, the head of the House of Harkonnens, Baron Vladimir Harkonnen, and the Emperor have evil plan for the Duke Leto and Atreides family.

Dr. Yueh, who is a graduate of Suk school with Imperial conditioning, works for the Atreides family for years. However, he helps Baron to kill the Duke Leto as Yueh thinks this is the only way to save his wife who has been kidnapped by Baron. Yueh places a peg tooth in Duke's mouth in order to kill Baron just before the death of Leto. However this plan does not work properly and Baron's mentat, Piter, dies. Actually, having killed the wife of the doctor, Baron deceives Yueh and kills him too. Meantime, thanks to the Thopter arranged by Yueh, Paul and Jessica are able to escape from the soldiers of the Harkonnens and the Emperor which are called Sardaukars. Paul and Jessica, also, find

Fremkit (desert equipments including stillsuit, stilltent etc.) which have been hidden in the Thopter by Yueh. Yueh's plan enables them to reach Idaho and Kynes.

Paul aims to develop his father's plans on Arrakis in order to make the planet green and a better place for the humans to live. Kynes learns this fact and helps them to find the Fremens, the local residents of Arrakis. Kynes is left alone in the desert without any equipments by the Harkonnens and this causes his death. However, Kynes's plan helps Jessica and Paul to reach the Tabr Sietch and contact to Stilgar, their leader. Jamis, a strong man in the tribe, bests Paul and loses his life. The Fremens realise their powers and start to respect Jessica and Paul while they also think that Paul can be the Lisan al-Gaib. According to their legend, Lisan al-Gaib is a messianic person, a prophet. Paul takes the name of "Muad'Dib" and he is also called "Usul" in the tribe. Jessica transforms the "water of life" and becomes the Reverend Mother. However, as Jessica hides her pregnancy during the ceremony of mutual awareness (with previous Reverend Mothers), Alia, her daughter, has been affected from this. She becomes a very powerful child who has adult knowledge and strange behaviours.

Paul has relationship with Chani, the daughter of Kynes, and they have a son called Leto II. After few years, Paul and Jessica mingle with the Fremens. They learn water discipline and get used to consuming spice. Paul even learns how to drive the makers, sandworms, which is a special skill among the Fremens. He also shares his fighting skills with the Fremens in the tribe. Their sietch becomes more powerful and wealthy day by day thanks to Paul Muad'Dib.

During the Desert War, the women of the tribe including Jessica and Chani live in the south part of the desert while Paul, Stilgar and other men live in the Cave of Birds. One day Paul decides to test if he is the Kwisadz Haderah and drinks from the Water of Life. He is able to transform it and understands that he is the person in the legends. He starts seeing the unknown and the future. During this time, the Harkonnens, Sardukars and the Emperor build a temporary lodging place near to the Shield Wall. The Sardukars also attack to the sietch in the south and kill Leto II and they also hold Alia captive. Alia kills the Baron Vladimir Harkonnen, who is her real grandfather, by using gom cabbar and she is able to escape from them. Paul uses atomics to blast the Shield Wall and with the help

of the great storm, they attack to the Emperor's hutment. Paul wins the war and wants to marry to Irulan, the daughter of the Emperor, to take the throne and he demands the Emperor's CHOAM Company holdings as a dowry.

In the following part of the study the translation of ecological items will be analyzed.

4.2.3. Translation Analysis Of Ecological Items In *Dune*

In this part of the study, the translation of ecological items in the categories of flora, fauna, natural formations, land forms, climate and weather conditions, names of the places, titles of people related to ecology, ecological protective outerwear and gears, figures of speech inspired by the ecology in *Dune* will be analyzed according to the strategies explained in Chapter 3.

During the analysis, "Terminology of the Imperium" and "Cartographic Notes for the Map" will also be used as they provide definitions of some of the ecological terms in the book.

4.2.3.1. Flora

Example 1:

ST: "But he consumes too much spice , eats it like candy." (p. 18)
TT: "Ama çok fazla baharat tüketiyor; şeker gibi yiyor." (p. 33)

Example 2:

ST: "... their mortal enemies, the Harkonnens, had been on Arrakis eighty years, holding the planet in quasi-fief under a CHOAM Company contract to mine the **geriatric spice, melange.**" (p. 4)

TT: "...Can düşmanları Harkonnenlar seksen yıldır Arrakis'teydi; **yaşlanmayı geciktirici melanj baharatını** kazıp çıkarmak için CHOAM Şirketi'yle yaptıkları anlaşma uyarınca gezegeni derebeyi gibi yönetmişlerdi." (p. 16)

The ecological term "spice" highlighted in example one is known as a vegetable product which is used to season food in real life. However, in the book, it is a neologism to describe an invaluable addictive substance which has geriatric quality. It is also called "melange" in the ST. It tastes and smells like a cinnamon. "Spice" or "melange" is a fictive ecological item, however, it is considered as a crop and harvested in *Dune*. The term "spice" is used more frequently than "melange" to refer to the same substance and the translator opts for literal translation strategy for the "spice" and translates it as "baharat" in the TL. On the other hand, "mélange" deriving from a French verb "mesler" means "a mixture often of incongruous elements" in MWD. The translator resorts to the orthographic adaptation strategy for this item and transcribes it as "melanj" in the TT. "Melanj" is not found in TDK, however, it is frequently used in the textile industry in order to refer to yarns and fabrics which are the mixture of two or more than two colours in Türkiye. As this word is not common in the target culture, it can be understood that the translator aims to express its fictive connotation in the book by foreignization method. Moreover, "geriatric spice" is also translated by the strategy of paraphrasing since the translator renders it as "spice that delays ageing", "yaşlanma geciktirici baharat" in the TL.

Example 3:

ST: "...even our poor **pundi rice** from Caladan." (p. 46)

TT: "Hatta bizim Caladan'ın naçızane **pundi pirincini** bile satar." (p. 68)

"Pundi" is a neologism which describes a fictive kind of rice in *Dune*. It is defined as "a mutated rice" in the "Terminology of the Imperium" and it is native to the planet Caladan

(p.570). The translator uses foreignization strategy of repetition for “pundi” and keeps it the same in the TT as “pundi”. However, he uses literal translation for “rice” and renders it as “pirinç”. Thus, the translation strategy used for “pundi rice” can be regarded as foreignizing couplets.

Example 4:

ST: “Names flitted through Paul’s mind, each with its picture imprinted by the book’s mnemonic pulse: *saguaro, burro bush, date palm, sand verbena, evening primrose, barrel cactus, incense bush, smoke tree, creosote bush...*” (p. 72)

TT: “Paul kitaptan aldığı, hafızaya kaydedici sinyaller sayesinde kitaptaki isimleri resimleriyle birlikte hatırlayabiliyordu: *Saguaro, eşekçalısı, hurma ağacı, kum mineçiçeği, eşekotu, fıçı kaktüsü, tütsü çalısı, sarı ağaç, katranruhu çalısı...*” (p. 98)

“Saguaro” is a giant form of cactus and its scientific name is *Carnegiea gigantea*. It is found in the southwestern U.S. and Mexico (MWD, USDA Plants Database). It is not found in Türkiye, so, the target culture is not familiar to it. The translator prefers repetition strategy and keeps this ecological item the same in the TT as “saguaro”.

“Burro bush”, also known as “burro weed” or “bursage”, is a kind of shrub which is native to California and found in the southwestern U.S. (MWD). Its scientific name is *ambrosia dumosa* and it is not found in Türkiye, however, as the word “burro” means “eşek (donkey)” and “bush” means “çalı” in Turkish, the translator opts for calque strategy and translates each component of this ecological item. This may lead confusion as “eşekçalısı” is not the equivalent of “burro bush” and there are different types of plants starting with “eşek” in Turkish, for example “eşek otu” (*oenothera biennis*).

For the translation of “date palm”, the translator prefers the strategy of domesticating couplets. He translates the first component “date” which means “hurma” in Turkish literally, while using absolute universalisation strategy for the second component “palm” and he replaces it with “ağacı” meaning “tree” in the TL. In Turkish, both “hurma ağacı” and “hurma palmyesi” are used, however, as the first one is more common in the target culture, the translator might have chosen domestication strategy for it.

According to USDA Plants Database, “sand verbena”, *abronia juss.*, is from the family of *Nyctaginaceae* Juss. Although it is called “verbena”, it is not from the family of

Verbenaceae. It is native to North American dunes and coastal parts while it is not found in Türkiye. In the TT, the translator resorts to the strategy of calque for the translation of “sand verbena” as he translates each item word-for-word (sand: kum, verbena: mineçiçeği). As it can be understood “kum mineçiçeği” is not the equivalent of “sand verbena” and it may be confused with “mineçiçeği” (verbena officinalis) in the TT.

Incense bush, *aloesia virgata* in latin, is a shrub native to Argentina and it is known for its fragrant flowers. This plant does not exist in Türkiye. The translator prefers foreignization strategy of calque by translating each component of the term literally and renders it as “tütsü çalısı” in the TT.

According to MWD, “smoke bush”, also known as “smoke tree”, is a kind of shrub whose panicles look like a cloud of smoke. It is generally known in two types: *cotinus coggygria* and *cotinus obovatus*. Smoke tree can be in different colours such as velvet, purple and yellow. In Turkish, this plant is known as “duman ağacı” which also means “smoke tree” literally. However, the translator resorts to the strategy of domesticating couplets for this plant. First, he uses componential analysis strategy and replaces the first word with “sarı” (yellow), then, he translates “tree” literally as “ağaç” in Turkish. As it can be understood “sarı ağaç” cannot be the equivalent of “smoke tree” as yellow (sarı) is only one of the colours of this kind.

In MWD, creosote bush, *larrea tridentata*, is found in the Southwestern U.S. and Mexico. It is a desert shrub and not found in Türkiye, thus, it is not recognized in the target culture. However, the term “creosote” solely, is known as “kahran ruhu” or “kreozot” in Turkish in the field of chemistry. The translator resorts to the calque strategy and translates each item word-for-word as “katranruhu çalısı” in the TT.

Translator opts for literal translation for the “evening primrose” (eşek otu) and “barrel cactus” (fiçı kaktüs) as they are also known in the target culture.

Example 5:

ST: “We will start with these mutated poverty grasses. ” (p. 293)
TT: “İşe mutasyon geçirmiş yoksulluklarıyla başlayacağız.” (p. 362)

According to MWD, poverty grass is the general name for the several kinds of plants such as *aristida dichotoma* and *danthonia spicata*. It is a delicate plant which is found in various

parts of the U.S., mostly in sandy soil, except for the northwest of the state. In the target culture, there are similar types of slender grass which are also used to feed the livestock, however, poverty grass is not one of them. Translator opts for foreignization strategy of calque and translates each component of the term word-for-word (poverty: yoksulluk, grass: ot).

Example 6:

ST: “She recognized a mimosa , a flowering quince , a sondagi , green-blossomed planiscenta , green and white striped akarso... ” (p. 76-77)

TT: “Bir mimoza gördü; çiçek açmış bir ayva ağacı , bir sondagi , yeşil yapraklı planiscentalar , yeşil beyaz şeritli akarsolar... ” (p. 104)
--

“Mimosa” is the name of the plants belonging to “Mimosa genus” and it is from the Fabaceae (pea family) family. It is found in warm and tropical regions with yellow, pink and white flowers. It is also grown in Türkiye. As the word is known as “mimoza” in the target culture, it can be said that the translator uses literal translation strategy for it. The translator prefers literal translation strategy for the “quince” as well, since the target culture is also familiar with this fruit as “ayva”. “Sondagi”, “planiscenta” and “akarso” are neologisms which describe fictive plants in the book. According to the “Terminology of the Imperium”, “planiscenta” is found in Ecaz, “sondagi” in Tupali, and “akarso” in Sikun (p. 556-573). As these plants do not exist in real life, the translator prefers repetition strategy and keeps these neologisms same in the TT.

Example 7:

ST: “There was a tree of portyguls , round and deep in color, near at hand.” (p. 430)
--

TT: “Yakında bir portakal ağacı vardı; meyveleri yuvarlak ve parlaktı.” (p. 519)

“Portygul” is a neologism and it means “orange” in the ST according to the “Terminology of the Imperium” (p. 569). “Tree of portyguls” is literally translated as “portakal ağacı” (orange tree) in the TT. This strategy causes the loss of neologism while transferring the ecological item in the TL.

Example 8:

ST: "... that the blue-milk moonlight could almost be heard flowing across sentinel saguaro and **spiked paintbush.**" (p. 289)

TT: "Saguarolar ile **dikenli fırça çalılarını** aydınlatan süt mavisi ay ışığının sesi duyuluyordu sanki." (p. 357)

"Paintbush" is not found in the dictionaries or official websites of plants databases. However, "paintbrush", is a general name of the plants from the castilleja genus and it is found in the dry, rocky and wet areas. It can be in different colours such as red, purple, orange and yellow. Some types of this plant has spikes on it and it is native to the American coasts and deserts. In the target culture, "fırça çalısı" (callistemon linearis) is not the equivalent of "paintbrush", whereas its appearance is so similar to it. It is not the word-for-word translation of the original word either (fırça: brush, çalısı:bush). It can be concluded that the translator renders it as "fırça çalıları" (the plural form of "fırça çalısı") by using the strategy of limited universalism since he opts for an expression which is recognized in the target culture instead of the original one (paintbush). He also translates "spiked" literally as "dikenli". Thus, the translation strategy of "spiked paintbush" as "dikenli fırça çalıları" can be regarded as domesticating couplets which is the combination of literal translation and limited universalism in this example.

Example 9:

ST: "There was a basket with **mish-mish** and baklava and mugs of liban- all manner of good things to eat." (p. 430)

TT: "Yanlarındaki sepette **mişmiş**, baklava ve liban kupaları..." (p. 519)

As it can be understood mish-mish is a neologism and it is the equivalent of "apricot" in real life, according to the "Terminology of the Imperium" (p.567). The translator uses the strategy of orthographic adaptation for it and transcribes it as "mişmiş" in the TL. Thus, the neologism is successfully preserved in the TT by this foreignization strategy.

Example 10:

ST: “A line of twenty palm trees grew there, the ground beneath them swept clean, barren.” (p. 63)
TT: “Orada yirmi hurma ağacı tek sıra halinde diziliydi; etrafları süpürülmüş ve boştu.” (p. 88)

“Palm tree” means “palmiye ağacı” in Turkish and some types of palm trees give fruit called “date” (hurma). The translator renders “palm tree” as “hurma ağacı” (date tree) in the TT. As it can be understood, they are not the equivalents and “hurma ağacı” is a kind of “palm tree”. Thus, this translation strategy can be called as hyponymy.

Example 11:

ST: “The arm retracted and she looked at what it had watered: a fern tree. ” (p. 77)
TT: “Kol geri çekilince Jessica onun suladığı şeyi gördü: Bir eğreltiotu. ” (p. 105)

Ferns (class Polypodiopsida) are the flowerless herbaceous vascular plants (Yatskievych et al., 2024). They are found in the different parts of the world and they have various families. “Fern tree” is generally from Cyatheaceae and Dicksoniaceae families (MWD) and it is in arborescent form. However, “eğreltiotu” in the TT refers to bracken ferns (*Pteridium Aquilinum*) as it is the most common type called by this name in Türkiye (Özkara et al., 2003). It does not have a woody stem. This translation strategy can be regarded as limited universalisation as the translator prefers using a better known plant in the target culture instead of giving the exact equivalent of the original word.

Example 12:

ST: “Spreading away in front of her stretched desert growth— bushes, cacti, tiny clumps of leaves —all trembling in the moonlight.” (p. 288)
TT: “Karşısında türlü türlü çöl bitkileri, çalılar, kaktüsler, ufak yaprak öbekleri vardı... Hepsi de ay ışığında titreşiyordu.” (p. 356)

Example 13:

ST: "...but I have to explain some of the words—like beach and surf and **seaweed** and seagulls." (p. 27)

TT: "Kumsal, dalga, **denizyosunu** ve martı gibi sözcükleri açıklamam gerekiyor." (p. 45)

Literal translation strategy is used for the ecological items in the examples 12 and 13.

Example 14:

"She had loved **pansies**...or was it **daisies**?" (p. 40)

"**Hercaimenekşelere** bayılırdı... Yoksa **papatyaları** mı severdi? (p. 60)

In this example both "pansies" and "daisies" are literally translated in the TT. However, as it can be understood, the rhyme (pansies-daisies) in the ST is lost in the TT.

4.2.3.2. Fauna

Example 1:

ST: "I'd like to study more about the **sandworms**." (p. 42)

TT: "**Kumsolucanları** hakkında daha çok bilgi edinmek isterim." (p. 63)

Example 2:

ST: "It's yours, a tooth of **shai-hulud**, for as long as you live." (p. 59)

TT: "Bu bir **Şeyh Hulud** dişidir; artık ölünceye kadar sizin." (p. 84)

Example 3:

ST: "Jessica said: "Did you think that I, knowing the mysteries of the Great Mother, would not know the **Maker**?"

TT: "Yüce Ana'nın sırlarını bilen ben, **Yaradan**'ı bilmez miyim sandın?" dedi Jessica. (p. 83)

“Sandworm”, “shai-hulud” and “maker” are neologisms to describe a fictive creature living in the deserts of *Dune*. It can be longer than 400 metres and live for many years. It also has a significant role in Fremens’ religious belief. In the TT, the translator uses literal translation for “sandworms” as the original word is meaningful in the ST as well. Thus, “sandworms” in example 1, is rendered as “kumsolucanları” in the TT. In example 2, the same animal is called as “shai-hulud” in Fremen language and it is meaningless in English. The translator resorts to the foreignization strategy of orthographic adaptation and transcribes the term as “Şeyh Hulud” in the TT. As, the first word of the term, “şeyh”, is used as a title in Islamic belief, when it is used with proper names, the first letter of the word (şeyh) is generally written with capital letters in the TL. Therefore, the translator prefers using capitals for the first letters of the each component and renders “shai-hulud” as “Şeyh Hulud” in the TT. In example 3, sandworm is called as “maker” in the ST. As it can be understood it derives from the verb “to make”. The translator uses “yaradan” which also has the similar connotation in the TL. However, “yaradan” (creator) is not the equivalent of “maker” (maker: yapan). This word is used for the God (Allah) in the target culture and derives from the verb “to create”. Therefore, it can be concluded that the translator opts for domestication strategy of adaptation in this example.

Example 4:

ST: “Paul pulled his hood down over his eyes, listened to the bug-hustling sounds of the night.” (p. 265)
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TT: “Paul kukuletasını başına geçirip, gecenin içinden gelen böcek seslerini dinledi.” (p. 328)
--

“Bug” means “böcek” and “sounds” means “sesleri” in Turkish. As it can be seen, “bug sounds” is literally translated as “böcek sesleri” in this example. However, there is no equivalent of “hustling” in the TT. “Hustling” is used to emphasize the crowd of bugs in the ST whereas this connotation is lost as the translator omits the word in the TT. Thus, the translator resorts to the strategy of domesticating couplets in this example (literal translation and omission).

