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A TRANSITIVITY ANALYSIS OF PREFACES WRITTEN FOR **MODERNIST NOVEL (RE)TRANSLATIONS: UNDERSTANDING** PARATEXTS AS A TOOL OF RECONTEXTUALIZATION

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Abstract

This study focuses on paratexts as recontextualization tools, specifically prefaces written for (re)translations, and problematizes Turkish (re)translations of modernist novels written in English, which, for reasons of morality, encountered legal difficulties, and were stigmatized, banned, or confiscated in the source culture. Recontextualization resonates with (re)producing ideologies, exposing various agents' deliberate power positions in determining discourse structures within the more general framework of Critical Discourse Analysis. Against this backdrop, this study, which is part of a larger project, has a twofold purpose: a) to evaluate 15 prefaces extracted from (re)translations of 10 modernist novels as a tool for recontextualization; and b) to investigate the preface discourse regarding the transfer of modernist novels into the target culture through the lens of transitivity analysis, based on Halliday's Systemic Functional Linguistics (SFL) model. SFL proposes that the main system by which experiential meaning is associated with process choices within the framework of ideational meta-function is transitivity; transitivity analysis is therefore applied to the prefaces to unveil the relationships established between the processes and the actors. The analysis of findings revealed that recontextualization was functionalized to create an explicit, rather than an implicit discourse structure through the intensive use of material processes. It concludes that prefaces written to (re)translations in Turkish context, as liminal devices between the fictitious and real worlds, are clearly instrumentalized to position the key players in the adaptation, promotion, and representation of these books within their new cultural context, and thus, were designed to influence the discourse surrounding the transfer of modernist novels into the target culture.

Keywords: Paratexts, Transitivity, Recontextualization, Retranslations, Modernist Literature

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It has always piqued a great deal of interest how books are (re)translated and (re)represented to the target culture in order to transmit the sensibilities and contradictory discourses ingrained in political and social taboos like sexuality and religion. Translated texts are direct reflections of power relations, namely the clash of norms and ideological conflicts. The employment of paratexts, multimodal language devices that are particularly helpful when (re)translating works that contain objectionable content for the target culture, enhances a negotiating platform for the cross-cultural transmission of a culturally prohibited book. To accommodate and adapt a foreign text into an indigenous literature, paratexts exist as multimodal linguistic and cultural instruments especially when (re)translating works that have values incompatible with the target culture. Some preliminary works (Kovala, 1996; Watts, 2000; Tahir-Gürçağlar, 2002) point out that paratexts function as a tool to enable the voice of the publishing house and/or translator to be heard; intend to explain, define, dictate, support the main text; conflict the main text; present the comments of the competent people and critics; develop a point of view; and present a background prior to reading the main text (Kansu-Yetkiner et al., 2018). Paratexts are, thus, crucial to the recontextualization processes. Recontextualization refers to the dynamic transformation of a meaning extracted from one context and transferred to another context, in order to impute different values and attributions to the meaning (Linell, 2001; Chilton & Schäffner, 2002; Semino et al., 2012). In Translation Studies, critical analysis of texts forges a link of interdiscursivity between recontextualized (Target) text and readily available (Source) text to unveil the inner dynamics of such transformations and contributes to the revelation of ideological exercise of power in text production. In line with this consideration, this study argues that in the light of Gérard Genette's (1997) theoretical foundations, paratexts, as intertextual and intercontextual connections, provide a fertile ground to intercultural interpretations that reveal both socio-cultural content and discourse-based reflections of recontextualization.

Genette (1997) broadly defines paratexts as "accompanying productions" that "surround," "extend," and "present" a text, enabling it "to become a book and to be offered as such to its readers and, more generally, to the public" (p. 1). Genette (1997, p. 344) classifies paratexts into two main categories: peritexts and epitexts. He defines epitexts as "any paratextual element not materially appended to the text within the same volume but circulating, as it were, freely, in a virtually limitless physical and social space [...]" and

emphasizes that "the location of the epitext is therefore anywhere outside the book [...]." On the other hand, peritexts are "within the same volume" and may refer to "the title or the preface and sometimes elements inserted into the interstices of the text, such as chapter titles or certain notes" (Genette, 1997, p. 5).

Drawing upon this framework, "recontextualization"—i.e., how a (re)translated text is repositioned in the context of the target culture on the basis of cultural adaptations and ideological discourses—is considered to be an excellent departure point to identify and analyze the prefaces, the linguistic peritexts with high connotational value as liminal devices forming up part of the complex mediation in cross-cultural contexts.

Genette (1997), in his seminal work, *Paratexts: Thresholds of Interpretation*, explores the functions of prefaces in detail and discusses the functions of prefaces in terms of temporal categories and senders. He identifies three types of temporal categorization for the preface:

- (1) *Original* prefaces published with the first edition of a book,
- (2) Later prefaces published with the second edition or translation of a book,
- (3) *Delayed* prefaces, which may be published with the delayed republication of a single work, or with the delayed original edition of a work that long remained unpublished, or with the delayed completion of a work written over a long period, or finally with a delayed collection of complete or selected works of an author (Genette, 1997, pp. 174-175).

Overlapping with our research topic, Genette's second and third categories of prefaces, i.e., "later/delayed prefaces," have a recontextualizing function as threshold texts that help to present translated works to other cultures. Therefore, in order to touch upon power conflicts and ideological differences, this study omits original prefaces written for a different target audience in the source culture, and builds on later and delayed prefaces, which are created according to the needs of the target culture and the conditions therein.

In an effort to underpin a literary text from a semantic-grammatical point of view, consequently, to describe the representational processes in the presentation of the designated actors (i.e., author, book, publisher, and translator etc.), a transitivity analysis of the prefaces written to (re)translated texts in Turkish context was conducted within the

broader framework of CDA. In this respect, Halliday's SFL model (1994) provides a toolkit that illuminates the experiences of language users, thereby revealing extraordinarily sensitive indicators of socio-cultural dynamics in Turkish culture. Language, as a system of choices, can present actions, events, and actors in an ideologically biased manner through the choices in order to communicate meaning. Transitivity analysis that emphasizes process types and action structures demonstrates how language users account for their experience of the outside world and how their mental representation of reality is encoded in language. It also provides quantifiable parameters for investigating the ideological stance and positioning of the identified actors.

In line with the foregoing consideration, based on a large-scale project encompassing 71 Turkish retranslations of 14 British/American modernist novels, this study, which is based on Halliday's SFL paradigm and restricts itself to linguistic peritextual analysis, especially prefaces, focuses on the examination of 15 prefaces extracted from 10 Turkish retranslations of modernist novels. It also analyzes the transitivity structures to explore the relationship between linguistic structures and socially constructed meaning and, thus, to reveal the linguistic interventions of the actors who play a key role in defining and introducing these works to the target reader. A selected corpus is built from modernist British and American novels published between 1900 and 1960 that emerged as a reaction to Victorian norms and values, dealing with issues such as alienation, uncensored sex and female sexuality.

The following section of the study will review the main features of modernist literature and the CDA concept of recontextualization, and then introduce the transitivity analysis in the SFL model. After providing details on the corpus and methodology, our findings will be analyzed, and the study will end with a discussion of findings in the conclusion section.

Modernist Literature and Recontextualization

The term "modernism" encompasses a variety of intersecting artistic and literary movements, and it is defined as a style in the arts and literature that arose in the early 20th century. Although modernism first appeared in England after the decline of the Victorian era and was triggered by the devastation following the First World War, it is not possible to pinpoint an exact date to the movement's emergence. Potter (2012, p. 1) states that the beginnings of modernism in Anglo-American literature have been discovered in

Joseph Conrad's *The Nigger of the 'Narcissus'* (1897) and Gertrude Stein's *Three Lives* (1909). Potter also adds that the word "modernist" first appeared in Robert Graves and Laura Riding's *A Survey of Modernist Poetry* (1927), where the authors argue that modern poetry is more complex than the traditional poetry and therefore, does not appeal much to the "plain" or "ordinary" reader. Bradbury and McFarlane (1976, p. 57) define modernism as "the art of a world from which many traditional certainties had departed."

Under the influence of Realism, Victorian writers mainly concerned themselves with bringing social realities into fiction. The main themes of the novels written in that period were real life struggles, such as class differences or the position of women and children in society. Matz (2006, p. 215) points out that Victorian fiction with its predictable endings in marriage or death does not reflect modern changes resulting from the global war, urban chaos, revolutionary technology, and sexual freedom. As a result, the objective and realistic style of Victorian writers lost ground to the subjective and introspective perspective in modernist novels. The godlike, omniscient narrators of Victorian writers are eliminated in the modern novel where the world is presented through the eyes of the character.

Gasiorek (2015, p. xi) underlines the internal contradictions of modernism and defines it as an "unstable and constantly changing phenomenon" which is made up of diverse movements such as Dada, Futurism, Imagism, Vorticism, Impressionism, and Surrealism. The modernist writer mainly strives to reflect life as the protagonists perceive it in their inner worlds. Gillies & Mahood (2007, p. 104) state that the modern novel showcases "a profound interest in the inner workings of the ordinary mind." Another common characteristic of modernist novels is that they were considered highly controversial back in their day and faced the threat of censorship by both the agents in the publishing field and the judicial authorities. Potter (2013, p. 3) states that censored modernist novels share some characteristics, such as deliberate flouting of moral conventions, exploration of sex, and an aestheticized presentation of the obscene, and lists some modernist novels with obscene content. Accepting sexuality as a natural part of life and inclined to reflect everything as is, modernist writers adopted a censorshipfree approach when dealing with this theme. Another reason for this attitude is that modernism was, in a way, a reaction against the Victorian novel. An extreme moralism dominated the Victorian novel, and in order to contradict this, modernist writers treated

sexuality plainly and openly. Consistent with this, Childs (2002, p. 19) argues that modernism introduced a new openness to the theme of sexuality with candid descriptions. He also adds that modernism was sympathetic to feminism, homosexuality, androgyny and bisexuality, and went beyond the constraints of the nuclear family. In light of this, it is not surprising that modernist works were censored and/or deemed obscene.