Example 5:

ST: “You heard the voice of the cielago , Jamis, Stilgar said.” (p. 299)
TT: “ Silagonun sesini duydun, Jamis, dedi Stilgar.” (p. 371)

In this example “cielago” is a neologism which describes “any modified Chiroptera of Arrakis” according to the “Terminology of the Imperium” (p. 558). It is understood from the book that it is a fictive kind of bat which can carry distrans messages. The translator resorts to the foreignization strategy of orthographic adaptation and transcribes it as “silago” corresponding to its Turkish pronunciation in the TT.

Example 6:

ST: “She looked up to see a line of hawks along the rim of the fissure. They perched there staring down at the open water.” (p. 269)
TT: “Yukarı bakınca, yarığın kenarına yan yana tünemiş şahinler gördü. Gözlerini aşağıya suya dikmiş bakıyorlardı.” (p. 333)

The expression of “a line of hawks” refers to the hawks which stand next to each other in English. Due to the fact that there is not an exact equivalent of the phrase “a line of” in Turkish (corresponding to the standing position of the birds), the translator prefers paraphrasing strategy to describe it. He combines the expressions which are in different sentences, in the first sentence and renders it as “yan yana tünemiş şahinler” (hawks which perched side by side) in the TT.

Example 7:

ST: “Where the dunes began, perhaps fifty meters away at the foot of a rock beach, a silver-gray curve broached from the desert...” (p. 285)
TT: “Elli metre kadar ötede, bir kaya sahilinin dibinde, kumların arasından yükselen gümüşi gri, halkalı bir yaratık vardı...” (p. 353)

“A silver gray curve” is used to describe the sandworm in the ST. The colour of the worm is literally translated as “gümüşi gri”. The translator also replaces “curve” with “halkalı bir yaratık” (a creature with rings) in the TT. This strategy can be regarded as

componential analysis as they are not the equivalents but they can create similar impact on the readers. Thus, the translation strategy used for the whole expression can be called domesticating couplets.

Example 8:

ST: ““We call that one muad’dib ,’ Stilgar said.” (p. 329)
TT: ““ Muad’Dib deriz,’ dedi Stilgar.” (p. 404)

“Muad’dib” is a neologism to describe a fictive animal in the book and it is defined as “the adapted kangaroo mouse of Arrakis” in the "Terminology of the Imperium" (p. 567). It is also related to the Fremen mythology and Paul Atreides changes his name as “Paul Muad’dib” after starting to live with the Fremens. The translator uses foreignization strategy of repetition for the translation of this animal and renders it as “Muad’Dib” in the TT.

Example 9:

ST: “We are not wailing for our dead like a pack of garvarg .” (p. 336)
TT: “Ölülerimizin ardından garvarg sürüsü gibi ağıt yakmayız.” (p. 412)

There is no definition for “garvarg” in the "Terminology of the Imperium" or any other dictionaries. Although, it is understood from the context that “a pack of garvarg” refers to a group of animals, there is still an obscurity about the species of this animal. As “varg” was “wolf” in Old Norse (InayahI and Hidayah, 2023) and “a group of wolves” are also called “a pack of wolves”, there is a possibility that “garvarg” is a neologism used for the wolves in the ST. In the TT, foreignization strategy of repetition is used, so, the word “garvarg” is not changed.

Example 10:

ST: “Jessica crossed to the deep, old-fashioned armchair with an embroidered cover of schlag skin...” (p. 162)
TT: “Jessica schlag derisiyle kaplı, işlemeli, büyük, eski tarz koltuğa gitti...” (p. 205)

“Schlag” is a neologism used to describe a fictive animal in the book. According to the "Terminology of the Imperium", it is native to Tupile (sanctuary planet) and hunted for its skin (p. 572). Similar to the previous fictive ecological items, translator prefers foreignization strategy by repeating the original word “schlag” in the TT. However, this transcription is not suitable to Turkish pronunciation as there are three vowels in the beginning of the word (sch-). Thus, it may deteriorate the fluency of the text for the readers. Transcribing the word as "şılag" by the strategy of orthographic adaptation could be a better preference for the translation of this word.

Example 11:

ST: “I heard the flock in my branches And was caught on their beaks and claws! ” (p. 290)
TT: “O sürüyü dallarımda hissettim Yakaladılar beni pençeleri, gagalarıyla! ” (p. 359)

Example 12:

ST: “Paul returned his attention to the cages, saw that the animals were brown-winged bats. ” (p. 237)
TT: “Paul dikkatini yeniden kafeslere yönelttiğinde, içlerindeki hayvanların kahverengi kanatlı yarasalar olduğunu gördü.” (p. 296)

Example 13:

ST: “And I saw the sparrows swiftly approach, Bolder than the onrushing wolf. ” (p. 290)
TT: “Ve serçelerin hızla yaklaştığını gördüm, Saldıran kurtlardan bile daha ataktılar.” (p. 359)

Literal translation strategy is used for the ecological items in the examples 11, 12 and 13.

4.2.3.3. Natural Formations

Example 1:

ST: “And she says: Tell me about the waters of your homeworld, Usul.” (p. 27)
TT: “Usul...Doğduğun gezegen... Oranın denizlerini anlatsana, diyor.” (p. 44)

In this example Chani asks Paul to tell her about the natural areas of water on Caladan which is Paul’s homeworld. Thus, in the ST, “waters” refers to the lakes, rivers, seas, oceans, springs and all other natural areas of water. However, the translator resorts to the domestication strategy of hyponymy and renders it as “denizler” (seas) in the TT. As it can be seen, this choice of domestication causes a meaning loss in this example, since the other sources of natural water (lakes, rivers, oceans, springs etc.) are not implicated in the TT.

Example 2:

ST: “He saw the spreading wetness on the gray meta-glass. ‘Water,’ he said.” (p. 32)
TT: “Gri metacama yayılan suyu gördü. ‘Su’ dedi.” (p. 50)

“Wetness” is the state of being wet which can be due to the water or any other liquid. The translator uses componential analysis strategy and replaces it with “su” which means “water” in the TL. However, it is clear that the sentence in the ST has two steps: First, Paul sees “wetness” (which can be water or other liquids), then he states that it is “water”. In the TT, Paul’s inference is not given explicitly. For this reason, the domestication strategy causes a meaning loss in this example.

Example 3:

ST: “That people could want so for water they had to recycle their body moisture struck him with a feeling of desolation.” (p. 32)
TT: “O halkın kendi vücut sularını defalarca içmek zorunda kalacak kadar susuzluk çekmesi içini karartmıştı.” (p. 50)

In the ST, “body moisture” is used to refer to any kind of liquid diffused from the body including the ones of a small amount. It is rendered as “vücut suları”, which means “body

waters”, in the TT. As the author, also, uses this expression (“body water”) interchangeably for the same thing, it can be inferred that they are synonyms in the book. However, it is notable that the connotation of “body moisture” puts more emphasis on the small quantity of body liquid than the expression of “body water”. The translator renders it as “vücut su(ları)” (body water) in the TT and leads to a slight narrowing in its sense.

Example 4:

ST: “With a Fremen suit in good working order, you won’t lose more than a thimbleful of moisture a day...” (p. 118)
--

TT: “Giysiniz Fremen malıysa ve iyi çalışıyorsa günde en fazla bir yüksük dolusu su yitirirsiniz...” (p. 153)
--

Example 5:

ST: “...where they must guard even fractional traces of moisture , hoarding the few drops in the tent’s catchpockets, begrudging a breath wasted on the open air.” (p. 218)
--

TT: “... bir damla suyu bile korumak, çadırın toplayıcı-keselerinde biriken birkaç damlayı saklamak, açık havada nefes almaktan kaçınmak zorundaydılar.” (p. 274)
--

In examples 4 and 5, “moisture” is translated as “su” (water) in the TT. As it is mentioned while explaining the previous example, in the ST “moisture” is used to emphasize the value of water on the planet. The translator resorts to the domestication strategy of “componential analysis” and renders it as “su” in these examples.

In example 4, the expression of “a thimbleful of”, used to highlight the small quantity of water, is translated literally as “bir yüksük dolusu” in the TT. In Turkish, “yüksük” (thimble) is an expression which is also used to refer to a small quantity of something. Translating “a thimbleful of” as “bir yüksük dolusu” is the literal translation and creates the same impact in the TT. Thus, the translation strategy used for the expression of “a thimbleful of moisture” can be regarded as domesticating couplets.

In example 5, it is notable that guarding the “fractional traces of moisture” is an hyperbolic expression which reveals the severity of the drought that the people face in Arrakis. In its Turkish translation the degree of this expression decreases seriously since “bir damla su” (a drop of water) is much more than “fractional traces of moisture”.

Unfortunately, it can be said that the Turkish version cannot evoke the same connotation in the TT by the strategy of componential analysis.

Example 6:

ST: “She, too, had said something about water starvation .” (p. 32)
TT: “O kadın da susuzlukla ilgili bir şeyler söylemişti.” (p. 50)

In the ST, the author’s choice for the expression of “water starvation” highlights the scarcity of water and shows the seriousness of the situation. In the TT, it is translated as “susuzluk” which is equivalent to the situation of “being thirsty” or “waterlessness”. As it can be seen, the situation in the ST is more severe than the one in the TT since “water starvation” is the further step of “being thirsty”. The translator’s preference can be defined as componential analysis because “susuzluk” has a similar connotation to “water starvation”. However, this strategy of domestication devitalises the problem by degrading the intensity of the situation.

Example 7:

ST: “He remembered open water and waves —days of grass instead of sand...”
TT: “ Denizi, dalgaları ... Kum yerine çimen gördüğü günleri...” (p. 177)

“Open water” is defined as “water that is clear of obstacles to passage or view: water that is open” in MWD. As it can be understood from the definition, the term can involve oceans, seas, lakes, rivers, natural pools, canals etc. In its Turkish version, the translator renders it as “deniz” which means “sea”. This domestication strategy of hyponymy causes narrowing in its meaning since the translator does not mention about the other forms of open water. The translator resorts to literal translation for “wave” and translates it as “dalga” in the TT.

Example 8:

ST: “There will be flowing water here open to the sky and green oases rich with good things. (p. 527)
--

<p>TT: “Burada, açık havada nehirler, göller, güzel şeylerle dolu yeşil vahalar olacak.” (p. 628)</p>
--

In the ST, “flowing” is used to describe the movement of the second word “water” and refers to the rivers and streams (European Environment Agency). The translator aims to use the strategy of hyponymy by replacing it with “nehirler” in the TT. However, “göl” (lake) is not a kind of flowing water and its translation strategy can be regarded as componential analysis. As it can be understood, the translator’s choice of “göller” (lakes) may cause the ecological accuracy to be impaired. It can be said that the strategy of domesticating couplets is adopted for the translation of this expression.

Example 9:

<p>ST: “Paul found the tube into his stillsuit, sipped at the reclaimed water.” (p. 286)</p>
<p>TT: “Paul damıtıcı giysisinin tüpünü bulup, vücudundan geri kazanılmış suyu içti.” (p. 354)</p>

In the book, Fremens wear stillsuits to recycle their body water in order to survive in the desert planet. In the ST, “reclaimed water” refers to the recycled body fluids. The translator opts for the strategy of domesticating couplets for the translation of this expression in the TT.

He literally translates “reclaimed water” as “geri kazanılmış su” while also adding “vücudundan” (from his body) by the strategy of explicitation. Thus, it can be said that the translator aims to be accurate to transfer the same connotation in the TT.

Example 10:

<p>ST: “He tried to see up the slope in the darkness, was almost knocked over by the cascade.” (p. 266)</p>
<p>TT: “Karanlıkta başını kaldırıp bayırın yukarısına bakmaya çalıştı fakat tepesine akan kumlar onu neredeyse devirecekti.” (p. 330)</p>

In this example, “cascade” is used to describe the dribbles of sand falling over Paul in a large quantity. In its Turkish version, it is translated by paraphrasing and rendered as “tepesine akan kumlar” meaning “sand falling over his head”. As there is not a single

word equivalent to this phrase in the TL, it is translated by explaining exactly this motion of sand in a way which successfully transfers the same connotation in the TT.

Example 11:

ST: “Jessica felt that the night was dominated by degrees of smallness in substances beneath their feet and hands—boulders or pea gravel or flaked rock or pea sand or sand itself or grit or dust or gossamer powder.”

“-**boulders** or **pea gravel** or **flaked rock** or **pea sand** or sand itself or **grit** or **dust** or **gossamer powder**.” (p. 263)

TT: “Jessica’nın gecenin içinde en çok farkına vardığı şey, ellerinin ve ayaklarının altındaki küçük cisimlerdi...**Kayalar, taşlar, kum topakları**, kumlar, **kum taşları, irili ufaklı tozlar**.” (p. 326)

As there is only one desert in Türkiye, this can be one of the reasons why TL does not have many terms related to the sand types. Similarly, it can be seen in example 11 that the Turkish version of the sentence has less sand-related terms. It is noticeable that the translator resorts to the domestication strategies for the translation of these ecological items except “grit” (kum taşları), “sand” (kum) and “dust” (toz). The first expression, “boulders” which means large rocks is translated as “kayalar” by absolute universalism strategy. As the expression of “kayalar” meaning “rocks”, is a neutral term and is not as specific as the original one, the accuracy of the source ecological item is lost.

“Pea gravel” and “flaked rock” are used to describe the types of stones or rocks which are in different forms and sizes. However, in the TT, the translator opts for absolute universalism strategy and renders them as “taşlar” (stones) which does not transfer any information about their shapes or sizes.

The definition of “pea sand” is not available in the dictionaries, however, it is understood that the “pea sand” consists of smaller particules than the “pea gravel”. In the TL, there is not an equivalent of this expression, hence, the translator renders it as “kum topakları” meaning “lumps of sand” by the strategy of componential analysis.

“Grit” that refers to the particules bigger than regular sand, and is similar to “gravel”, is also used as a sand type in the example. Literal translation is used and it is rendered as “kum taşları”. “Gossamer” is used to describe the extreme delicacy of the sand/powder

in the ST. “Gossamer powder” refers to the tenuous particules which are even smaller than the dust on the desert. As there is no equivalent of this expression in Turkish, the translator resorts to the paraphrasing strategy for the translation of “dust or gossamer powder” and gives their explanation. He combines two of the ecological items and translates them as “irili ufaklı tozlar” (dust with miscellaneous dimensions) in the TT.

Example 12:

“You must walk softly, avoid **drum sands**, tidal dust basins—head for the nearest rock zone.” (p. 126)

“**Kumdavullarından** ve gelgitli toz havzalarından uzak durarak, en yakın kayalık bölgeye doğru ağır ağır yürürüm.” (p. 163)

“Drumsand” is a neologism and its definition is also provided in the “Terminology of the Imperium” (p. 560). When the sandworm approaches, it warns the Fremens beforehand by making a drum sound. The translator uses literal translation strategy and reforms this neologism as “kumdavulu” in the TT. The only difference is the syntactic order (kumdavulu: sanddrum).

Example 13:

ST: “He waded part way up the slope, kicking off the **sand rivulets**, spurts of dust.” (p. 269)

TT: “Bayıra çıkmaya başladı; adımları **kumların kayarak derecikler halinde akmasına**, tozların havalanmasına yol açıyordu.” (p. 334)

In MWD, “rivulet” is defined as “a small stream” which refers to a water source. However, in this example it is used to describe the flowing motion of sand while Paul is walking up the slope on the desert. “Sand rivulet” can be literally translated as “kum dereciği”, however, the translator prefers paraphrasing strategy and renders it as “kumların kayarak derecikler halinde akması” (flowing of sand in the form of a rivulet) in the TT.

Example 14:

ST: “His mind focused on the storm as he had seen it begin through the transparent end of their stilltent—cold dribbles of sand crossing the basin, then **runnels** and tails furrowing the sky.” (p. 218)

TT: “Paul’ün zihni fırtınaya odaklandı; damıtıcı çadırlarının şeffaf ucundan baktığında, fırtınanın başladığını görmüştü...Soğuk kumlar havzada savrulmaya başlayıp sonra da göğe yükselmiş, gökyüzünde **dere** ve kuyruklar oluşturmuştu.” (p. 274)

“Runnel” is a synonym of rivulet which is also used to describe the flowing motion of the sand to the sky. It is literally translated as “dere” in the TT.

Example 15:

ST: “The central wastelands beyond those moon-frosted cliffs were desert—**barren rock, dunes**, and blowing dust...”

TT: “Ay ışığıyla aydınlanan, donmuş gibi görünen o tepelerin ardında çöl uzanıyordu...**Çıplak kayalar, kumullar**, toz savuran rüzgarlar...” (p. 113)

“Barren” is the synonym of “infertile” and it is used to describe the rocks on which there are no plants or any other desert growth. In its Turkish version, “barren” is rendered as “çıplak” (naked) in English. It is also used to imply that the rocks are uncovered which means there is no plant life on it. Namely, both expressions’ connotation is contextually same. It can be inferred that the translator uses the strategy of domesticating couplets for the translation of this expression as “barren” is translated by the strategy of synonymy as “çıplak” and “rock” is literally translated as “kaya(lar)” in the TT. The next expression, “dune”, is one of the most frequently used ecological items in the ST. It is used to refer to the sand hills on the desert. The translator prefers literal translation and translates this word as “kumul” in the TT.

Example 16:

ST: “Believe, and **al-Lat** shall never burn you.” (p. 206)

TT: “İmanlı olursanız **el-Lât** sizi asla yakmaz.” (p. 260)

“Al-Lat” was one of the goddesses in North Arabia before the Islam (The Editors of Encyclopaedia Britannica, 1998). However, in the ST, it is used as a neologism for the primary Sun and its description is provided in the "Terminology of the Imperium" (p. 556). In the TT, the translator prefers foreignization strategy of orthographic adaptation and replaces it with “el-Lât”. By doing so, the translation preserves its mythological connotation as well as its meaning in the TT successfully.

Example 17:

ST: “Low on the southern horizon, the night’s second moon peered through a thin dust haze...” (p. 109)

TT: “Güney ufkunun hemen yukarısında gecenin ikinci ayı , seyrek toz bulutunun ardından bakıyordu...” (p. 143)

Example 18:

ST: ““ The first moon will be up soon,’ Paul said.” (p. 282)

TT: “ ‘Birazdan ilk ay doğar,’ dedi Paul.” (p. 349)
--

Literal translation strategy is used for the phases of the Moon in examples 17 and 18.

Example 19:

ST: “...Jessica returned to the book, studied an illustrated constellation from the Arakeen sky: ‘Muad’Dib: The Mouse’, and noted that the tail pointed north.” (p. 206)
--

TT: “...Jessica tereddütle kitaba geri döndü ve Arrakis göğündeki bir takımyıldızı ele alan, illüstrasyonlu bir yazıya baktı: ‘Muad’Dib: Fare’... Takımyıldızının kuyruğunun kuzeye dönük olduğuna dikkat etti.” (p. 261)

Literal translation strategy is used for the translation of “constellation” as “takımyıldızı” in the TT. As the translator paraphrases the whole sentence while translating, he renders “tail” as “takımyıldızının kuyruğu” which means “the tail of the constellation”. Thus, the translator resorts to strategy of domesticating couplets (literal translation+explicitation) with an aim to give the exact meaning of the ecological item.