Since modernist writers, focusing on people's subjective experiences and representing them as they are, inevitably contradict the Victorian novel's attempts to idealize everything and its extreme moralism, many modernist novels have been subjected to various forms of censorship such as court cases, bans, and so on, on the grounds that they were "deviant" (Childs, 2002; Childs & Fowler, 2006; Matz, 2006; Olson, 2006; Bradshaw, 2006; Butler, 2010). In this context, the "presentation of the forbidden and the objectionable" to Turkish society within the framework of retranslations of modernist novels is problematized with a focus on their peritexts to undertake the process of recontextualization.

Recontextualization, one of the core concepts of CDA, refers to the dynamic transformation of a meaning extracted from one context and transferred to another, in order to impute different values and attributions to the meaning (Linell, 2001; Chilton & Schäffner, 2002; Semino et al., 2012). The relationship between texts and the social world is mediated by the way the text integrates or articulates many discourses, genres, and styles. Texts have the power to uphold, challenge, transform, and manipulate the social order and relations (Fairclough, 1992, 2000, 2003). An order of discourse that may be seen in the restructuring of current social and linguistic practices is made up of several interdiscursively mediated discourses that are articulated together as part of a network of publishing industry practices. Recontextualization is one manifestation of this reconfiguration. In a similar vein, (re)translated texts are recontextualizations of sourcelanguage texts in new social and cultural contexts. Literary (re)translations open up new avenues that are primarily cultural and may even be political, where the text will serve literary and political purposes and objectives that may be very different from those it served in the source culture and original setting. Schäffner (2008, p. 13) states that text producers such as journalists, revisors, and editors can use strategies such as "deletions, information, substitutions paraphrasing" rearrangements of and the recontextualization processes. These strategies are convenient for paratextual constructions as well. In this regard, paratexts constitute a buffer zone that directs and supports the recontextualization of a (re)translated text. Along with the intratextual intervention, paratexts provide a negotiation platform preparing the reader for the work and adjusting the tone and impact of the text.

Systemic Functional Linguistics and Transitivity

SFL is an approach to linguistics that examines the linguistic functions for which sentences are constructed, the contextual features that enable the text to be constructed, and the depth of the text with its semantic, pragmatic and syntactic dimensions in a systematic way. The most significant aspect of Halliday's (Halliday, 1994; Halliday & Matthiessen, 2004) model is that language is described as an interaction means in a social context, a system of choices consisting of structural and grammatical elements. In this regard, SFL allows the study of texts by touching on the changing context, recontextualization, and concrete effects of language use. From the point of SFL, meaning is constructed through **three main metafunctions** in the content stratum of the language system, depending on the social environment:

- Making sense of our experiences (ideational function)
- Acting out our social relations (interpersonal function)
- Transfer of ideational and interpersonal functions to written or spoken language on a linear level **(textual function)**

Accordingly, in a natural language, the content area functionally emerges along three different meaning areas and is fulfilled through three basic linguistic resources in lexico-grammar: transitivity, modality, and thematic structure (see Halliday & Matthiessen, 1999; Eggins, 1994). Transitivity indicates how the relations between an event and the actors of the event are arranged by the language users at the sentence level, and it reveals the codes by which these users encode their experiences of the world in the language. Modality means the function of providing a verbal communication between the communicating/interacting individuals by underlining the interactional meaning. Thematic structures also reveal the relations of sentences with discourse context (Halliday, 1994). The grammatical means of the metafunctions defined by Halliday in the model below and shaped on the basis of these three metafunctions introduce means that can be converted into observable quantitative data.

Table 1. Context and Text Components in Systemic Functional Linguistics Model (adapted from Magistrale, 2009)

C 0	Context of	Ideology				
N T E X T	Culture Context of Situation	Genre Register				
		Field	Tenor	Mode		
Т	Discourse- Semantic Level	Experiential Meaning How the writer describes what is going on Who does what to whom, when, where and how? Lexical Relations	Interpersonal Meaning How the writer describes his attitude to himself, the reader and the subject What is the writer's attitude to himself, the reader, and the subject? Conversational	Textual Meaning How the writer organizes the content of the text How is the content of the text organized? Reference &		
E X		Lexical Relations	Structure	Conjunction		
Т	Lexico- Grammar Level	Transitivity System	 Mood System Mood Modality: Degree of probability or obligation Appraisal Clause as Exchange 	 Thematic System Theme & Rheme Given & New Information Clause as Message 		
	Expression	Graphology / Phonology				

As a strong semantic concept within the framework of the SFL, transitivity is associated with the way the meaning is represented in the sentence. In the simplest terms, transitivity is a language system that enables semantic coding of how we use language to represent "who does what to whom/what, where, when, how, and why" (Hasan, 1989, p. 36). In other words, transitivity demonstrates how language users "represent reality in language" (Eggins, 2004, p. 206) and how they express their experiences of the world they live in.

More clearly, transitivity is associated with the representation of ideas and thoughts; therefore, it is a part of the ideational function of language. In this regard, transitivity powers language users to categorize and interpret an infinite variety of events and situations with a limited set of process types. At the linguistic level, transitivity analysis is related with the propositional meanings and functions of syntactic constituents. At the

social level, as indicated by Fairclough (1992, pp. 179-180), transitivity analysis provides the means to reveal the social, cultural, ideological and/or political factors that determine the linguistic encoding of a process in a certain discourse type or genre.

The semantic processes encoded in the sentence basically include three components: the process itself coded with verb phrases in the sentence; the actors expressed by noun phrases in the sentence; and the circumstances associated with the process represented by adverbial and prepositional phrases.

Processes are classified according to whether they encode actions, events or situations. Halliday and Matthiessen (2004) divide processes into three main categories: material, mental, relational, and three sub-categories: behavioral, verbal, existential.

Material process is the process type that encapsulates actions such as "to run," "to come," "to fall," "to look for."

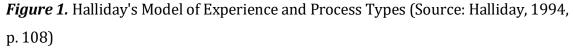
Mental process refers to the type of mechanism that we use to interpret or perceive the world while maintaining our own consciousness or psychological states. Mental processes include cognitive acts, like thinking, knowing, and understanding; affective actions, like loving, hating, and fearing; and perceptual acts, like seeing and hearing.

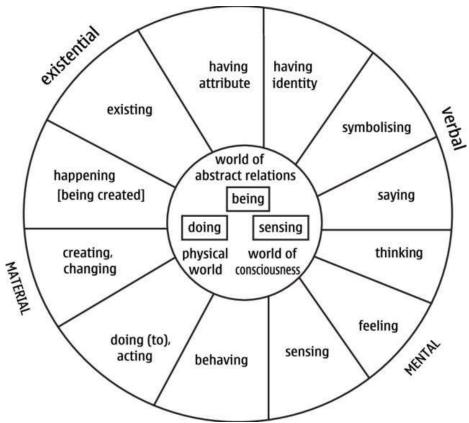
Relational process is the process type used to relate a participant with its identity and description. For Halliday & Matthiessen, (2004, pp. 214-216), it occurs in two different forms of "being," as attribution and identification.

Behavioral process is defined as the process type that includes physiological and psychological states between material and mental processes, such as "to laugh," "to cry," "to breathe," "to frown," "to grin" (Halliday & Matthiessen, 2004, pp. 248-251).

Verbal process takes part between mental and relational processes and includes verbal actions such as "to ask," "to tell," "to say" (Halliday & Matthiessen, 2004, pp. 251-253).

Existential process is the process type which denotes that something exists or something occurs, according to Bloor & Bloor (2004, p. 125). The Turkish words "var" and "yok" help to define the existential process type.





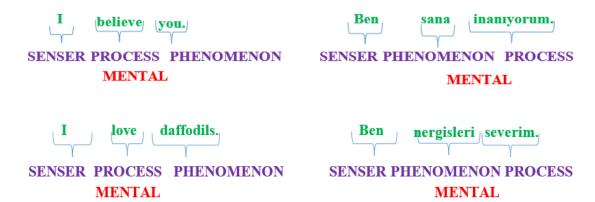
Actionals are processes pointing out material, mental and verbal types of processes. Material processes specify either action or event. Material processes which denote an action have two participants: The Actor (the one who acts) and the Goal (the person or thing/object affected by the action). A typical action sentence has a transitive structure in both English and Turkish:



Material processes that indicate an <u>event</u> have one participant who takes on the role of the actor. Event sentences exhibit an intransitive structure:



Mental processes encompass acts such as feeling, thinking, and perceiving and require two participants, the Senser (the person who experiences the mental process) and the Phenomenon (what affects consciousness):



Verbal processes perform acts such as saying, expressing or stating and require two participants, the Saying and the Said:



According to Halliday (1994, p. 119) relational processes can be divided into two distinct modes: a) Attributive: 'a is an attributive of x' b) Identifying: 'a is the identifying of x'. These modes serve to assign a quality to something (attributive) and to identify something (identifying), respectively.

Considering whether they are: intensive, possessive or circumstantial, the relational processes can be further categorized into three types. 1) Intensive: 'x is a' 2) Possessive: 'x has a' 3) Circumstantial: 'x is at a' (where 'is at' stands for 'is at, in, on, for, with, about, along, etc.').