Example 20:

ST: “ A shower of meteors crossed her patch of night.” (p. 220)
TT: “O yuvarlak gece parçasının içinden geçen meteorlar... ” (p. 276)

“A shower of meteor” means plenty of meteors passing through the sky at the same time. As it can be understood, the word “shower” is used to imply the large number of them in the ST. It is also used as “meteor yağmuru” (meteor shower) in the TL. However, in this example, the translator opts for the strategy of omission by deleting “shower” and translates the first word literally as “meteorlar” (meteors) in the TT. This strategy can be regarded as domesticating couplets which is the combination of literal translation and the omission.

Example 21:

ST: “ A wide patch of dust-blurred stars framed in angular darkness appeared where the door wall had been.” (p. 244)
TT: “Açılan kapıduvarın bıraktığı geniş dörtgen boşlukta, toz sisinin ardında donuk donuk parlayan yıldızlar görülüyordu.” (p. 305)

In the ST, an adjective “dust-blurred”, is used to describe the “stars” which are not clear enough to be seen due to the particules of dust in the sky and the expression “a wide patch of”, implies the large number of those stars. In its Turkish version, the omission strategy is used for the translation of “a wide patch of”, thus, it is deleted. For the translation of “dust-blurred stars”, the translator employs different strategies for rendering the components of this ecological item. First, he resorts to the strategy of paraphrasing in order to explain “dust-blurred” in the TT. He also opts for the strategy of explicitation as he adds ecological items such as “parlayan” (shining) and “toz sisinin ardında” (behind the fog of dust) to the expression. Thus, the overall translation strategy used in this example can be called domesticating triplets (omission, explicitation and paraphrasing).

4.2.3.4. Land Forms

Example 1:

ST: “The planet sheltered people who lived at the **desert** edge without caid or bashar to command them...” (p. 5)

TT: “O gezegen, **çöl** sınırında yaşayan bir halkı barındırıyordu; başlarında onları yönetecek ne kâid, ne de başar vardı...” (p. 17)

As Dune is also called a Desert Planet, the story takes place in a desert. It is beyond doubt that it is one of the most frequently used ecological item in the book. Literal translation strategy is used for this ecological item.

Example 2:

ST: “In the **open desert**, you wear this filter across your face...” (p. 118)

TT: “**Çölde açık havza**ya çıktığınızda bu filtreyi yüzünüze geçirmelisiniz.” (p. 153)

In this example, it is understood from the context that “open desert” is used to describe the vast land of desert. When it is translated word-for-word in Turkish, “open desert” means “açık çöl” and it is not a common and meaningful expression in the target culture. The translator resorts to the strategy of explicitation and adds an ecological item, “havza” (basin), to this expression and translates it as “çölde açık havza” (open basin in the desert). This choice of domestication may cause an obscurity as “basin” is generally used for the areas beneath the surface of the land in the book.

Example 3:

ST: “...the **wasteland** where nothing lives except the spice and the sandworms.” (p. 32)

TT: “...baharat ve kumsolucanlarından başka hiçbir şeyin olmadığı o **çorak topraklar** hakkında bilgi edineceksin.” (p. 51)

“Wasteland” is used to describe the areas on which there are no crops grown in the TL (CD). It is notable that “wasteland” is used as a synonym of the term “desert” in many parts of the ST. The translator resorts to synonymy strategy and renders it as “çorak toprak(lar)” which can be translated word-for-word as “arid land” in English. These words (wasteland-arid land) are synonyms as they refer to the same land form in the book.

Example 4:

ST: “There’s little to tell them from the folk of the graben and sink .” (p. 32)
TT: “ Graben lerde ve çanak larda yaşayan halk, onlar hakkında pek bir şey anlatmıyor.” (p. 50)

In this example, as the definition of “graben” exists in as well, repeating it in the TT can be considered as literal translation. “Sink” is used as “çanak” in Turkish, therefore, the translator also translates it literally in the TT.

Example 5:

ST: “...Fremen, they are one group, and the others are the people of the graben, the sink, and the pan .” (p. 41)
TT: “Fremenler bir grubu oluşturuyor; diğer gruptakilerse graben, çanak ve pan larda yaşayanlar.” (p. 62)

“Pan” is used as a synonym of “natural basin” according to the MWD. This term does not exist in TDK and therefore it can be translated as “doğal havza” (natural basin) into Turkish. However, the translator opts for the foreignization strategy of repetition and keeps it same as “pan” in the TT. This choice may cause obscurity in the TT as the readers may not get its meaning.

Example 6:

ST: “A salt pan glared white there with a blending of dirty tan at its edges—a field of white out here where white was death.” (p. 281)
--

TT: “O tarafta beyaz, kenarları lekeli bir **tuz çukuru** parlıyordu... Buralarda beyaz, ölümün rengiydi ve o çukur bembeyazdı.” (p. 349)

In this example, as it can be seen, domesticating couplets strategy is used for the translation of ecological expression “salt pan”. “Salt” is translated literally as “tuz” while “pan” is replaced with its synonym, “çukur” (hollow) in the TT.

Example 7:

ST: “It hung low on a jagged horizon above **cliffs** that formed part of the **immense rock uplifting** known as the Shield Wall.”

TT: “Güneş, ufukta, Kalkan duvarı adı verilen **devasa dağların** ardında batıyordu.” (p. 105)

In the example, it can be understood that the place where the sunset occurs, is described. In the ST, the Sun goes down the “cliffs” forming Shield Wall which is also called “immense rock uplifting”. The translator opts for the omission strategy for “cliffs” and deletes it in the TT. He renders “immense rock lifting” as “devasa dağlar” (immense mountains) by the synonymy strategy.

Example 8:

ST: “But the mystery, Wellington, the real mystery is the wells that’ve been drilled up here in the sinks and **basins**.” (p. 66)

TT: “Ama asıl muamma buradaki çanaklarda ve **kutuplarda** açılmış kuyular, Wellington. (p. 91)

“Basin” means “havza” in Turkish and it is translated literally in most of the sentences in the book. However, in this example the translator replaces it with “kutup” (pole) which is not the equivalent of it. This translation strategy can be regarded as componential analysis, because in this part of the book, Jessica and Yueh are talking about the possible water sources on the planet as well as the polar caps. Yet, this choice of translator, may

cause the ecological accuracy to be impaired in the TT as there is not an implication of the wells in the poles in this sentence of the ST.

Example 9:

ST: “Milky light picked out a boiling of dust clouds that spilled over into the **blind canyons** interfingering the Shield Wall.” (p. 111)

TT: “Süt beyazı ışığı, Kalkan Duvarı’nın içlerine parmak gibi uzanan **kör kanyonlara** köpürürcesine dökülen toz bulutlarını aydınlatıyordu” (p. 145).

Literal translation strategy is used in example 9.

Example 10:

ST: “Sand almost brimmed their basin, leaving only **a dim lip of surrounding rock.**”(p. 220)

TT: “Havza neredeyse tamamen kumla dolmuştu, **etraftaki kayalıkların** da yalnızca **donuk dorukları** görünüyordu.” (p. 276-277)

In this example “surrounding rock” is literally translated as “etraftaki kayalıklar” in the TT. “Lip” is used to refer to the upper part of this “surrounding rock” in the ST and it is translated as “doruk” (summit) by the strategy of synonymy in the TT. “Dim” is also rendered as “donuk” which is its literal translation. It can be concluded that domesticating couplets strategy is employed for the translation of this expression. It is notable that the translator successfully recreates the rhyme of the expression in the TT (a dim lip - donuk doruk) while transferring its meaning.

Example 11:

ST: “He took a deep breath, looked up through the transparent end of the tent at the **rock escarpment** outlined against the stars.” (p. 205)

TT: “Derin bir nefes alıp çadırın şeffaf ucundan dışarıya, yıldızlı göğün altında **yükselen kayalığa** baktı.” (p. 259)

“Rock escarpment” is used to describe the formation of rock which is very steep and divides the high level from the lower level (MWD). In Turkish there is not an exact equivalent of this expression. The translator renders it as “yükselen kayalık” (rising rock) by using paraphrasing strategy. This choice of domestication may be because of the lack of vocabulary about the land formation in the TL, however, as can be seen, there is an inevitable narrowing in the meaning of the ecological item.

Example 12:

ST: “The two crouched beneath a **rock overhang** that looked down on a wide, shallow sink.” (p. 222)

TT: “Geniş, sığ bir çanağa bakan bir **kaya çıkıntısının** altında çömelmişlerdi.” (p. 279)

In this example “rock overhang” is literally translated as “kaya çıkıntısı” in the TT.

Example 13:

ST: “... and they came out over rocks, silver-frosted angles and **outcroppings** in the starlight.” (p. 244)

TT: “...karşılarında yıldızların ışığında donuk ve gümüşü görünen kayalıklar, **uçurumlar** belirdi.” (p. 305)

“Outcropping” is used to describe the extent of a rock on the surface of the Earth. The translator resorts to the componential analysis strategy as there is not an equivalent of this item in the TL. He translates it as “uçurum” (cliff) which actually refers to the steep edges of rock and does not create the same impact as “outcropping”.

Example 14:

ST: “She unhooked her robe from its hammock pegs in a **rock alcove**, fumbled with the fabric in the dark until she found the top, slipped into it.” (p. 319)

TT: “**İçinde bulunduğu girintinin taş duvarlarındaki** kazıklara bağlı cübbesini çözüp, karanlıkta el yordamıyla giydi.” (p. 392)

“Rock alcove” refers to the cavities in rock formations and it is “kaya girintisi” in Turkish. The translator resorts to the strategies of explicitation and paraphrasing (domesticating couplets) and translates it as “içinde bulunduğu girintinin taş duvarları” (stone walls of the alcove where she is in). As it can be seen, “taş duvarları” (stone walls) are redundant in the TT. This strategy might have been employed in order to describe the scene clearly to the readers.

Example 15:

ST: “From food processing and other evidence, Idaho estimates the **cave complex** he visited consisted of some ten thousand people, all told.” (p. 91)

TT: “Idaho işlenen yiyecek miktarları gibi ipuçlarından yola çıkarak, ziyaret ettiği **mağara kompleksinde** on bin kadar insanın yaşadığını tahmin ediyor.” (p. 122)

“Cave complex” is used to refer to the group of caves in the ST. “Cave” is translated literally as “mağara” and “complex” is rendered as “kompleks” in the TT. As “kompleks” is also used in the TL to describe a group of facilities and it exists in the dictionary of TDK, the translation strategy used for “complex” can also be called literal translation.

Example 16:

ST: “Paul fell asleep to dream of an Arrakeen **cavern**, silent people all around him moving in the dim light of glowglobes.” (p. 4)

TT: “Uykuya dalan Paul rüyasında bir Arrakis **mağarası** gördü, etrafı korkürelerin loş ışığında hareket eden suskun insanlarla çevriliydi.” (p. 17)

As it is seen in example 15 and 16, both “cave” and “cavern” are translated as “mağara” in the TT. However, “cave” refers to the natural chambers in the hills while “cavern” is generally used to describe the larger caves (MWD). In example 16, the translator opts for the absolute universalism strategy and renders “cavern” as “mağara” (cave). This choice of domestication may not create the same connotation as the term in the TT does not attach importance to the size of the “cave”.

Example 17:

ST: “There’ll be crevasses there, deep ones.” (p. 265)
TT: “Orada derin yarıklar olmalı.” (p. 329)

Paul points to the windward face of the cliff and implies that there will be deep crevasses there. “Crevasses” is used to describe the big cracks on the cliff. It is literally translated as “yarıklar” in the TT.

Example 18:

ST: “They came to a series of shelves dropping down and, beyond them, saw a fissure with its ledge outlined by moonshadow leading along the vestibule .” (p. 266)
TT: “Aşağı doğru uzanan kaya çıkıntıları çıktı karşlarına...Bunların ötesinde, kenarları ay ışığıyla aydınlanan, gölgeli bir yarık vardı.” (p. 330)

“Fissure” is a narrow deep crack whereas “vestibule” refers to any cavity which resembles an entrance of other cavities (MWD). In the example, “fissure” is translated as “yarık” (crevasse) into Turkish. Although they are not the same expressions, as these formations are not clearly defined in the TL, “yarık” can be regarded as a synonym of “fissure”. However, as it can be seen, the translator resorts to the omission strategy for the translation of “vestibule” in the TT.

Example 19:

ST: “The ringwalls were dark to her left, moon-frosted on her right.” (p. 288)
TT: “ Havzanın halka şeklindeki duvarının sol tarafı karanlık sağ tarafı ise aydınlıktı...Ay ışığında donmuş gibi görünüyordu.” (p. 356)

It can be inferred from the context that the expression “ringwall” describes the wall surrounding the basin in the ST. There is not an equivalent of “ringwall” in Turkish, so, the translator resorts to the domesticating couplets strategy to translate this ecological item. He paraphrases the expression as “havzanın halka şeklindeki duvarı” (the wall of the basin which is in the form of a circle) in the TT. As he adds “havza” (basin) to the

sentence, it can be said that the translator also uses the strategy of explicitation. Domestication strategy successfully creates the same impact for the readers.

Example 20:

ST: “The Duke glanced down to the left at the broken landscape of the Shield Wall— chasms of tortured rock...” (p. 120)

TT: “Dük sol tarafına, Kalkan Duvarı’nın tepelerine baktı...Girintili, çıkıntılı kayaların arasında uçurumlar vardı...” (p. 155)

In MWD, “chasm” is defined as a deep fissure in the surface of the Earth. It is seen between two cliffs. In its Turkish version, “chasm” is rendered as “uçurum” (cliff). As it can be understood, “uçurum” (cliff) refers to only one side of the “chasm”. This strategy of translation can be regarded as componential analysis, since the meaning of the term in the TT, is similar to the meaning of “chasm” in the ST while they are not equivalents.

4.2.3.5. Names Of The Places

Example 1:

ST: “And take the most special care that you locate Muad’Dib in his place: the planet Arrakis. ” (p. 3)

TT: “Özellikle de Muad’Dib’in yaşadığı yeri göz önünde bulundurun: Arrakis gezegenini.” (p. 15)
--

“Arrakis”, also called Dune, is the main planet where the story takes place in the book. It is translated by the foreignization strategy of repetition in the TT.

Example 2:

ST: “There had been Fremen on Poritrin , she saw...” (p. 385)
--

TT: “Jessica bir zamanlar Poritrin ’de Fremenler olduğunu gördü...” (p. 468)

Example 3:

ST: “Brought from Chusuk , a sweet instrument.” (p. 469)
TT: “ Chusuk ’tan getirttim... Güzel alet.” (p. 563)

In examples 2 and 3, the fact that most of the names of the planets and cities are proper names which are meaningless or their meaning is not explicit in the ST, makes them hard to render in the TT. The translator prefers the strategy of repetition for “Poritrin” and “Chusuk” along with most of the other names of planets and cities (Gamont, Giedi Prime, Caladan, Cartag, Arsunt etc.)

Example 4:

ST: “You’ll learn about the funeral plains ,” she’d said, “about the wilderness that is empty, the wasteland where nothing lives except the spice and the sandworms.” (p. 32)
TT: “Yaşlı kadın, ‘ Cenaze ovaları hakkında, o bomboş çöller, baharat ve kumsolucanlarından başka hiçbir şeyin olmadığı o çorak topraklar hakkında bilgi edineceksin,’ demişti.” (p. 51)

In this example, the expression “funeral plains” means open ergs according to the Cartographic Notes of the book. As it can be understood from the author’s additional information, the word “funeral” attributes a fictive feature to an erg which makes a connection to “death”. In its Turkish version, literal translation strategy is used and it is rendered as “cenaze ovaları” which can successfully create the same impact in the TT.

Example 5:

ST: “He knew suddenly that he was in a hiereg , a desert camp. (p. 413)
TT: “Birden hieregde , yani çöl kampında olduğunu anladı.” (p. 500)

As the definition of “hiereg” cannot be found in the dictionaries, it is considered as a Fremen term namely a neologism. The explanation of the term is already given as “a desert camp” within the sentence. The translator resorts to the foreignization strategy of repetition and does not change the original term in the TT.

Example 6:

ST: “This is one of the Imperial Ecological Testing Stations my father wanted as advance bases” (p. 236)
TT: “Burası babamın öncü üs olarak istediği istasyonlardan, İmparatorluğun Ekolojik Test İstasyonlarından biri,” (p. 295)

Example 7:

ST: “Arrakis: His Imperial Majesty’s Desert Botanical Testing Station ” (p. 72)
TT: “Arrakis: İmparator Hazretleri’nin Çöl Botanik Test İstasyonu ” (p. 98)

“Imperial Ecological Testing Stations” in example 6 and “Desert Botanical Testing Station” in example 7, are literally translated in the TT.

Example 8:

ST: “It hung low on a jagged horizon above cliffs that formed part of the immense rock uplifting known as the Shield Wall .” (p. 77)
TT: “Güneş ufukta, Kalkan Duvarı adı verilen devasa dağların ardında batıyordu.” (p. 105)

Example 9:

ST: “It was the voice of his father who had been planetologist here before him—his father long dead, killed in the cave-in at Plaster Basin .” (p. 291)
TT: “Burada kendisinden önceki gezegenbilimci olan babasının sesiydi... Babası çok uzun zaman önce, Alçı Havzası ’ndaki bir mağarada, göçük altında kalıp ölmüştü.” (p. 361)

In examples 8 and 9, it is clear that the components comprising the names of the places are individually meaningful. The translator opts for literal translation strategy for each component of the ecological items in the TT.

Example 10:

ST: “The raiders came through the mushtamal , rushing at us...Jessica said.” (p. 430)
TT: “Akıncılar müştemale dalıp üstümüze saldırdılar...” (p. 519)

In this example “mushtamal” is not an English word whose origin is presumed to be Arabic. It is a neologism and refers to an extension of a garden according to the “Terminology of the Imperium” (p. 567). The translator resorts to the strategy of orthographic adaptation and transcribes it as "müştemal" in the TT. Thus, he can recreate this neologism in the TL as well.

Example 11:

ST: “ <i>I enshrined the skull of my father in a Fremen rock mound overlooking Harg Pass.</i> ” (p. 410)
TT: “ <i>Babamın kafatasını Harg Geçidi’ne tepeden bakan bir Fremen kayasının içine oyulan türbeye koydum.</i> ” (p. 497)

Example 12:

ST: ““We’ll camp for the evening meal and prayer at Cave of Birds beneath Habbanya Ridge ,’ Stilgar said.” (p. 437)
TT: ““Akşam yemeği ve dua için Habbanya Sırtı ’nın altındaki Kuşlar Mağarası’nda kamp kuracağız,’ dedi Stilgar.” (p. 527)

Example 13:

ST: “...that my hands tasted your loveliness when we struggled last night in Tuono Basin .” (p. 312)
TT: “Dün gece Tuono Havzası ’nda boğuşurken o güzel tenine dokunduğum için.” (p. 385)

In examples 11, 12 and 13 foreignizing couplets strategy is used for the translation of the ecological items as the first components of the expressions are proper names which are either meaningless or have an inexplicit meaning in the ST. On the other hand, the second

components of them (pass, ridge, basin) are meaningful and they can be literally translated. The translator opts for repetition strategy for the first components (Harg, Habbanya, Tuono) and literal translation for the second components of the terms (Pass-Geçidi, Ridge-Sırtı, Basin-Havzası).

Example 14:

ST: “A surface car came from Rimwall West... ” (p. 488)
TT: “ Batı Kenar Duvarı ’ndan bir yer aracı geldi...” (p. 584)

In this example, “Rimwall” is considered as a neologism since its definition cannot be found in the dictionaries. It is defined as a high scarp on the Shield Wall according to the Cartographic Notes for Map. It is literally translated as “Batı (West) Kenar (Rim) Duvarı (Wall)” in the TT. As it can be seen, the syntactical order is different than the original expression.

4.2.3.6. Climate And Weather Conditions

Example 1:

ST: “Those storms build up across six or seven thousand kilometers of flatlands, feed on anything that can give them a push— coriolis force , other storms, anything that has an ounce of energy in it.” (p. 31)
TT: “O fırtınalar altı yedi bin kilometrelik düzlükler boyunca büyür; onlara güç katacak her şeyle beslenir... Coriolis gücüyle , başka fırtınalarla, biraz olsun enerjiye sahip her şeyle.” (p. 50)

“Coriolis force” which is the result of the Earth’s rotation is a geographical term and it is known as “Coriolis kuvveti” in Turkish. The foreignization strategy of repetition is used for “Coriolis” whereas “force” is rendered as “gücü” (power/force) by the strategy of synonymy in the TT. Thus, it can be concluded that foreignizing couplets strategy is employed for the translation of the ecological item in this example.

Example 2:

ST: “They say you can’t drill in the desert—storms and **sand tides** destroy equipment faster than it can be installed...” (p. 65-66)

TT: “Çölde sondaj yapılamaz diyorlar... Fırtınalar ve **kum gelgitleri** teçhizatları daha doğru dürüst kurulmadan yok edermiş...” (p. 91)

“Tide” is the rising and falling of seas due to gravitational forces twice a day (MWD). As it can be understood “sand tide” is a fictive term in the book referring to this movement of sand. In the “Terminology of the Imperium”, “sand tide” is defined as “dust tide” and explained as the change in the dust level of basins because of the gravitational forces on the desert. It is literally translated as “kum gelgitleri” in the ST.

Example 3:

ST: “Beneath it, the jagged cliffs of the Shield Wall shone like parched icing through a **dust haze**.” (p. 83)

TT: “Ayın altında, **toz bulutunun** içinde Kalkan Duvarı’nın girintili çıkıntılı tepeleri, kurumuş krema tabakasıyla kaplıymış gibi ışıldıyordu.” (p. 112)

“Dust haze” is used to express the cloudy appearance of dust in the ST. “Dust” is literally translated as “toz” in the TT. However, the translator renders “haze” as “bulut” (cloud). As it can be understood, although “haze” and cloud are similar things, they are not exactly the same ecological items. Thus, this translation strategy can be regarded as componential analysis.

Example 4:

ST: “In the **burning places** where **whirlwinds** came.” (p. 123)

TT: “**Kasırgaların** estiği **sıcak diyarlarda**” (p. 159)

In the ST, “burning” is used to describe the extremely hot weather. However, it is translated by the strategy of componential analysis as “sıcak” (hot) in the TT. As it can be understood, they have similar meanings but the expression in the TT refers to a lower degree of temperature. “Place” means “yer” in Turkish, however, it is translated as

“diyar” (country) in the TT by the strategy of hyponymy. Because, “place” is a superordinate in relation to “diyar” (country). Thus, it can be said that the domesticating couplets strategy is used for the translation of “burning places” as “sıcak diyarlar” in the TT.

“Whirlwind” is a small atmospheric vortex which is the common name of the swirling windstorm (The Editors of Encyclopaedia Britannica, 1998; MWD). Thus in Turkish, it can be literally rendered as “dönen rüzgar” (swirling wind). In the TT, it is translated as “kasırğa” (hurricane) which is a rotating violent wind (CD), and it is not the equivalent of “whirlwind”. As it can be seen, the translator resorts to the componential analysis strategy for this ecological item.

Example 5:

ST: “Secure yourself for the open ,’ he said...” (p. 219)
TT: “ Açık havaya çıkmaya hazırlan,’ dedi...” (p. 275)

In the ST, “open” is used to describe the weather outside the tent as Paul tells Jessica to protect herself for it. The translator uses the strategy of explicitation by adding an ecological item, “hava” (weather), to the sentence in the TT. This strategy of domestication helps the reader get the message accurately in the TL.

Example 6:

ST: “ An eider wind feathered Paul’s cheeks, ruffled the folds of his burnoose.” (p. 265)
TT: “ Hafif bir esinti yanaklarını okşayıp giysisinin kıvrımlarını kımıldattı.” (p. 329)

“Eider” is “the northern sea duck” according to MWD. “Eider wind” can be a fictive ecological item as its meaning cannot be found in the dictionaries or online sources. It is probably used to describe the mildness of the wind which can also be inferred from the expressions of “feathered Paul’s cheeks”. It is translated as “hafif bir esinti” meaning “a mild wind” in the TT. The translator omits the term “eider” and describes the wind in the

TL by using paraphrasing strategy (domesticating couplets). However, as it can be seen, there is an ecological meaning loss in the sentence of the TT.

Example 7:

ST: “He felt dust fronts, billowings, mixings of turbulence , an occasional vortex .” (p. 258)
--

TT: “Savrulan toz ve kumları, rüzgarları , ara ara girdapları hissediyordu.” (p. 321)

“Turbulence” is used to describe the irregular movements of air and “mixings” refers to the “kinds of turbulence.” The eddies and vertical movements are the reasons of them. According to TDK, “turbulence” is “burgaç” in Turkish. The translator renders “mixings of turbulence” as “rüzgarlar” (winds) in the TT. Although they are different weather events, “rüzgarlar” (winds) and “turbulence” are both about the movements of air. Thus, the strategy used in this example can be regarded as componential analysis. “Vortex” is literally translated as “girdaplar” in the TT.

Example 8:

ST: “But she could feel them sinking deeper into the maelstrom .” (p. 245)

TT: “Ama Jessica aşağıya, girdabın içine çekildiklerini hissediyordu.” (p. 307)
--

“Maelstrom” is a destructive whirlpool which sucks in anything on its way (MWD), it can be formed in oceans. However, it is translated as “girdap” meaning “vortex” in the TT. As it can be understood, “girdap” (vortex) is a superordinate in relation to “maelstrom” and “maelstrom” is a violent form of it. Thus, the translation strategy used can be regarded as absolute universalism.

Example 9:

ST: “We must create a true sirocco —a moist wind...” (p. 293)
--

TT: “ Sıcak ve nemli rüzgarlar oluşturmalıyız...” (p. 362)
--

“Sirocco”, which is “siroko” in Turkish, is used to describe a very hot wind appearing in the Mediterranean basin in the SL (TDK). The translator resorts to the absolute universalism strategy for “sirocco” and renders it as “sıcak rüzgar” (hot wind) in the TT.

Example 10:

ST: “It is said that you two died in a Mother storm .” (p. 303)
TT: “Siz ikinizin de büyük bir fırtınada öldüğünüz sanılıyor.” (p. 375)

Example 11:

ST: “‘ A great grandmother of a storm coming,’ Stilgar said.” (p. 485)
TT: “‘ Çok ama çok büyük bir fırtına geliyor,’ dedi Stilgar.” (p. 581)

In examples 10 and 11, the expressions of “mother storm” and “a great grandmother of a storm” are used to describe the intensity of the storms in the ST. As this usage may sound unusual in the TT, the translator opts for the strategy of adaptation and translates “mother” as “büyük” (big) and “a great grandmother” as “çok ama çok büyük” (very very big) in the TT. “Storm” is literally rendered in both of the expressions as “fırtına”. Thus, the translator resorts to the strategy of domesticating couplets in these examples.

Example 12:

ST: “‘ El-Sayal , the rain of sand that brings the morning,’ he said.” (p. 417)
TT: “‘ El-Seyl , sabahı getiren kum yağmuru,’ dedi.” (p. 505)

“El- Sayal” is a neologism in the book and its definition is provided in the “Terminology of the Imperium”. As it can be seen in the sentence, it is a rain of sand and translated by the strategy of orthographic adaptation in the TT.

Example 13:

ST: “‘You are Sihaya ,’ he said, ‘the desert spring.’” (p. 388)
TT: “‘Sen Sihaya ’sın... Çöl baharı,’ dedi Paul.” (p. 471)

“Sihaya” is a neologism to describe “the desert spring” as it can be understood from the sentence. Paul wants to call Chani “Sihaya” and uses it as a proper name. Its definition is also provided in the “Terminology of the Imperium” (p. 573) and the translator resorts to the repetition strategy and keeps it the same as “Sihaya” in the TT.

Example 14:

ST: “Restless heat devils were beginning to set the air aquiver out on the open sand.” (p. 272)
TT: “Sıcaklık arttıkça açık çölde hava titreşmeye başlamıştı.” (p. 337)

In this sentence it can be understood that, when the desert land is heated, the air starts to shimmer above it which is called “heat devils” (MWD). Then, those “heat devils” affect the air and it shimmers entirely. There is no equivalent of “heat devils” in the TL. The translator resorts to the omission strategy for it and deletes “heat devils” in the TT while paraphrasing the rest of the sentence as “when the temperature increased, the air started to shimmer.” It can be said that the choice of domestication causes an ecological loss in the TT.

Example 15:

ST: “ Dry lightning streaked a dark corner to the south...” (p. 418)
TT: “Güneyin karanlık göğünde şimşek çaktı... (p. 505)

In this example “lightning” is literally translated in the TT. In the ST, “dry” is used to put an emphasis on the fact that there is no rain along with the lightning as it is a desert planet. However, the translator resorts to the strategy of omission for the term “dry” and it is possible to say that the domesticating couplets strategy (literal translation+omission) does not create the same impact in terms of ecology on the readers.

4.2.3.7. Ecological Protective Outerwear And Gears

Example 1:

ST: “It’s from those suits they wear—call them ‘ stillsuits ’—that reclaim the body’s own water” (p. 32)
TT: “Kokmalarının sebebi, vücut sularını tekrar tekrar kullanmalarını sağlayan giysileri –‘ damıtıcı-giysi ’ diyorlar- olsa gerek” (p. 50)

“Stillsuit” is a neologism which is used to describe a special clothing item which helps Fremens to reuse their own body water, as it is explained in the “Terminology of the Imperium” (p. 574). The expression is comprised of the words “still” and “suit” in the ST. In the TT, while “still” is literally translated as “damıtıcı”, “suit” is rendered as “giysi” (garment) by the strategy of absolute universalism. As it can be understood domesticating couplets strategy is used for the translation of this item.

Example 2:

ST: “He sat near his mother hugging his knees within a small fabric and plastic hutment—a stilltent —that had come, like the Fremen clothing they now wore, from the pack left in the ’thopter.” (p. 201)
TT: “Annesinin yanında oturmuş, kollarını dizlerine dolamıştı; topterde buldukları (ve orada bıraktıkları) çantadan çıkan kumaş ve plastikten yapılmış küçük bir çadırın - damıtıcı çadırın - içinde oturuyorlardı.

Similar to the example 2, “stilltent” is also a neologism and it is literally translated as “damıtıcı-çadır” in the TT.

Example 3:

ST: “It’s the major source of water here, caught in wind-traps and precipitators ” (p. 66)
TT: “Buradaki başlıca su kaynağı; rüzgar kapanları ve su tutucularla su toplanıyor” (p. 92)

In this example, “windtrap” is a neologism and it is defined as a device which separates moisture from the air provided from the prevailing wind in the "Terminology of the Imperium" (577). This fictive ecological item is successfully formed in the TL by the strategy of literal translation (wind: rüzgar, traps: kapanlar). “Precipitator” also refers to the device which separates water from the atmospheric moisture that comes from the polar caps. It can be literally translated as “tutucu” in Turkish. However, the translator also resorts to the strategy of explicitation by adding an ecological item to the original expression and renders it as “su tutucu” meaning “water precipitator” in the TT. Therefore this translation strategy can be defined as domesticating couplets (literal translation and explicitation).

Example 4:

ST: “They stopped only when the people learned we were installing windtraps and condensers to take care of the load.” (p. 67)
--

TT: “Halk ayaklanmayı ancak fazladan su ihtiyacını karşılamak için yeni rüzgarkapanları ve yoğunlaştırıcılar kurmaya başladığımızı öğrenince kesti” (p. 93)
--

“Condenser” is used to refer to the water separating devices in the ST. It is literally translated as “yoğunlaştırıcı” in the TT.

Example 5:

ST: “But this room embodied a statement far more significant than the lack of waterseals on outer doors.” (p. 78)
--

TT: “Ama bu odanın verdiği mesaj, dış kapıların nem geçirmez olmamasından çok daha çarpıcıydı” (p. 105)
--

“Waterseal” is used to describe the device which prevents the passage of water on the outer doors in the ST. The translator opts for the strategy of componential analysis and translates it as “nem geçirmez” (moisture-proof) in the TT.

Example 6:

ST: “How many **sandcrawlers, harvesters, spice factories**, and supporting equipment have they left us” (p. 93)

TT: “Harkonnenler bize kaç **kum sürüngei, hasatçı, baharat fabrikası** ve destek ekipmanı bıraktı” (p. 123)

According to the "Terminology of the Imperium", these expressions “sandcrawlers”, “harvesters” and “spice factories” are used to describe the machines which mine and collect spice on the deserts of Arrakis. They can be called as “crawler” due to their “buglike body” and they are all literally translated in the TT.

Example 7:

ST: “He felt up under the robe for the **shoulder seals**, speaking as he examined the suit.” (p.118)

TT: “Letonun cübbesinin içine ellerini sokup giysisinin **nem geçirmez omuzluklarını** kontrol etti.” (p. 153)

As it can be understood from the book that these seals are the gears worn on the shoulders to prevent the leaking of body’s water. In Turkish, “shoulder” means “omuz” and “seal” means “mühür”. However, the translator resorts to the domesticating couplets strategy as he adds an ecological item in the TT (strategy of explicitation) while paraphrasing the expression as “nem geçirmez omuzluk” (moisture-proof shoulder pad).

Example 8:

ST: ““The next two layers...’ Kynes tightened the chest fit. ‘...include **heat-exchange filaments** and **salt precipitators**.”” (p. 118)

TT: ““Diğer iki katmandaysa...’ Kynes giysisinin göğüslüğünü sıkıştırdı. ‘**Isı alışverişi sağlayan ince teller** ve **tuz çökticiler** bulunur.’” (p. 153)

In this example, the translator uses paraphrasing strategy while transferring “heat exchange filaments” in the TT. It is translated as “ısı alışverişi sağlayan ince teller”

(filaments enabling heat-exchange). “Salt precipitators” are literally translated as “tuz çökelticiler”.

Example 9:

ST: “Reclaimed water circulates to **catchpockets** from which you draw it through this tube in the clip at your neck.” (p. 118)

TT: “Geri kazanılan su, **toplayıcı-keselerde** birikir; oradan da, boynunuza klipsle tutturulmuş bu tüp vasıtasıyla suyu emebilirsiniz.” (p. 153)

“Catchpocket” is a neologism and it is defined as the pocket of the stillsuits which collects filtered water in the “Terminology of the Imperium” (p. 558). It is translated as “toplayıcı-kese” (collector pocket) in the TT. This strategy can be regarded as synonymy, since both “collect” and “catch” refer to “catching water” in this sentence.

Example 10:

ST: “... before he could immobilize it with a **static compaction tool**.” (p. 219)

TT: “... Paul akan kumu **statik sıkıştırma cihazı**yla durdurmaya fırsat bulamamıştı.” (p. 276)

It is understood from the context that Paul uses the “static compaction tool” to immobilize the sand which runs into their tent. The name of this device is literally translated as “statik sıkıştırma cihazı” in the TT.

Example 11:

ST: “Beard and moustache were stained at one side of the mouth, his hair matted there by pressure of the looping **catchtube** from his **nose plugs**.” (p. 224)

TT: “Ağzının bir kenarında, bıyık ve sakalında lekeler vardı; oradaki kıllar, kıvrılmış **burun tıkacı hortumunun** baskısıyla yassılaştı.” (p. 282)

In the ST, “catchtube” is a neologism which describes a fictive equipment used to drink the filtered body water which is stored in the catchpockets. It can be described as a kind of hose. In the TT, it is translated as “hortum” (hose). This strategy can be defined as

absolute universalism since “hortum” is a neutral term and a superordinate in relation to “catchtube” and also it is not a neologism. The strategy of literal translation is used for “nose plugs” in the TT.

Example 12:

ST: “We need many **dew collectors** for the planting?” (p. 370)

TT: “Ekim yapmak için bir sürü **çiy biriktiriciye** ihtiyacımız var.” (p. 450)

“Dew collector”, also called “dew precipitator” is a neologism which is used to describe a fictive ecological equipment to collect a small amount of water by precipitating the dawn dew (Terminology of the Imperium, p. 559). This neologism is formed in the TT by the literal translation strategy as “çiy biriktirici”.

Example 13:

ST: “He found his stillsuit’s **watertube** in its clip at his neck, drew a warm swallow into his mouth...” (p. 218)

TT: “Boynunu yoklayarak, damıtıcı giysisinin orada klipsle takılı **su tüpünün** ucunu bulup ılık sudan bir yudum alırken...” (p. 274)

“Watertube” is a neologism and it is a part of the stillsuit in the ST. It carries filtered body water to the person who wears it (Terminology of the Imperium, p. 576). This neologism is also formed by the literal translation strategy in the TT as “su tüpü”.