In a nutshell, actionals encode actions, events and situations involving people and objects as participants of any process. Thus, actionals represent relationships perceived both in the physical world and in the world of thought and intuition.

On the other hand, relationals do not contain actions, but encode the relationship between two phenomena/entities or between a phenomenon/entity and an attribution; therefore, they exhibit results related to mental activities through judgment and interpretation. Such representational processes indicate two types of discursive stances:

- 1. **Relationals** perform classification and judgment. (Interpreting and description functions.)
- 2. **Actionals**, on the other hand, perform events and situations, namely doing, sensing and saying. (Who did what to whom?)

Thus, language users can manage the linguistic elements that enhance the representation of these processes in the construction of discourse (Hodge & Kress, 1993). Transitivity in general, and the verbal and relational processes in particular, are valuable analytical tools that emphasize the agency and process that the speaker/writer attributes to the participants while constructing the text.

As a result, the approach to transitivity within the SFL framework (Halliday, 1994) not only connects grammar to the reality of the physical and mental world but also builds on the idea of a paradigmatic language in which choice is the key function. More specifically, language users do not simply receive and produce a set of grammatical components, they encode and decode these components after choosing which reality they will construct, which point of view they will adapt, and which formal language structures they will use in order to achieve successful communication (Calzada Pérez, 2007). To summarize, according to the SFL, "the transitivity system construes the world of experience into a manageable set of process types" (Halliday & Matthiessen, 2004, p. 170).

Corpus and Methodology

The corpus of the study consists of the 15 prefaces culled from retranslations of 10 stigmatized modernist novels against which obscenity suits were brought in their source culture, causing a great sensation. In this respect, representation of these books to a target culture constitutes a slippery ground which requires discursive adjustments instrumentalized mostly by prefaces. This situation is the main criterion for the selection of the books, since these stigmatized books promoting obscene language, deviant sexual behavior, scatology, corruption and perversity are problematized as the source of dispute in the target language.

The following criteria were taken into consideration in the selection of the works and in building up the corpus.

- 1. If the books in the corpus have multiple editions with different visual and/or textual paratextual elements, all editions were evaluated. As any intratextual evaluation was not carried out in the project, it was concluded that a book series could consist of several editions translated by the same translator but surrounded, and thus, repackaged and contextualized by different paratextual elements. As a result, some books may have multiple prefaces from various versions.
- 2. While "original prefaces" published with the first edition of a book were eliminated, "later prefaces" published with the second edition or translation of a book were incorporated into the corpus.

The distribution of the prefaces throughout the corpus is shown in Table 2.

Table 2. The works included in the corpus

Works in the Corpus	Selected Prefaces	# of Prefaces
A. Tobacco Road (Tütün Yolu)	-	0
B. God's Little Acre (Allaha Adanan Toprak/ Tanrıya Adanan Toprak)	B1-1949	1
C. Tragic Ground (Felâket Yatağı/ Belâlı Yer)	-	0
D. Sister Carrie (Kız Kardeşim Carrie)	-	0
E. An American Tragedy (İnsanlık Suçu/ Bir Amerikan Faciası)	E2-1970	1
F. Sanctuary (Kutsal Sığınak/ Lekeli Günler/ Tapınak)	F6-2007	1
G. Point Counter Point (Ses Sese Karşı)	G1-1961 G2-1978	2
H. Brave New World (Yeni Dünya/ Cesur Yeni Dünya)	Н3-1997	1
I. Rainbow (Yağmur Kuşağı/ Gökkuşağı)	I3-1990	1
J. Lady Chatterley's Lover (Lady Chatterley'in Âşıkı/ Lady Chatterley'in Âşığı/ Lady Chatterley'in Aşığı/ Lady Chatterley'in Sevgilisi/ Kadın Âşık Olursa)	J1-1945 J5-1981	2
L. Women in Love (Ursula/ Âşık Kadınlar/ Âşık Kadınlar)	L1-1967 L2-1970 L7-2020	3
M. Tropic of Cancer (Yengeç Dönencesi)	M3-2014	1
N. Tropic of Capricorn (Oğlak Dönencesi)	N3-2001 N4-2019	2
O. Lolita (Lolita)	-	0
	TOTAL	15

Preliminary Studies Before the Analysis

Books in the larger corpus were first codified through the use of letters, then both visual and textual paratexts of these translations were scanned and converted into digital format via Abbyy FineReader software. All the digital documents were edited and saved as Word files, and accordingly, the analysis process was carried out through the use of those digital copies instead of the books themselves. The letter codes assigned to the books are listed below:

Table 3. Book series and their alphabetical codes

Letter Code	Book Name		
A	Tobacco Road		
В	God's Little Acre		
С	Tragic Ground		
D	Sister Carrie		
E	An American Tragedy		
F	Sanctuary		
G	Point Counter Point		
Н	Brave New World		
I	Rainbow		
J	Lady Chatterley's Lover		
L	Women in Love		
M	Tropic of Cancer		
N	Tropic of Capricorn		
0	Lolita		

The digital sets of prefaces were first classified under book titles, and then they were categorized according to preface types. Following this, they were systematically indexed, and the categorized prefaces were coded and compiled. Accordingly, those subcategories of peritexts are: a) Translator's Preface b) Editor's Preface c) Anonymous Preface.