Example 14:

ST: “Green and orange letters leaped up at him from the pages: literjons, stilltent, energy caps, **recaths**, **sandsnork**, binoculars, **stillsuit repkit**, **baradye pistol**, **sinkchart**, **filt-plugs**, **paracompass**, **maker hooks**, **thumpers**, Fremkit, **fire pillar**....” (p. 205)

TT: “Sayfalarda beliren yeşil ve turuncu sayfaları büyüteçle okudu: “Litrejonlar, damıtıcı çadır, enerji kapsülleri, **devridaimler**, **kumşnorkeli**, dürbün, **damıtıcı-giysi bakkiti**, **baradye tabancası**, **çanak haritası**, **filtretikaçlar**, **parapusula**, **yaradan kancaları**, **gümleyiciler**, fremkit, **ateş sütunu**...” (p. 259)

It is important to mention that the “recaths, sandsnork, (stillsuit) repkit, baradye pistol, sinkchart, filtplugins, paracompass, maker hooks, thumpers and fire pillar” are fictive equipments used by the Fremens to survive on the deserts of Arrakis. They are all neologisms and their meanings and functions are explained in the “Terminology of the Imperium”. The first term, “recaths” is used to describe the tubes which transmit the humans’ waste to the stillsuit’s filters (p. 570). This neologism is translated as “devridaimler” (recirculations) by the strategy of adaptation as the translator uses an existing neologism in the TL to create the same impact. “Sandsnork” is a tool which is used to breathe in the stilltent (p. 571). As the second component of the term, “snork”, is assumed to be the abbreviation of “snorkel”, this neologism is translated literally as “kum şnorkeli” (sand-snorkel) in its Turkish version. It is understood from its definition in the “Terminology of the Imperium” that “(stillsuit) repkit” is used as an abbreviation of “(stillsuit) repair kit”. In the TT, the translator uses a similar way for recreating this neologism in the TT and abbreviates the expression “bakım kiti” (repair kit) as “bakkit”. This strategy can also be regarded as literal translation.

“Baradye pistol” is a dust gun and it marks the sand by dying it (p. 557). The translator resorts to the repetition strategy for “baradye” and does not change it in the TT while replacing “pistol” by “tabanca” (gun). The second strategy used for the translation of “pistol” can be regarded as synonymy as this expression is defined as a gun in the “Terminology of the Imperium”. It can be said that foreignizing couplets strategy is adopted for the translation of “baradye pistol” as “baradye tabancası” in the TT.

Sinkchart” is a kind of map which shows the routes between the places of refuge (p. 573). It is translated as “çanak haritası” (sink map) by the strategy of synonymy as well.

“Filt-plugin” is a filter which is worn on a nose and catches the moisture from the exhaled breath (p. 561). “Filt” is assumed to be the abbreviation of “filter” according to its definition and this neologism is recreated by the strategy of literal translation as “filtretıkacı” in the TT.

“Paracompass” is defined as a compass which shows the directions according to local magnetic anomaly (p. 569). It is translated by the strategy of foreignizing couplets as

“parapusula”: the first item is repeated as “para” and the second item is literally translated as “pusula” in the TT.

As it is mentioned above, “maker” is translated by the strategy of adaptation as “yaradan” in the TT. In this example “maker hooks” are tools in order to catch the sandworms as well as changing their directions and riding on them. “Hooks” are literally translated as “kancalar” in the TT. Thus, the domesticating couplets strategy is used for the translation of “maker hooks” as “yaradan kancaları”.

“Thumper” is a small stake which is used to call the sandworms by “thumping” sound (p. 574-575). As this loud sound is generally described as “güm” in the TL, the translator resorts to literal translation strategy and renders it as “gümleyici” in the TT.

The neologism of “fire pillar” is also recreated by the strategy of literal translation as “ateş sütunu” in the TT.

Example 15:

ST: “He felt under the front seats for the Fremkit he had hidden there, lifted a flap and slipped in the ducal signet.” (p. 187)

TT: “Elini ön koltukların altında gezdirip, sakladığı fremkiti buldu; fremkiti açıp düklük mühür yüzüğünü içine bıraktı. (p. 237)
--

“Fremkit” is a kit which is made by the Fremens in order to survive in the desert (p. 561). This neologism is transferred to the TT by the strategy of repetition.

Example 16:

ST: “Paul shook the pack beside him, hearing the two literjons of water gurgle there.” (p. 205)
--

TT: “Paul yanındaki çantayı sallayıp oradaki iki litrojen suyun gurultusunu dinledi.” (p. 259)

“Literjon” is an unbreakable container which is used to carry a liter of water (p. 566). As it can be understood, this neologism has been created from the word “liter” in the SL.

“Liter” is “litre” in Turkish and the translator recreates this neologism in a similar way in the TL. “Literjon” is rendered as “litrojen” in the TT. This translation strategy can be regarded as orthographic adaptation.

4.2.3.8. Titles of People Related to the Ecology

Example 1:

ST: “Paul lowered his voice, said: ‘Stilgar, I want sandwalkers out this night and cielagos sent to summon a Council Gathering.’” (p. 464)

TT: “Paul sesini alçaltarak ‘Stilgar, bu gece kumdayürüyenler ve silagolar gönderilsin...Divan toplantısı yapılmasını istiyorum.’” (p. 557)
--

“Sandwalkers” are Fremens who are skilled to survive on the deserts (p. 571). This neologism is reformed as “kumdayürüyenler” in the TT by the strategy of literal translation.

Example 2:

ST: “We particularly need spice drivers, weather scanners, dune men... ” (p. 87)

TT: “Özellikle ihtiyacımız olan adamlar: baharat sürücüleri, hava tarayıcıları, kumul insanları... ” (p. 116)
--

“Spice drivers” are used to describe the men who operate the movable machines on the desert (p. 574). This neologism is literally translated as “baharat sürücüleri” in the TT. The second neologism of “weather scanner” is a person who has a special skill in weather forecasting by different methods (p. 576). “Weather scanners” is literally translated as “hava tarayıcıları” in the TT. “Dune men” is another example of neologism which is used to describe the workers on the deserts of Arrakis such as sandworkers and spiceworkers (p. 560). It is literally translated as “kumul insanları” in the TT.

4.2.3.9. Figures of Speech Inspired by Ecology

Example 1:

ST: “He looked up into bird-bright eyes. ” (p. 8)
TT: “Paul başını kaldırıp kadının kuş gözüne benzeyen parlak gözlerinin içine baktı.” (p. 21)

As it can be seen, the author constantly resorts to the similes inspired by the environment in the book. The translator also tends to preserve this style and keep the ecological items in the TT. In this example, the expression of “bird-bright eyes” is used to describe the eyes of the Reverend Mother. It is translated as “kadının kuş gözüne benzeyen parlak gözleri” (her bright eyes which resemble an eye of a bird) in the TT. As the translator transfers exactly the same meaning in a different form, this strategy can be regarded as paraphrasing.

Example 2:

ST: “The inkvine scar along his jawline writhed as he turned, casting a smile across the room.” (p. 35)
TT: “Başını çevirip odanın diğer tarafındaki Paul’e gülümseyince yüzündeki mürekkep sarmaşığı izi kıvrıldı.” (p. 55)

“Inkvine” is defined as “a creeping plant native to Giedi Prime” in the “Terminology of the Imperium” (p. 567). However, in this sentence it is used to describe the beet-coloured scar on Halleck’s face which is a marker of the victims whipped by an inkvine plant. This fictive plant’s name is a neologism and its components are literally translated in Turkish as “mürekkep (ink) sarmaşığı (vine)”. This strategy can be regarded as calque since this plant does not exist in the target culture and sounds weird in the TL.

Example 3:

ST: “Long lashes concealed the lime-toned eyes. ” (p. 64)
TT: “Uzun kirpikleri limon yeşili gözlerini gizliyordu.” (p. 90).

In this example “lime-toned” is used to describe the colour of Paul’s eyes which are yellowish green. As “lime” (misket limonu) may not be known by the target culture reader, the translator renders “lime-toned” as “limon yeşili” which means “green as lemon” in the TT. It can be said that “lime” is translated as “lemon” by the strategy of absolute universalism. The translator also resorts to the strategy of explicitation in order to give the exact colour of the eyes and renders “toned” as “yeşili” (green as...) in the TT. This domestication strategy can be regarded as domesticating couplets.

Example 4:

“...and the thin set of the lips with the cranberry -coloured stain of sapho juice” (p. 97)
“...ve ince dudaklarındaki kızılcık rengi safo suyu lekelerinden anlaşılıyordu bu” (p. 129)

The expression of “cranberry-coloured” is used to describe the colour of Hawat’s lips which are dark red in the ST. “Cranberry” which is the fruit of *vaccinium macrocarpon* aiton (USDA) and native to America, is known as “turna yemişi” in Turkish. However, since this fruit is not native to Türkiye, it is not well-known in the target culture. The translator resorts to the strategy of limited universalism and replaces it with a better known ecological item “kızılcık” (*cornus mas*, cornelian cherry), which has the same colour, in the TT.

Example 5:

ST: “ <i>Look at that chicken, the Baron thought.</i> ” (p. 247)
TT: “Baron, <i>Şu korkak tavuğun haline bak, diye düşündü.</i> ” (p. 309)

In this example Baron thinks that Nefud is “chicken” as his face goes pale when Baron gets angry with him. It can be understood that “chicken” is a metaphor meaning coward in this sentence. In the TT, the translator transfers the same meaning more explicitly as he renders “chicken” as “korkak tavuk” (coward chicken). This translation strategy can be regarded as domesticating couplets since “chicken” is literally translated as “tavuk” and the word “korkak” (coward) is added to the sentence by the strategy of explicitation.

Example 6:

ST: “Get back, you wormheaded lice! ” (p. 301)
TT: “Geri çekilin, solucan kafalı bitler! ” (p. 373)

In this example Stilgar says “wormheaded lice” to the Fremens in order to insult them. As this is a Fremen way of insulting, it can be regarded as a neologism (The language of Fremens is fictive and it is full of neologisms). The translator opts for the strategy of literal translation for this example and renders it as “solucan kafalı bitler” in the TT.

Example 7:

ST: “‘Isn’t a one of those sandlice I cannot handle,’ Stilgar said.” (p. 311)
TT: “‘O kumpirelerinden hiçbiri bana karşı gelemez,’ dedi Stilgar.” (p. 383)

As it can be understood “sandlice” is another neologism which is used for insulting in Fremen language. Although “lice” is translated literally in example 6, it is translated as “pireler” (fleas) in this example. While these two wingless parasites are similar to each other, they are not the equivalents. The translation strategy used in this neologism can be regarded as domesticating couplets since “sand” is literally translated as “kum” and “lice” is rendered as “pireleri” by the strategy of componential analysis.

Example 8:

ST: “We’re like rabbits in a cage if a patrol catches us here.” (p. 309)
TT: “Devriyeler bizi yakalarsa kafesteki kuşlara döneriz.” (p. 381)

In this example the simile of “rabbits in a cage” is used to express their vulnerability in the presence of a patrol. This expression is translated as “kafesteki kuşlar” (birds in a cage) in the TT. This choice of domestication can be due to the connotational differences of these animals between Turkish and English languages. As the “birds in a cage” are generally attributed to being helpless in the target culture, the translator may have chosen it. Thus, the translation strategy used in this example can be regarded as adaptation.

Example 9:

ST: “He could’ve filled your mind full of the coddle and you could’ve bird-talked it to us, hoping to make a false way among us.” (p. 320)

TT: “Belki de bizi kandırmayı umarak o sözleri papağan gibi tekrarladın. ” (p. 393)
--

In this example Jamis blames Jessica for repeating Stilgar’s words. The expression of “bird-talked” is used to refer to this act of repeating like a bird. This simile is translated as “papağan gibi tekrarladın” (repeated like a parrot) in the TT. As it can be seen “bird” is replaced with “papağan” (parrot) in its Turkish version. “Papağan gibi tekrarlamak” is an idiom used for this kind of situations in the TL. Thus, the translator transfers the figures of speech while preserving its ecological value by using the strategy of adaptation in the TT.

Example 10:

ST: “ <i>He was warrior and mystic, ogre and saint, the fox and the innocent...</i> ” (p. 503)

TT: “ <i>O bir savaşçı ve gizemciydi; canavar ve azizdi; kurnaz ve masumdu...</i> ” (p. 602)

This sentence of Princess Irulan refers to the contradictory character traits of Muad’Dib. As it can be understood that “fox” is used as an opposite of innocent in the ST. The translator opts for the strategy of componential analysis and translates “fox” as “kurnaz” (sly) in the TT. This choice of domestication may help readers to understand the meaning of this trait better while causing a loss in the ecological value of the sentence.

Example 11:

ST: “...as he listened to a faint sound – the drip-drip-drip of water” (p. 5)
--

TT: “O hafif bir sesi, şıp şıp damlayan suyun sesini dinlerken...” (p. 17)

In this example the onomatopoeia of “drip-drip-drip” is rendered as “şıp şıp damlayan” (dribbling as drip drip) in the TT. This domestication strategy can be regarded as adaptation since this is the Turkish way of expressing the sound of dribbling water. The

translator can successfully transfer this ecological item in the TT while preserving its literary value.

CHAPTER 5

RESEARCH FINDINGS AND DISCUSSION

This study aims to investigate how the nature of the ST, is recreated in the TT in SF literature within the framework of eco-translation. To this aim, the translation strategies adopted for the translation of ecological terms in *Dune* by the translator, Dost Körpe, have been examined descriptively in accordance with the strategies of Venuti (1995), Newmark (1988) and Aixelà (1996) adapted by Kansu-Yetkiner et al. (2018) for the translation of ecological elements. Additionally, the strategy of hyponymy (Chesterman, 1992, p. 102) is found to be necessary for the analysis of the ecological terms (hyponyms) which have more specific meaning than the original terms. The strategies of intratextual/extratextual gloss and loan words are excluded in the study, as no explicit examples of them are detected by the researcher in the TT.

In chapter 4, firstly 126 examples which include 173 ecological expressions have been selected randomly from *Dune*. In the case of the recurrent terms, the first examples which are contextually meaningful have been chosen for the study. Secondly, these examples have been divided into the ecological categories such as flora, fauna, natural formations, land forms, names of the places, climate and weather conditions, geological protective outerwear and gears, titles of people related to the ecology and the figures of speech inspired by the ecology. The ecological terms and their Turkish translations have been analyzed thoroughly. Finally, the translation strategies adopted by the translator in the TT have been explained in detail by the researcher.

In this part of the study, the translation strategies adopted for the ecological terms in each category will be examined further by providing quantitative data through figures and tables. This data will provide insight to uncover the strategies which have been most frequently used and determine whether the translator prefers literal translation, domestication or foreignization method for each ecological category. This data will also be used to evaluate the extend to which the translator is ecologically sensitive within the framework of eco-translation.

	ST TERM	TT TERM	TRANSLATION STRATEGY
1	spice	baharat	literal translation
2	geriatric spice	yaşlanma geciktirici baharat	paraphrasing
3	melange	melanj	orthographic adaptation
4	pundi rice	pundi pirinci	foreignizing couplets (repetition+lit. translation)
5	saguaro	saguaro	repetition
6	burro bush	eşekçalısı	calque
7	date palm	hurma ağacı	domesticating couplets (lit.translation+abs.universalism)
8	sand verbena	kum mineçiçeği	calque
9	evening primrose	eşekotu	literal translation
10	barrel cactus	fiçi kaktüsü	literal translation
11	incense bush	tütsü çalısı	calque
12	smoke tree	sarı ağaç	domesticating couplets (com. analysis+ lit. translation)
13	creosote bush	katranruhu çalısı	calque
14	poverty grasses	yoksullukotları	calque
15	mimosa	mimoza	literal translation
16	quince	ayva ağacı	literal translation
17	sondagi	sondagi	repetition
18	planiscenta	planiscenta	repetition
19	akarso	akarso	repetition
20	tree of portyguls	portakal ağacı	literal translation

21	spiked paintbush	dikenli fırça çalıkları	domesticating couplets (lit.translation+lim.universalism)
22	mish-mish	mişmiş	orthographic adaptation
23	palm trees	hurma ağacı	hyponymy
24	fern tree	eğreltiotu	limited universalism
25	bushes	çalılar	literal translation
26	cacti	kaktüsler	literal translation
27	tiny clumps of leaves	ufak yaprak öbekleri	literal translation
28	seaweed	denizyosunu	literal translation
29	pansies	hercaimenekşeler	literal translation
30	daisies	papatyalar	literal translation

Table 1: The ecological terms and translation strategies in the category of flora

As seen in Table 1, there are 30 ecological terms in this category. Literal translation is the most frequently used strategy with 12 examples whereas the strategy of calque is the second (5 examples). The translator tends to adopt literal translation strategy when the plant in the ST, exists in the target culture. However, when the ecological term does not exist in the target culture, thus, there is no equivalent of it in the TL, this may constitute a challenge for the translation. According to the Table 1, in such cases, the first preference is calque, as long as the components of the ecological terms are individually meaningful in the TL. As, the desert plants native to America such as "burro bush", "sand verbena", "creosote bush", "poverty grass" and "incense bush" are not found in Türkiye, their components are translated word-for-word into Turkish. The strategy of repetition is used in 4 examples, particularly for the translation of fictive plants, namely neologisms such as "sondagi", "planiscenta", and "akarso" which are also meaningless in the SL. "Portygul" and "mish-mish" which are also neologisms, are translated by the strategy of orthographic adaptation, otherwise Turkish readers may have difficulty in pronouncing them. Paraphrasing, limited universalism and hyponymy are the least frequently used strategies for the translation of flora in the TT. It is notable that the omission strategy is not adopted

in the examples so it is possible to state that the translator is sensitive about the ecological diversity during the translation of this category.

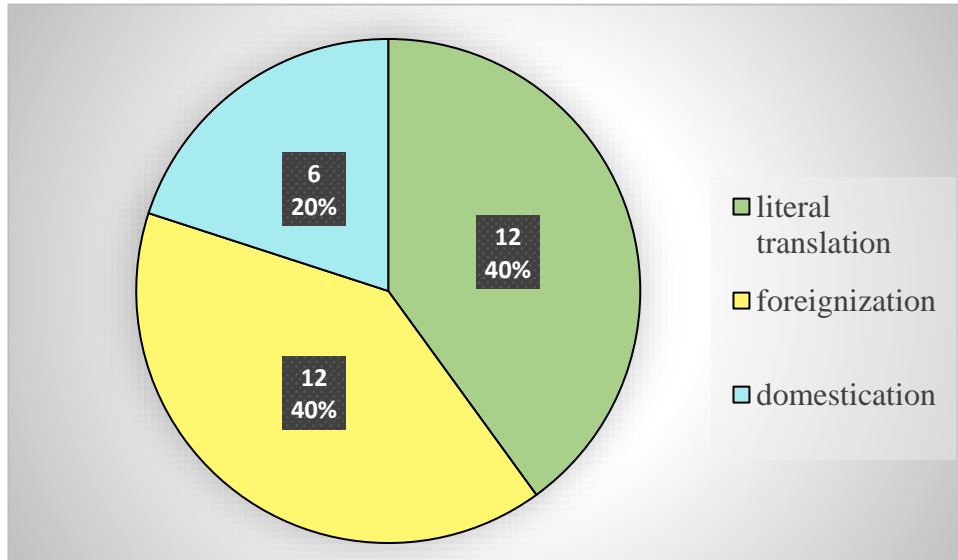


Figure 3: The distribution of translation methods for the flora

According to the Figure 3, the predominancy of the literal translation and foreignization strategies shows that the translator adopts source text oriented approach and tries to preserve the ecological terms in the category of flora in the TT. The tendency towards using the foreignization strategies for the translation of neologisms can be due to the fact that the definitions of these fictive plants are already provided in the "Terminology of the Imperium" in both the ST and TT. For this reason, the translator does not need to adopt domesticating strategies to bring them closer to the readers for the intelligibility of these words. Thus, the strangeness of these neologisms which is necessary for SF works, is preserved in the TT as well. While the domestication strategies of hyponymy (date palm) and limited universalism (fern tree) are used to make the ecological terms familiar to the readers, it is likely that they cause loss in the meanings of ecological terms and harm the ecological sensitivity of the text.