Analyst Training

Through a training session, the three basic metafunctions of the language system (ideational, interpersonal, and textual) postulated by Halliday's model of SFL were introduced to the analyst group (Halliday, 1994; Halliday & Matthiessen, 2004). In order to analyze transitivity within the context of ideational function of the language, the process types defined by Halliday were introduced as well. The issues that surfaced throughout the training exercise were discussed and appropriate solutions were put

forth. The project coordinator also gave each member of the project group the same instruction on the interpersonal and textual functions.

Pilot Study and Inter-rater Reliability

Following the training session, a pilot study was conducted using a structured corpus compiled from the prefaces of various books in the corpus. Each researcher was asked to analyze the text in question, create Excel files, and note down any questions that arose. In response to these concerns, the second meeting provided the necessary explanations and warnings.

Six analysts were tasked with independently analyzing a 20-sentence excerpt from the author's biography sections of Erskine Caldwell's novel *Tobacco Road*. The Intraclass Correlation Coefficient (ICC) method was used to evaluate the level of agreement between the analysts. The inter-analyst agreement was found to be high with a score of ICC=0.764 for the analyses performed by the analysts regarding the process types.

Determination of Main Actors by Word Frequency

In this study, the word frequency method was combined with the lexico-semantic analysis framed by Halliday so as to identify actors. The "word-scoring" method developed by Laver et al. (2003) is used for text analysis, and instead of structural thematic coding as in standard content analysis, relative word frequencies determine the position and attitude of the text. By means of this method, the main actors and the main subject of the text are revealed.

All subcategories of the linguistic paratexts were compiled in a text file, and their word frequencies were determined with the Word Count tool. The most frequently used words in the text file were presented as a word cloud. In the word cloud, frequently used words were written in larger fonts while less frequently used ones were written in smaller fonts. This visual representation aided in the quantitative determination of how often certain words (in one-, two- and three-word phrases) were used in the linguistic paratexts. The distribution of the actors as revealed by the findings is as follows: Author (Yazar), Book (Kitap), Reader (Okur), Translator (Çevirmen), Publishing House (Yayınevi).

It was additionally detected that different wordings were used in referring to these actors. For instance, "author" ('yazar') showed up as "a proper name/ novelist/ writer" (özel isim kullanımı/ romancı/ mütefekkir in Turkish), "book" ('kitap') as "novel/ work/ artifact/ book title" ('roman/ eser/ yapıt/ kitap başlığı' in Turkish), and "reader" ('okur') as "audience/ those who read the book/ critics" ('okuyucu/ kitabı okuyanlar/ eleştirmenler' in Turkish). All these variations were included in the analyses.

Analysis of the Process Types and Findings

Within the framework of transitivity analysis, types of processes related to the identified actors were analyzed on the basis of prefaces. In the analysis of the prefaces written to retranslations of the letter-coded novels, each previously identified actor was given a color-code. The processes matching these actors were divided into the process types based on Halliday's SFL and transferred to MS Excel. In the final stage, the problematic areas were revised by reaching consensus, and the analyses were completed. Because there are few sub-categories in the form of anonymous prefaces, translator's prefaces, and editor's prefaces, the analysis was conducted by grouping all sub-categories under the heading of preface.

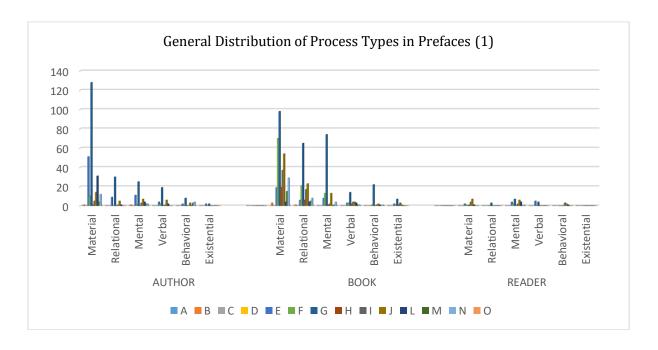
Table 4. *Percentage distribution of processes*

PROCESS	AUTHOR	воок	READER	P. HOUSE	TRANSLATOR
Material	61.63%	49.86%	26.67%	61.54%	44%
Relational	11.03%	22.35%	5%	0%	24%
Mental	13.43%	16.62%	43.33%	30.77%	16%
Verbal	8.15%	5.01%	15%	0	12%
Behavioral	4.80%	4.01%	10%	7.69%	4%
Existential	0.96%	2.15%	0	0	0

As illustrated in Table 4, the results of transitivity analysis with respect to designated actors in the prefaces display differences in the process types. Regarding the "author", material processes are the most common with a percentage of 61.63%, followed by mental processes with 13.43%, then relational processes with 11.03%, verbal processes with 8.15%, behavioral processes with 4.8%, and existential processes with 0.96%.

In the designation of the book as an actor, material processes are the most frequent with percentage of 49.86%, followed by relational processes with 22.35%, then mental processes with 16.62%, verbal processes with 5.01%, behavioral processes with 4.01% and existential processes with 2.15%. When considering the reader as an actor, mental processes account for 43.33%, followed by material processes for 26.67%, verbal processes for 15%, and behavioral processes for 10%. There is no existential process found in the prefaces that designated "reader" as an actor. Material processes account for 61.54% of publishing house processes, followed by mental processes (30.77%), and behavioral processes (7.69%). There are no relational, verbal or existential processes in the prefaces that identify "publishing house" as an actor. Regarding the translator as an actor, material processes are the most frequent with 44%, followed by relational processes with 24%, then mental processes with 16%, verbal processes with 12% and behavioral processes with 4%. No existential process was found in the prefaces that designated "translator" as an actor.

Figure 1. General Distribution of Process Types in Prefaces based on Author, Book and Reader



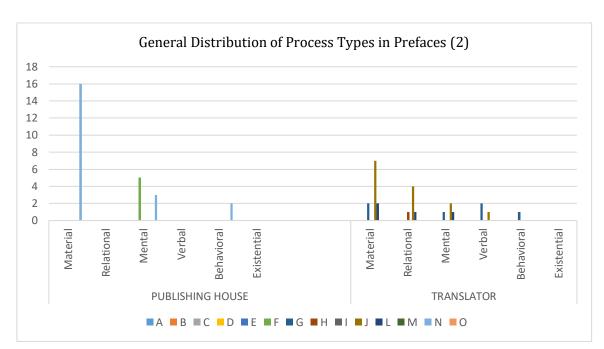


Figure 2. General Distribution of Process Types in Prefaces based on Publishing House and Translator

From the standpoint of the process distribution per actor over 10 modernist books, Figures 1 and 2 reveal that the actors which receive the most attention or become the main focus in the prefaces are "the author" and "the book." In other words, this clearly exposes that focus of the prefaces is primarily woven around the author and the book. It is important because they are primarily problematized as the source of conflict and dispute. However, the material process is foregrounded in the construction of discourse for all actors, with the exception of the reader. In other words, the experiences for actors such as the author, the book, the publishing house, and the translator have been explicitly construed with material processes. Since material processes encompass happenings and achievements, the intensity of material processes providing explicit answers to the question "who is doing what to who?" indicates that the discourse constructed through prefaces is written in an explicit language rather than an implicit one.

- (1) Bugüne dek 68 eseri yayımlanan ve kitapları bütün dünyada 100 milyondan fazla satılan Caldwell 1983'te Onur Ödülünü kazandı.
- (1) Caldwell, whose 68 works have been published to date and whose books have been sold more than 100 million copies worldwide, won the Honorary Prize in 1983.

(Caldwell, 1944/1984)

- (2) İlk kez 1915 yılında yayımlanan Gökkuşağı, yirminci yüzyılın en büyük yazarlarından biri sayılan D. H. Lawrence'in yazarlık serüveninde önemli bir evreyi yansıtır.
- (2) First published in 1915, The Rainbow reflects an important phase in the literary career of D. H. Lawrence, who is widely regarded as one of the greatest writers of the twentieth century.

(Lawrence, 1915/1990)

If we concentrate on the construction of author and book-focused discourses in the prefaces; it is observed that mental processes are the second most frequently occurring processes, indicating the infusion of some abstract doings and happenings into the texts. Mental processes express the actors' inner feelings, allowing them to be identified as part of the process of feeling, knowing, sensing, and wanting, among other things.

- (3) Lawrence, aşkın şefkatle olan ilintisine o kadar önem verir ki, kitaba "Sevecenlik" adını vermeyi bile düşünmüştür.
- (3) Lawrence cared so deeply about the relationship between love and compassion that he even considered calling the book "Tenderness."

(Lawrence, 1928/2012)

- (4) O kadınlar ki kendini tanımak için büyük sancılar çeker, kadın olmanın geleneksel rolünü reddeder, bir yandan sonsuzu arar ve başka yerlerin özlemini çekerken bir yandan da durulmak ister.
- (4) Those women, who suffer great pains to know themselves and reject the traditional role of being a woman, on one hand search for the infinite and long for other places, and on the other wish to settle down.

(Lawrence, 1915/2019)

Foregrounded relationals give an impression of emphasis on the representation of identification and description. To be more precise, high frequency of relationals denotes that the discourse of characterization, definition, classification, and interpretation is infused into the prefaces. These attributions illuminate social meaning of the preface writers, events and reality attached to these books and "seem to be the most obvious site where bias can be located and demonstrated" (Hodge & Kress, 1993, p. 163).