	ST TERM	TT TERM	TRANSLATION STRATEGY
1	sandworms	kumsolucanları	literal translation
2	Shai-hulud	Şeyh hulud	orthographic adaptation
3	Maker	Yaradan	adaptation
4	bug-hustling sounds	böcek sesleri	domesticating couplets (lit.translation+omission)
5	cielago	silago	orthographic adaptation
6	a line of hawks (perched there)	yan yana tünemiş şahinler	paraphrasing
7	silver-gray curve	gümüşi gri, halkalı bir yaratık	domesticating couplets (lit.translation+com.analysis)
8	muad'dib	Muad'Dib	repetition
9	garvarg	garvarg	repetition
10	schlag	schlag	repetition
11	flock	sürü	literal translation
12	beaks	gagalar	literal translation
13	claws	pençeler	literal translation
14	brown-winged bats	kahverengi kanatlı yarasalar	literal translation
15	sparrows	serçeler	literal translation
16	wolf	kurt(lar)	literal translation

Table 2: The ecological terms and translation strategies in the category of fauna

In Table 2, there are 16 ecological expressions in the category of fauna. The literal translation is the most frequently adopted strategy with 7 examples. The animals which exist in the real world such as "hawk", "brown-winged bat", "sparrow" and "wolf" and their body parts such as "beaks" and "claws" have been translated by the literal translation strategy. The fictive animals of "muad'dib", "garvarg" and "schlag" which are also neologisms, are meaningless in the SL. They have been preserved in the TT and their definitions are given in the "Terminology of the Imperium". The strategy of orthographic adaptation has been used for the translation of other two neologisms, "Shai-hulud" and

"cielago", since their original transcriptions are not suitable to Turkish pronunciation. The only meaningful neologism in this category is the fictive animal called "sandworm" and it has been literally translated in the TT. The strategies of domesticating couplets and paraphrasing have been adopted for the ecological expressions which are comprised of two or more words such as "bug hustling sounds", "a line of hawks" and "silver gray curve".

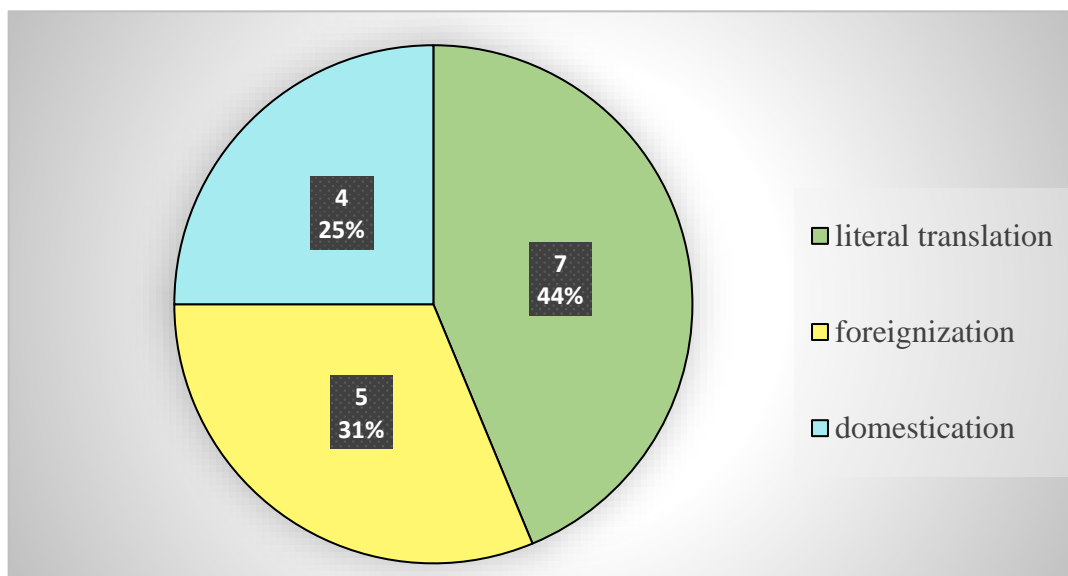


Figure 4: The distribution of translation methods for the fauna

Figure 4 illustrates the translator's approach while translating the ecological terms in the category of fauna. It can be said that the distribution on the figure is similar to the one in the previous category, flora. While the literal translation is adopted in almost half of the examples, foreignization is the second most frequently used method. As it is explained above, this is due to the abundance of fictive animals which are also tried to be preserved as neologisms in the TL. Similar to the fictive plants, as their definitions exist in the "Terminology of the Imperium", this approach is helpful for the readers' comprehension of the TT. It is clear that the translator tends to avoid domesticating the ecological terms in the category of fauna as long as the readers can understand them by means of their equivalents or the definitions provided in the book. This approach of the translator confirms his awareness of ecological diversity.

	ST TERM	TT TERM	TRANSLATION STRATEGY
1	waters	denizler	hyponymy
2	wetness	su	componential analysis
3	body moisture	vücut suları	componential analysis
4	a thimbleful of moisture	bir yüksük dolusu su	domesticating couplets (lit. translation+com. analysis)
5	fractional traces of moisture	bir damla su	componential analysis
6	water starvation	susuzluk	componential analysis
7	open water	deniz	hyponymy
8	waves	dalgalar	literal translation
9	flowing water	nehirler, göller	domesticating couplets (hyponymy+com. analysis)
10	reclaimed water	vücudundan geri kazanılmış su	domesticating couplets (explicitation+lit. translation)
11	cascade	tepesine akan kumlar	paraphrasing
12	boulders	kayalar	absolute universalism
13	pea gravel or flaked rock	taşlar	absolute universalism
14	pea sand	kum topakları	componential analysis
15	grit	kum taşları	literal translation
16	dust or gossamer powder	irili ufaklı tozlar	paraphrasing
17	drum sands	kumdavulları	literal translation
18	sand rivulet	kumların kayarak derecikler halinde akması	paraphrasing
19	runnel(s)	dere	literal translation
20	barren rock	çıplak kaya(lar)	domesticating couplets (synonymy+lit. translation)

21	dunes	kumullar	literal translation
22	Al-Lat	El-Lât	orthographic adaptation
23	second moon	ikinci ay	literal translation
24	first moon	ilk ay	literal translation
25	constellation	takımyıldızı	literal translation
26	tail	takımyıldızının kuyruğu	domesticating couplets (explicitation+lit.translation)
27	a shower of meteors	meteorlar	domesticating couplets (omission+lit.translation)
28	a wide patch of dust- blurred stars	toz sisinin ardında donuk donuk parlayan yıldızlar	domesticating triplets (omission+explicitation+paraphrasing)

Table 3: The ecological terms and translation strategies in the category of natural formations

In Table 3, there are 28 ecological expressions comprised of 10 water-related terms, 11 sand/rock related terms and 7 celestial objects. The most frequently used strategies are the literal translation (8 terms), domesticating couplets/triplets (7 terms) and componential analysis (4 terms) respectively. As seen in the table, only one of the terms, which is a neologism (Al-Lat), is translated through orthographic adaptation strategy. The strategy of repetition is not used in this category.

It is significant that the translator has avoid using the literal translation for the expressions such as "water" and "moisture" in the TT although they have equivalents in the TL. He tends to render the expressions referring to the large bodies of water such as "waters", "flowing water" and "open water" by using their hyponyms. When one or two of the hyponyms are used instead of the exact equivalent of the term, this may cause an ecological loss as the other hyponyms of the words have not been included. Another obscurity occurs due to the replacing of "moisture" and "wetness" with "su" (water) in the TT. It is clear that the author uses these expressions in order to emphasize the value of every traces of water which shows his over sensitivity about the issue. The translator opts for the componential analysis strategy and translates them as "su" (water) in the TT.

As a result, this choice of translation may bring into doubt whether the TT is ecologically sensitive enough or not.

The abundance of the expressions used to describe the texture or the feature of the desert ground such as "pea sand", "pea gravel", "gossamer powder", "sand rivulet", "boulders" etc. in the novel, constitutes a challenge for the translation. As there is only one desert in Türkiye (Karapınar Çölü), the TL does not have such a variety of words related to the desert or sand. It can be seen in Table 3 that the translator opts for the domestication strategies of componential analysis, absolute universalism and paraphrasing when it is not possible to render these expressions by literal translation.

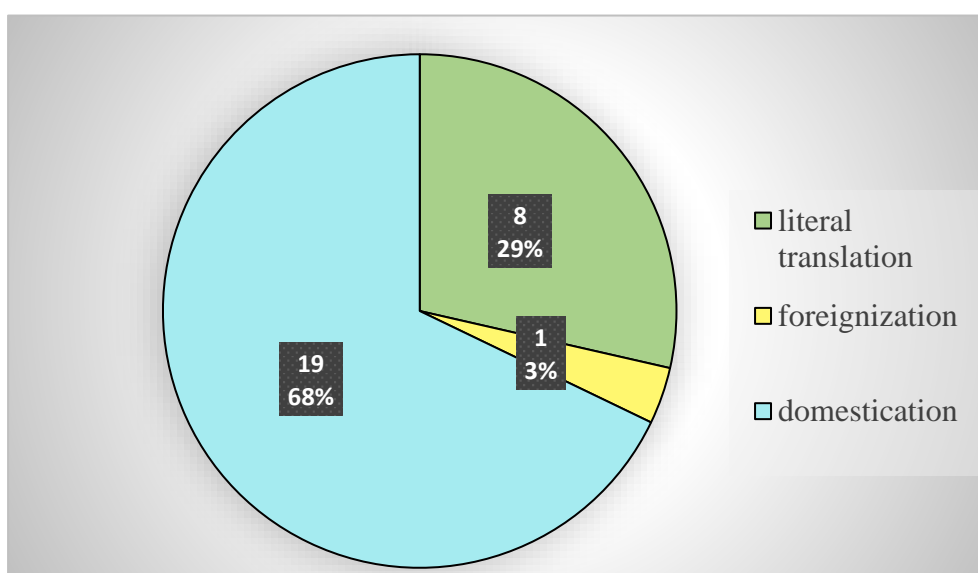


Figure 5: The distribution of translation methods for the the natural formations

The literal translation is adopted for the translation of most of the celestial objects. As explained above, especially for describing the desert/sand-related expressions, the translator's tendency towards the strategies of domestication is noticeable in Figure 5. For the translation of the neologisms in this category, it can be said that "drum sand" has been literally translated whereas "Al-Lat" has been translated by the foreignization method for in this category.

	ST TERM	TT TERM	TRANSLATION STRATEGY
1	desert	çöl	literal translation
2	open desert	çölde açık havza	explicitation
3	wasteland	çorak topraklar	synonymy
4	graben	graben	literal translation
5	sink	çanak	literal translation
6	pan	pan(lar)	repetition
7	salt pan	tuz çukuru	domesticating couplets (l. translation+ synonymy)
8	cliffs	-	omission
9	immense rock uplifting	devasa dağlar	synonymy
10	basins	kutuplar	componential analysis
11	blind canyons	kör kanyonlar	literal translation
12	a dim lip of surrounding rock	etraftaki kayalıkların donuk dorukları	domesticating couplets (literal translation+synonymy)
13	rock escarpment	yükselen kayalık	paraphrasing
14	rock overhang	kaya çıkıntısı	literal translation
15	outcroppings	uçurumlar	componential analysis
16	rock alcove	içinde bulunduğu girintinin taş duvarları	domesticating couplets (explicitation+ paraphrasing)
17	cave complex	mağara kompleksi	literal translation
18	cavern	mağara	absolute universalism
19	crevasses	yarıklar	literal translation
20	fissure	yarık	synonymy
21	vestibule	-	omission
22	ringwall(s)	havzanın halka şeklindeki duvarı	domesticating couplets (paraphrasing + explicitation)
23	chasms	uçurumlar	componential analysis

Table 4: The ecological terms and translation strategies in the category of land forms

The topographic features of the fictive planet, Arrakis, which constitute its setting, are described meticulously in the book and some of the ecological expressions used to describe these features are near synonyms. As seen in Table 4, the translator resorts to various strategies of translation in order to describe this environment to the readers. The literal translation is the most frequently adopted strategy with 7 examples whereas the couplets is the second with 4 examples. The strategies of synonymy and the componential analysis are also used more than the other strategies (repetition, omission, paraphrasing and absolute universalism). The strategy of omission is used for the translation of two expressions: "cliffs" and "vestibule".

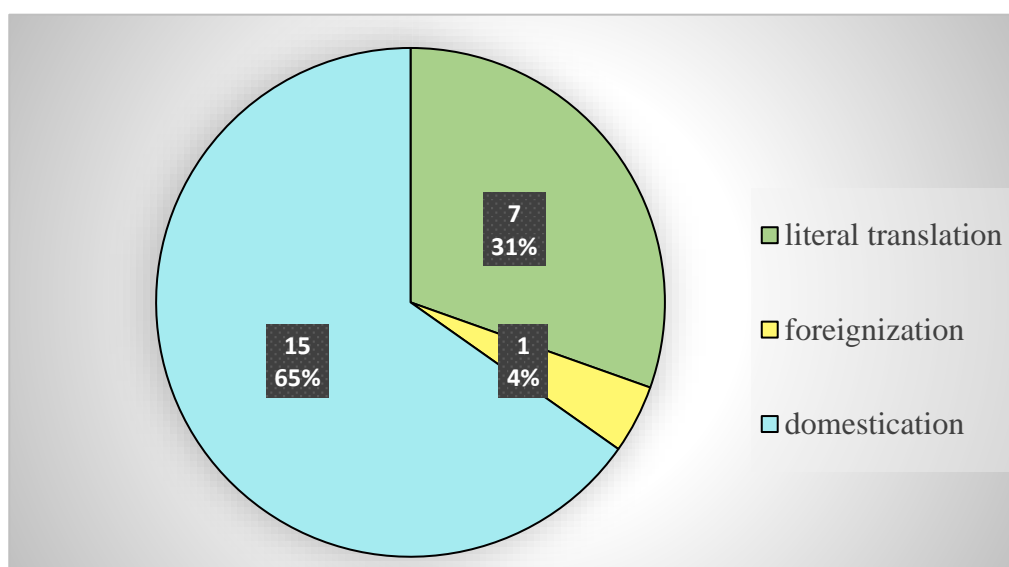


Figure 6: The distribution of translation methods for the land forms

It is clear from the Figure 6 that the domestication strategies are adopted more than the foreignization when the TL is lack of the exact equivalent of the terms describing the land forms. For instance, for the translation of "rock escarpment", the domestication strategy of paraphrasing has been adopted since the literal translation is not possible. "Rock" and "escarpment" are two different ecological terms whose denotations are so close and the equivalent of this expression in the TL would look like repeating the synonyms in a sentence (rock: kaya, escarpment: kayalık).

Despite the fact that the Turkish version of the novel can recreate the natural surrounding to a large extent for the readers, the choice of the strategies could have been more

ecologically sensitive in some of the examples. For instance the choice of the strategy of omission for "cliffs" and "vestibule" has caused an ecological meaning loss in those sentences. Another example for this can be using the componential analysis for the expressions such as "basin", "outcropping" and "chasm" as their connotations have changed in the TT due to the translation. The image of the Arrakis' natural surrounding evoked on the readers' mind in the target culture is not exactly the same as the one in the source culture.

	ST TERM	TT TERM	TRANSLATION STRATEGY
1	Arrakis	Arrakis	repetition
2	Poritrin	Poritrin	repetition
3	Chusuk	Chusuk	repetition
4	funeral plains	Cenaze Ovaları	literal translation
5	Hiereg	Hiereg	repetition
6	Imperial Ecological Testing Stations	İmparatorluğun Ekolojik Test İstasyonları	literal translation
7	Desert Botanical Testing Station	Çöl Botanik Test İstasyonu	literal translation
8	Shield Wall	Kalkan Duvarı	literal translation
9	Plaster Basin	Alçı Havzası	literal translation
10	Mushtamal	Müştemal	orthographic adaptation
11	Harg Pass	Harg Geçidi	foreignizing couplets (repetition + lit. translation)
12	Habbanya Ridge	Habbanya Sırtı	foreignizing couplets (repetition + lit. translation)
13	Tuono Basin	Tuono Havzası	foreignizing couplets (repetition + lit. translation)
14	Rimwall West	Batı Kenar Duvarı	literal translation

Table 5: The ecological terms and translation strategies in the category of the names of the places

According to the Table 5, literal translation is the most frequently used strategy with 6 examples in this category. It is clear that the translator has tendency to render every meaningful unit forming the names of the places through literal translation in Turkish. In the case that the name of the place is comprised of a loaded proper name (meaningful in the ST) with a land form such as "Shield Wall" and "Plaster Basin", the literal translation strategy is preferred for both of the components. For the names of the places which have been comprised of a conventional proper name (meaningless in the ST) with a land form such as "Harg Pass", "Habbanya Ridge" and "Tuono Basin", the foreignizing couplets strategy is adopted. The first component of the expression is repeated in the TT while the second component (the land form) is literally translated. For the Fremen terms, "hierreg" has been translated through the repetition strategy while "mushtamal" has been translated through the orthographic adaptation strategy in the TT.

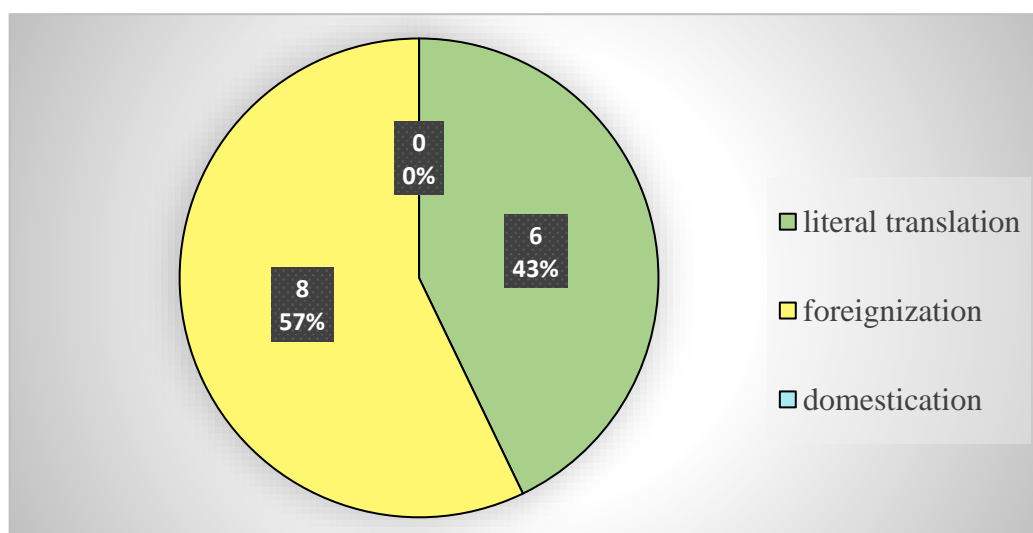


Figure 7: The distribution of translation methods for the names of the places

As seen in Figure 7, the domestication method has not been adopted for the translation of the names of the places. The translator has tended to adopt the literal translation for the names which are meaningful when translated literally in the TL. For the meaningless names and the neologisms, foreignization method has been used.

	ST TERM	TT TERM	TRANSLATION STRATEGY
1	Coriolis force	Coriolis gücü	foreignizing couplets (repetition + literal translation)
2	sand tides	kumgelgitleri	literal translation
3	dust haze	toz bulutu	componential analysis
4	burning places	sıcak diyarlar	domesticating couplets (com. analysis+hyponymy)
5	whirlwinds	kasırgalar	componential analysis
6	open	açık havza	explicitation
7	an eider wind	hafif bir esinti	domesticating couplets (omission+paraphrasing)
8	mixings of turbulence	rüzgarlar	componential analysis
9	vortex	girdap(lar)	literal translation
10	maelstrom	girdap	absolute universalism
11	sirocco	sıcak rüzgar	absolute universalism
12	mother storm	büyük bir fırtınada	domesticating couplets (adaptation+lit. translation)
13	a great grandmother of a storm	çok ama çok büyük bir fırtına	domesticating couplets (adaptation+lit. translation)
14	El-Sayal	El-Seyl	orthographic adaptation
15	Sihaya	Sihaya	repetition
16	heat devils	-	omission
17	dry lightning	şimşek	domesticating couplets (omission+literal translation)

Table 6: The ecological terms and translation strategies in the category of the climate and weather conditions

As seen in Table 6, there are 17 ecological terms in this category and the domesticating couplets is the most frequently used translation strategy with 5 examples. This result reveals the need for using more than one strategy in some of the examples as the target culture are not fully familiar with the desert climate and the TL does not have exact

equivalents for these terms. It would not be wrong to say that the use of the strategy of componential analysis in the examples of "dust haze", "whirlwinds" and "mixings of turbulence" has caused ecological meaning loss as they are not translated by their exact equivalents or near synonyms although they can roughly describe the weather conditions for the readers in the TT. The choice of the strategy of absolute universalism in the translations of "maelstrom" and "sirocco" may constitute a problem for the ecological diversity as the terms "girdap" and "sıcak rüzgar" are not as specific as the original terms. It is beyond any doubt that the biggest threat to the ecological awareness occurs when the source item is deleted completely in the TT. The omission of the "heat devils" is the most explicit example of this in this category.

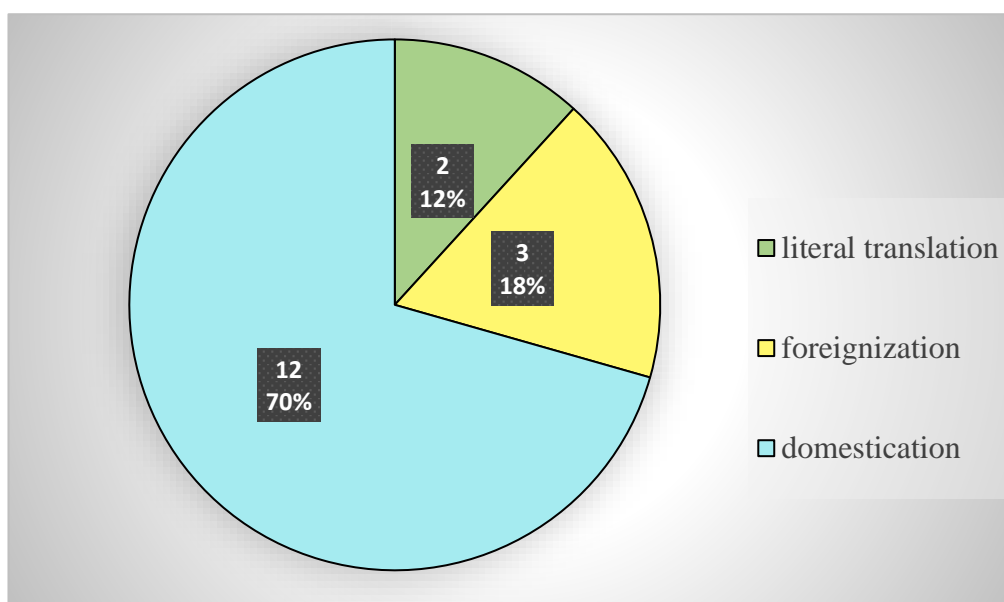


Figure 8: The distribution of translation methods for the climate and weather conditions

This category includes terms about the desert climate which is not a well-known topic in the target culture. With an aim to make these ecological terms understandable to the readers, the translator mainly adopts the domestication strategies for their translation into Turkish as seen in Figure 8. The literal translation has been preferred for the conditions such as "sandtides" and "vortex" which are well-known in the target culture and have exact equivalents in the TL. The foreignization strategies have been used for the translation of neologisms: "El-Sayal" and "Sihaya" in the TT.

	ST TERM	TT TERM	TRANSLATION STRATEGY
1	stillsuit(s)	damıtıcı-giysi	domesticating couplets (lit.translation+abs.universalism)
2	stilltent	damıtıcı çadır	literal translation
3	wind-traps	rüzgar kapanları	literal translation
4	precipitators	su tutucular	domesticating couplets (lit. translation and explicitation)
5	condenser	yoğunlaştırıcılar	literal translation
6	water seal(s)	nem geçirmez	componential analysis
7	sandcrawler	kum sürüngenı	literal translation
8	harvester	hasatçı	literal translation
9	spice factories	baharat fabrikası	literal translation
10	shoulder seals	nem geçirmez omuzluklar	domesticating couplets (paraphrasing+explicitation)
11	heat-exchange filaments	ısı alışverişı sağlayan ince teller	paraphrasing
12	salt precipitators	tuz çökelticiler	literal translation
13	catchpockets	toplayıcı-keseler	synonymy
14	static compaction tool	statik sıkıştırma cihazı	literal translation
15	catchtube	hortum	absolute universalism
16	nose plug	burun tıkacı	literal translation
17	dew collector(s)	çiy biriktirici	literal translation
18	watertube	su tüpü	literal translation
19	recaths	devridaimler	adaptation
20	sandsnork	kum şnorkeli	literal translation
21	(stillsuit) repkit	bakkit	literal translation
22	baradye pistol	baradye tabancası	foreignizing couplets (repetition+lit. translation)
23	sinkchart	çanak haritası	synonymy
24	filt-plugs	filtretikaç	literal translation

25	paracompass	parapusula	foreignizing couplets (repetition+lit. translation)
26	maker hooks	yaradan kancaları	domesticating couplets (adaptation+lit.translation)
27	thumper(s)	gümleyici	literal translation
28	fire pillar	ateş sütunu	literal translation
29	Fremkit	Fremkit	repetition
30	literjon	litrojen	orthographic adaptation

Table 7: The ecological terms and translation strategies in the category of the geological / ecological protective outerwear and gears

In Table 7, there are 30 ecological terms about the geological/ecological outerwear and gears. These are fictive equipments used to adapt to the extreme climate of the desert planet. As adopted for the translation of most of the fictive components in the book, the literal translation is the most frequently used strategy with 16 examples. The domesticating couplets is the second strategy with 4 examples in this category. As seen in table 7, the translator has tried to translate each term as the omission strategy has not been adopted in this category.

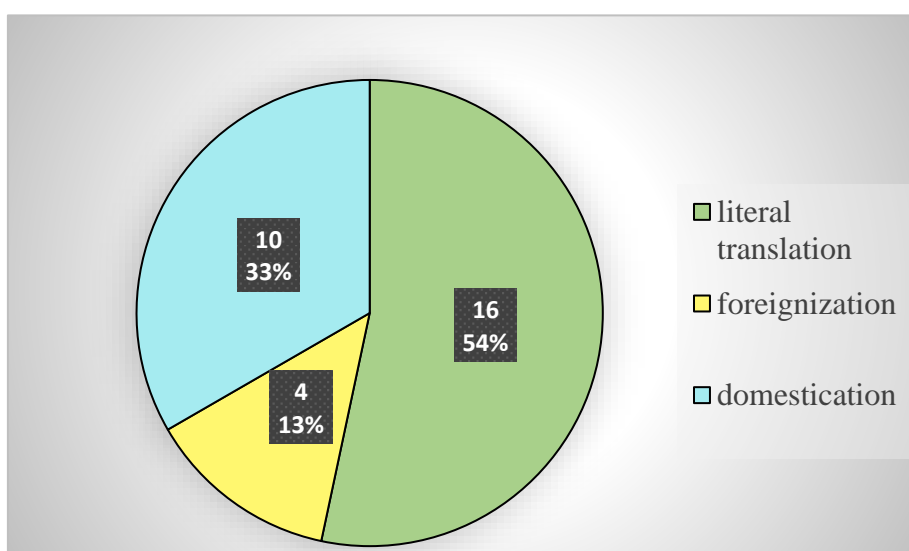


Figure 9: The distribution of translation methods for the ecological protective outerwear and gears

Figure 9 illustrates that more than the half of the terms in this category have been translated through the literal translation in the TT. This approach of translator may recreate these neologisms by preserving their strangeness in the TT. It does not constitute a problem for the understanding of the readers as their definitions and functions have been described in the "Terminology of the Imperium" in both the ST and TT. As these neologisms are mostly comprised of two words, it seems that the translator needed to resort to more than one strategy for their translation and resorts the the strategies of couplets. The domestication method have been adopted in 33% of the examples. It can be said that the translator's approach is mostly ecologically sensitive during the translation of this category.

	ST TERM	TT TERM	TRANSLATION STRATEGY
1	sandwalkers	kumdayürüyenler	literal translation
2	spice drivers	baharat sürücüleri	literal translation
3	weather scanners	hava tarayıcıları	literal translation
4	dune men	kumul insanları	literal translation

Table 8: The ecological terms and translation strategies in the category of the titles of people related to the ecology

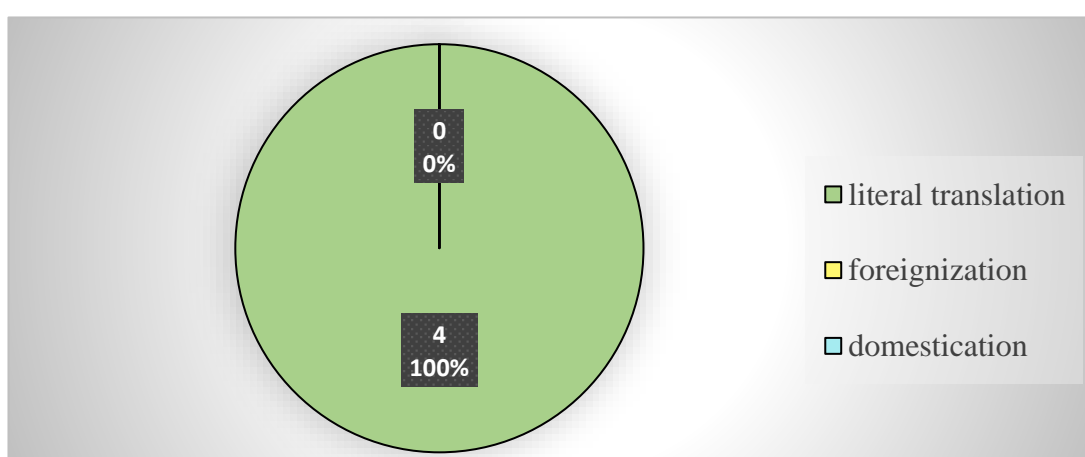


Figure 10: The distribution of translation methods for the titles of the people related to the ecology

As seen in Table 8 and Figure 10, the titles of the people are neologisms and they have been literally translated into Turkish. By this way, the strangeness of these expressions have been preserved along with their ecological values in the TT.

	ST TERM	TT TERM	TRANSLATION STRATEGY
1	bird-bright eyes	kadının kuş gözüne benzeyen parlak gözleri	paraphrasing
2	inkvine	mürekkep sarmaşığı	calque
3	lime-toned	limon yeşili	domesticating couplets (abs.universalism+explicitation)
4	cranberry (coloured)	kızılçık (renği)	limited universalism
5	chicken	korkak tavuk	domesticating couplets (explicitation+lit. translation)
6	wormheaded lice	solucan kafalı bitler	literal translation
7	sandlice	kumpireleri	domesticating couplets (lit. translation+com. analysis)
8	rabbits (in a cage)	(kafesteki) kuşlar	adaptation
9	bird-talked	papağan gibi tekrarladın	adaptation
10	fox	kurnaz	componential analysis
11	drip-drip-drip (of water)	şıp şıp damlayan (suyun sesi)	adaptation

Table 9: The ecological terms and translation strategies in the category of figures of speech inspired by the ecology

As seen in Table 9, there are 11 ecological expressions in this category. These figures of speech include similes, metaphors and onomatopoeias in the ST. The domesticating couplets and adaptation are the most frequently adopted strategies with 3 examples for each. The adaptation strategy which is one of the most preferred strategies for the culture specific items, can constitute a problem for the ecological diversity when the source term

is completely replaced in the TT (bird-papağan, rabbits-kuşlar). The examples of the limited universalism (cranberry-kızılcık) and hyponymy (lime-limon) above may also constitute a problem for the awareness of the ecological diversity as the translator does not provide the exact equivalent of the ecological term in the target culture. The strategy of paraphrasing can transfer the ecological expressions successfully unless one of the components are omitted or changed in the TT.

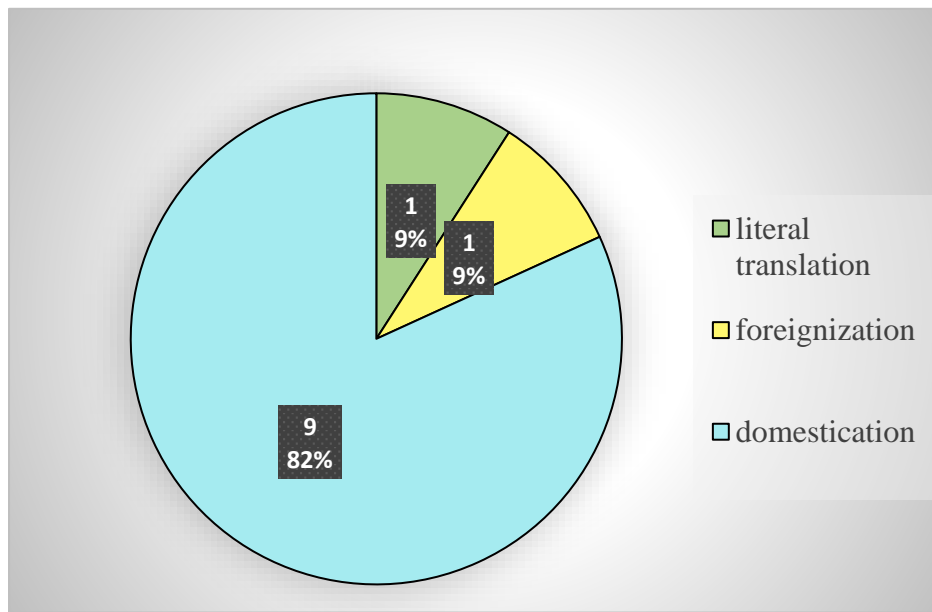


Figure 11: The distribution of translation methods for the figures of speech inspired by the ecology

It is notable that the ecological value of the expressions are tried to be preserved in the figures of speech as none of them have been omitted in the TT. However, as seen in Figure 11, the domestication method has been resorted on a large scale in order to make their meaning clear in the TL. The literal translation is adopted only for the neologism of "wormheaded lice".

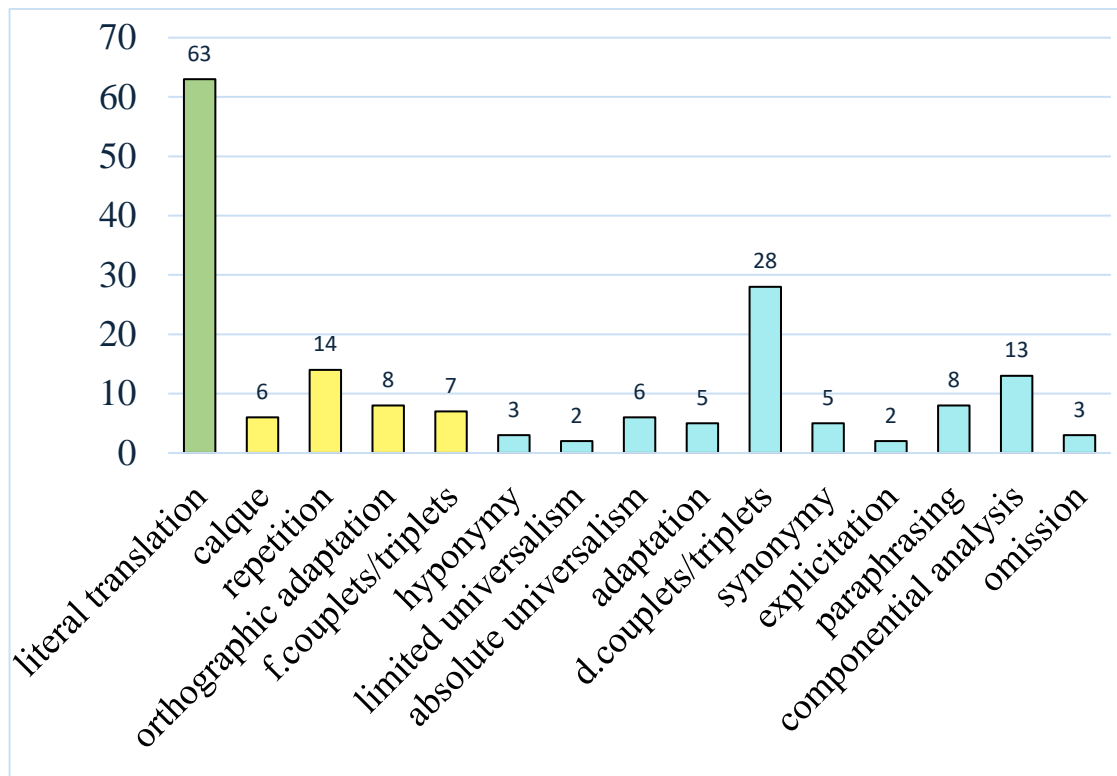


Figure 12: The Overall Distribution of the Translation Strategies Adopted for the Ecological Terms in *Dune*

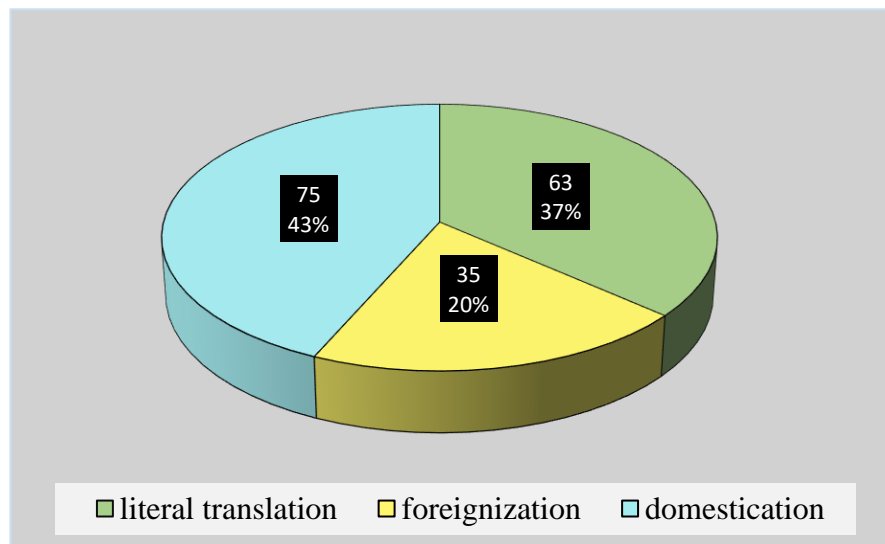


Figure 13: The Overall Distribution of the Translation Methods for the Ecological Terms in *Dune*

CONCLUSION

This study has aimed to provide an insight into the challenges of eco-translation in SF literature and investigate how the nature of the ST, has been recreated by the translator in the TT in SF literature. The translator's role in raising ecological awareness of the target culture has also been investigated.

In this chapter, the research questions stated in the introduction part of the study will be answered as follows:

1-What might be the challenges of translating ecological terms in *Dune*?

It is beyond any doubt that translating a natural surrounding with all its ecological components is not an easy task. But, in the case of *Dune*, the situation is even more complicated, as the author Frank Herbert has meticulously described a fictive desert planet called Arrakis. The novel is full of details from the types of plants to the ecological protective equipments. All of these expressions have ecological value and need to be translated diligently in the TL in order to preserve the ecological diversity and raise ecological awareness through the translation.

According to the findings, it is possible to say that as this is a SF work, the biggest challenge is translating the fictive ecological expressions, namely the neologisms in *Dune*. Some of these neologisms originate from different languages such as Spanish, Arabic and other Middle Eastern languages and recreating them by preserving their strangeness in the TL is a really hard work along with transferring the ecological value of the ST. In this regard, the categories of "ecological protective outerwear and gears", "the titles of people related to the ecology" and "figures of speech inspired by the ecology" are added for the translation analysis of the ecological items in this study.

Secondly, the expressions which describe the natural formations, land forms and the climate&weather conditions of the planet pose a challenge for the translation. The main reason may be the fact that the target culture is not familiar with the vocabulary about the deserts. In the ST, detailed depictions of the desert topography and the sand/rock types

have been provided by near-synonyms in most of the examples. As the TL does not have specific vocabulary for the desert-related terms as much as the SL, the literal translation seems nearly impossible in some of the examples.

2-Which translation strategies does the translator adopt for the ecological terms?

As analyzed in Chapter 4 and 5 in detail, the strategies adopted for the translation of ecological terms in *Dune* can be summarized as follows:

For the translation of the ecological terms in the categories of flora and fauna, the literal translation is the most frequently used strategy. However, when there is not an equivalent term in the TL for the ecological term concerned, various domestication strategies of couplets, paraphrasing, limited universalism and hyponymy have been adopted. For the neologisms in these categories, the literal translation and calque have been preferred if the source term is meaningful when translated word-for-word. Provided that the neologism is meaningless, the foreignization strategies of repetition, orthographic adaptation and foreignizing couplets have been used.

The translation strategies used for the ecological terms in the category of the names of the places, are similar to the categories of flora and fauna. It is observed that the translator has tended to adopt the literal translation for the names which are meaningful when translated literally in the TL. For the meaningless names (conventional proper names) and the neologisms, foreignization strategies of repetition, orthographic adaptation and the foreignizing couplets have been used. For the ecological terms in the categories of natural formations, land forms, and climate/weather conditions, the domestication strategies have been adopted mostly due to the reason that the TL does not have any specific vocabulary for them.

As for the titles, it is possible to say that all the titles related to ecology which are attributed to people in the novel are translated literally. The terms in the category of ecological protective outerwear and gears, mostly consist of neologisms. As mentioned before, the definitions and the functions of these words are provided in the "Terminology of the Imperium" and this may be the reason behind the translator's priority of preferring

the literal translation strategy while rendering them to the TL. However, when it is not possible to render them word-for-word to the TL, or when it is probably thought that the literal translation may cause obscurity in the TT, it seems that different strategies such as domesticating couplets, absolute universalism, adaptation, orthographic adaptation and the repetition have been adopted.

The last ecological category, the figures of speech inspired by ecology, can be considered different than the others due to its literary and cultural significance. As this category includes the examples of ecological similes, metaphors and onomatopoeias, it is not only important but also difficult to translate them by using terms sounding natural and literary in the TL while preserving their ecological value. According to the data in chapter 5, 82% of the examples in this category have been translated through domestication strategies.

In conclusion, when the overall distribution of the translation strategies are analyzed, as seen in Figure 13, it can be said that domestication is the most preferred method for the translation of the ecological terms in *Dune*. The literal translation has been preferred in 63 examples of 173 ecological terms. It is deemed necessary to mention at this juncture that there seems to be a need to divide the examples for which the literal translation strategy has been used into 3 categories: The first category includes the examples whose denotational meaning can be inferred from the context such as "barrel cactus" (fiçı kaktüsü) and "runnel" (dere), the second category includes the neologisms which are probably considered useful for preserving the strangeness of SF novels such as "drumsand" (kum davulu) and "stilltent" (damıtıcı çadır) and the third category includes the examples such as "tree of portyguls" (portakal ağacı) which can be explained as the preferences of the translator when he probably has a trouble finding an exact equivalent of the ecological term in the TL. That's why it may be appropriate to name the preferences in the last category as "shy-fighting" as they may cause obscurity for the readers of the TT.

3-Is the translator ecologically sensitive during his act of translation? At what extent does the translator could transfer Herbert's depiction of the nature?

According to the findings of this study, it can be said that the fictive ecological expressions provide an opportunity for the translator to be creative in the TT. However, as the Turkish SF readers are not accustomed to the creativity of the translators, it is understood that the translator Körpe prefers the strategies of foreignization when word-for-word translation is not possible for these ecological items. It is possible to say that this act of "shy-fighting" in translation causes ecological loss in some of the examples due to the fact that the translator does not consider all of the connotations of the neologisms in the TT.

However, when the overall translation analysis of the ecological items are examined, it can be said that the translator is mostly ecologically sensitive as he has tried to translate almost all of the ecological terms in the TL. When the target culture is not familiar with the source terms or the TL is lacking the specific vocabulary, various domestication strategies have been used to make the reader understand the source term. The fact that the strategy of omission has been adopted in only few examples in a novel which is so rich in ecological components, confirms his awareness of the ecological diversity. Körpe mostly transfers Herbert's depiction of nature successfully except a few examples.

4-What might be the roles of the translator to raise ecological awareness in the SF works?

As it has been stated in the previous chapters, the SF literature is one of the fields in which the themes about nature and environment have frequently been addressed throughout history. Different than the other genres, in SF works, fictive environments are created or the fictional features are attributed to the real environment depending on the authors' creativity. The abundance of the neologisms in SF works also helps it to be distinguished among the other literary genres.

The literary works can be influential in shaping the ideas of the communities. Halliday states that the environmental issues are not only the responsibilities of the biologists and physicists, but also the linguistics alike to deal with and have a say in environmental sciences (1990). In Translation Studies, the responsibilities of the translators have been

argued by many scholars and in Eco-translatology, Hu's following remarks illuminate the subject:

"The translator has the responsibility to safeguard the balance and "neutrality" of the source language ecology and the target language ecology for a unique and harmonious coexistence of the source language and culture in the target language and culture." (Hu, 2020, p. 75)

Within the framework of eco-translation in SF works, it is thought that translating the fictive environments with an ecological sensitivity, by respecting the diversity of nature should be the main approach regarding this topic. Particularly, the translators can take the advantage of the neologisms which are indispensable part of the SF and are necessary for creating the strangeness of SF works, by being more creative during the act of translation. In this way, the translators may be pioneers in setting a new language for the SF literature in the TL as well. It is also necessary that the translator needs to have a certain background knowledge or make a detailed research about the real ecological components such as flora, fauna, land forms, climate and weather conditions and all other categories in order to transfer them in the TL correctly.

Another approach can be retranslating the SF works which have not been translated with an ecological sensitivity before. The translator can focus on the ecological value of these works and enable the readers to reflect on them from an ecological perspective. Also the untranslated SF works which have ecological value can be rediscovered through the translations with today's understanding.

It is believed that as long as the translators continue translating SF works with an ecological perspective and the translation scholars carry out studies on eco-translation and, thus, bring the ecology to the forefront in the field of Translation Studies, the act of translation may be one step closer to contribute to the environment and future of our planet.

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APPENDIX I

	HACETTEPE ÜNİVERSİTESİ SOSYAL BİLİMLER ENSTİTÜSÜ	Doküman Kodu Form No.	FRM-YL-15
		Yayın Tarihi Date of Pub.	04.12.2023
	FRM-YL-15 Yüksek Lisans Tezi Orijinallik Raporu <i>Master's Thesis Dissertation Originality Report</i>	Revizyon No Rev. No.	02
		Revizyon Tarihi Rev. Date	25.01.2024



HACETTEPE ÜNİVERSİTESİ
SOSYAL BİLİMLER ENSTİTÜSÜ
MÜTERCİM TERCÜMANLIK ANABİLİM DALI BAŞKANLIĞINA

Tarih: 10/06/2024

Tez Başlığı: Bilim Kurgu Edebiyatında Eko-çeviri: Frank Herbert'in Dune adlı eseri
Tez Başlığı (Almanca/Fransızca)*:.....

Yukarıda başlığı verilen tezimin a) Kapak sayfası, b) Giriş, c) Ana bölümler ve d) Sonuç kısımlarından oluşan toplam142.... sayfalık kısmına ilişkin, 10/06/2024 tarihinde şahsım/tez danışmanım tarafından Turnitin adlı intihal tespit programından aşağıda işaretlenmiş filtrelemeler uygulanarak alınmış olan orijinallik raporuna göre, tezimin benzerlik oranı % 17 'dir.

Uygulanan filtrelemeler*:

- Kabul/Onay ve Bildirim sayfaları hariç
- Kaynakça hariç
- Alıntılar hariç
- Alıntılar dâhil
- 5 kelimedenden daha az örtüşme içeren metin kısımları hariç

Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü Tez Çalışması Orijinallik Raporu Alınması ve Kullanılması Uygulama Esasları'nı inceledim ve bu Uygulama Esasları'nda belirtilen azami benzerlik oranlarına göre tezimin herhangi bir intihal içermediğini; aksinin tespit edileceği muhtemel durumlarda doğabilecek her türlü hukuki sorumluluğu kabul ettiğimi ve yukarıda vermiş olduğum bilgilerin doğru olduğunu beyan ederim.

Gereğini saygılarımla arz ederim.

ZEYNEP KORKMAZ PAŞA

Öğrenci Bilgileri	Ad-Soyad	ZEYNEP KORKMAZ PAŞA
	Öğrenci No	N21224216
	Enstitü Anabilim Dalı	Mütercim ve Tercümanlık ABD
	Programı	İngilizce Mütercim ve Tercümanlık Tezli Yüksek Lisans

DANIŞMAN ONAYI

UYGUNDUR.
Doç. Dr. Yeşim (SÖNMEZ) DİNÇKAN

* Tez Almanca veya Fransızca yazılıyor ise bu kısımda tez başlığı Tez Yazım Dilinde yazılmalıdır.

**Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü Tez Çalışması Orijinallik Raporu Alınması ve Kullanılması Uygulama Esasları İkinci bölüm madde (4)'te de belirtildiği üzere: Kaynakça hariç, Alıntılar hariç/dahil, 5 kelimedenden daha az örtüşme içeren metin kısımları hariç (Limit match size to 5 words) filtreleme yapılmalıdır.

	HACETTEPE ÜNİVERSİTESİ SOSYAL BİLİMLER ENSTİTÜSÜ	Doküman Kodu Form No.	FRM-YL-15
		Yayın Tarihi Date of Pub.	04.12.2023
	FRM-YL-15 Yüksek Lisans Tezi Orijinallik Raporu <i>Master's Thesis Dissertation Originality Report</i>	Revizyon No Rev. No.	02
		Revizyon Tarihi Rev. Date	25.01.2024

TO HACETTEPE UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
DEPARTMENT OF TRANSLATION AND INTERPRETING

Date: 10/08/2024

Thesis Title (In English): Eco-translation in Science Fiction Literature: Dune series by Frank Herbert

According to the originality report obtained by myself/my thesis advisor by using the Turnitin plagiarism detection software and by applying the filtering options checked below on 10/06/2024 for the total of 142 pages including the a) Title Page, b) Introduction, c) Main Chapters, and d) Conclusion sections of my thesis entitled above, the similarity index of my thesis is 17 %.

Filtering options applied**:

1. Approval and Declaration sections excluded
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5. Match size up to 5 words excluded

I hereby declare that I have carefully read Hacettepe University Graduate School of Social Sciences Guidelines for Obtaining and Using Thesis Originality Reports that according to the maximum similarity index values specified in the Guidelines, my thesis does not include any form of plagiarism; that in any future detection of possible infringement of the regulations I accept all legal responsibility; and that all the information I have provided is correct to the best of my knowledge.

Kindly submitted for the necessary actions.

ZEYNEP KORKMAZ PAŞA

Student Information	Name-Surname	ZEYNEP KORKMAZ PAŞA
	Student Number	N21224218
	Department	Translation and Interpreting
	Programme	English Translation and Interpreting Master's Degree

SUPERVISOR'S APPROVAL

APPROVED
Assoc. Prof. Yeşim (SÖNMEZ) DİNÇKAN

**As mentioned in the second part [article (4)/3] of the Thesis Dissertation Originality Report's Codes of Practice of Hacettepe University Graduate School of Social Sciences, filtering should be done as following: excluding reference, quotation excluded/included, Match size up to 5 words excluded.

APPENDIX II

	HACETTEPE ÜNİVERSİTESİ SOSYAL BİLİMLER ENSTİTÜSÜ	Doküman Kodu Form No.	FRM-YL-09
		Yayın Tarihi Date of Pub.	22.11.2023
	FRM-YL-09 Yüksek Lisans Tezi Etik Kurul Muafiyeti Formu <i>Ethics Board Form for Master's Thesis</i>	Revizyon No Rev. No.	02
		Revizyon Tarihi Rev. Date	25.01.2024

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HACETTEPE ÜNİVERSİTESİ SOSYAL BİLİMLER ENSTİTÜSÜ MÜTERCİM TERCÜMANLIK ANABİLİM DALI BAŞKANLIĞINA	
Tarih: 03/06/2024	
Tez Başlığı (Türkçe): Bilim Kurgu Edebiyatında Eko-çeviri: Frank Herbert'in Dune adlı eseri	
Tez Başlığı (Almanca/Fransızca)*:	
Yukarıda başlığı verilen tez çalışmam:	
<ol style="list-style-type: none"> 1. İnsan ve hayvan üzerinde deney niteliği taşımamaktadır. 2. Biyolojik materyal (kan, idrar vb. biyolojik sıvılar ve numuneler) kullanılmasını gerektirmemektedir. 3. Beden bütünlüğüne veya ruh sağlığına müdahale içermemektedir. 4. Anket, ölçek (test), mülakat, odak grup çalışması, gözlem, deney, görüşme gibi teknikler kullanılarak katılımcılardan veri toplanmasını gerektiren nitel ya da nicel yaklaşımlarla yürütülen araştırma niteliğinde değildir. 5. Diğer kişi ve kurumlardan temin edilen veri kullanımını (kitap, belge vs.) gerektirmektedir. Ancak bu kullanım, diğer kişi ve kurumların izin verdiği ölçüde Kişisel Bilgilerin Korunması Kanuna riayet edilerek gerçekleştirilecektir. 	
Hacettepe Üniversitesi Etik Kurullarının Yönergelerini inceledim ve bunlara göre çalışmamın yürütülebilmesi için herhangi bir Etik Kuruldan izin alınmasına gerek olmadığını; aksi durumda doğabilecek her türlü hukuki sorumluluğu kabul ettiğimi ve yukarıda vermiş olduğum bilgilerin doğru olduğunu beyan ederim.	
Gereğini saygılarımla arz ederim.	
ZEYNEP KORKMAZ PAŞA	

Öğrenci Bilgileri	Ad-Soyad	ZEYNEP KORKMAZ PAŞA
	Öğrenci No	N21224216
	Enstitü Anabilim Dalı	Mütercim ve Tercümanlık ABD
	Programı	İngilizce Mütercim ve Tercümanlık Tezli Yüksek Lisans

DANIŞMAN ONAYI

UYGUNDUR.
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* Tez Almanca veya Fransızca yazılıyor ise bu kısımda tez başlığı Tez Yazım Dilinde yazılmalıdır.

	HACETTEPE ÜNİVERSİTESİ SOSYAL BİLİMLER ENSTİTÜSÜ	Doküman Kodu Form No.	FRM-YL-09
		Yayın Tarihi Date of Pub.	22.11.2023
	FRM-YL-09 Yüksek Lisans Tezi Etik Kurul Muafiyeti Formu <i>Ethics Board Form for Master's Thesis</i>	Revizyon No Rev. No.	02
		Revizyon Tarihi Rev.Date	25.01.2024

HACETTEPE UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
DEPARTMENT OF ENGLISH TRANSLATION AND INTERPRETING

Date: 03/06/2024

Thesis Title (In English): Eco-translation in Science Fiction Literature: *Dune* by Frank Herbert

My thesis work with the title given above:

1. Does not perform experimentation on people or animals.
2. Does not necessitate the use of biological material (blood, urine, biological fluids and samples, etc.).
3. Does not involve any interference of the body's integrity.
4. Is not a research conducted with qualitative or quantitative approaches that require data collection from the participants by using techniques such as survey, scale (test), interview, focus group work, observation, experiment, interview.
5. Requires the use of data (books, documents, etc.) obtained from other people and institutions. However, this use will be carried out in accordance with the Personal Information Protection Law to the extent permitted by other persons and institutions.

I hereby declare that I reviewed the Directives of Ethics Boards of Hacettepe University and in regard to these directives it is not necessary to obtain permission from any Ethics Board in order to carry out my thesis study; I accept all legal responsibilities that may arise in any infringement of the directives and that the information I have given above is correct.

I respectfully submit this for approval.

ZEYNEP KORKMAZ PAŞA

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SUPERVISOR'S APPROVAL

APPROVED
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