- (5) Aldoux Huxley, dünya edebiyatında "düşünce edebiyatı" denen türün başlatıcılarındandır.
- (5) Aldoux Huxley is one of the initiators of the genre called the "literature of ideas" in world literature.

(Huxley, 1928/1992)

- (6) Hayatta kalmanın, yaşama rağmen yaşamanın belgesidir Yengeç Dönencesi.
 - (6) Tropic of Cancer is a document of survival and living in spite of life. (Miller, 1934/2014)

Verbal processes might make the internal mental processes external in some way or assign information to sources. Verbal processes encompass verbs of "saying," a stage between mental and material processes that indicates that saying something is a physical action that denotes mental operations.

- (7) Miller, etkilendiği tüm yazarlarla bağını kopartarak özgün sesini bulduğunu ve bir tür 'umutsuzluk' yüzünden yazar olduğunu söyler.
- (7) Miller says that he found his unique voice by severing ties with all the writers that influenced him, and that he became a writer out of a kind of 'despair'.

(Miller, 1934/2014)

- (8) Yayımlandığı günden itibaren çeşitli tartışmaların odak noktasında yer alan Lady Chatterley'in aşığı, savaşta yaralanarak kötürüm kalan Clifford'ın genç karısı Constance ile koru bekçisi Mellors arasındaki aşkı anlatır.
- (8) Lady Chatterley's Lover, positioned at the center of various debates since the day it was published, tells the story of the love between Constance, the young wife of Clifford who was wounded and crippled in the war, and Mellors, the gamekeeper.

(Lawrence, 1928/2012)

Writers' much lesser use of behavioral processes in comparison to the excessively used material processes may be due to their far greater attention to the concrete than to psychological and physiological action.

- (9) Yer yer okuru kahkahalarla gülmek zorunda bırakan bu akıcı, usta işi romanda, yazar, bir an bile dürüstlükten ayrılmamıştır.
- (9) The author never for a moment deviates from honesty in this fluent, masterful novel, which at times compels the reader to burst into laughter.

(Miller, 1939/1985)

- (10) Hipnopedya sayesinde herkes mutludur; herkes çalışır ve herkes eğlenir.
- (10) Thanks to hypnopedia, everyone is happy; everyone works, and everyone enjoys themselves

(Huxley, 1928/2014)

A limited number of existential processes were encountered in the author and book-oriented preface discourses.

- (11) Ansiklopedilerde belirlenen deyimiyle, birazcık yeteneği ama büyük bir dehası vardı.
- (11) As the encyclopedias put it, there was a little talent, but a great genius in him.

(Dreiser, 1925/1970)

- (12) Bu yakınlarda ölümü bütün sanatseverleri üzmüş olan büyük İngiliz romancısı Aldous Huxley'in romanları arasında "Yeni Dünya"nın özel bir yeri vardır.
- (12) There is a special place for "The New World" among the novels of the great English novelist Aldous Huxley, whose recent death has upset all art lovers.

(Huxley, 1932/1964)

As the examples show, different processes represent various types of discursive traces.

Conclusion

This study argues that the presentation of modernist novels that were stigmatized, banned, or confiscated for moral reasons in the source culture creates a contentious and manipulative ground for all agents involved in their (re)translations into a target culture.

Our findings revealed that paratexts, which serve as a bridge between fiction and reality, function as a recontextualization tool with each retranslation having a multilayered and multifaceted nature. While each new edition of a work in a different language represents a process of re-interpretation, prefaces that act as thresholds to direct and support the recontextualization of a work constitute a discursive platform which allows the reflection of mind maps. In this regard, transitivity analysis, as a grammatical reflection of processes, events, mental operations and relations, enables us to ascertain how the authors of these prefaces encoded their mental representations of reality in language.

The results of the transitivity analysis of the prefaces in our corpus demonstrate that the discourse is basically shaped around the book and the author. The extensive use of material processes in the textualization of the prefaces uncovers the use of an explicit structure which exposes clear-cut relations between the processes and participants. It means that material processes clearly denote the "notion that some entity 'does' something—which may be done 'to' some other" (Halliday, 1994, p. 110) to affect the perception. Therefore, it can be assumed that preface writers occupy a unique role in cultural discourse as actors who manage and direct the network of relations between source culture and target culture in the broader context. In other words, by understanding and undertaking the important role of translation in shaping our literary and cultural system in the process of creating a cultural repertoire, the preface writers' use of intense material processes in transferring their mental schemas of external world experiences to the linguistic level clearly shows that they construct a discourse that defies all forms of oppression of freedom. Furthermore, the taboos and controversy that accompany prefaces create a pathway into the use of mental and relational processes. This represents a more implicit discourse construction which paves the way for judgemental acts and indicates an intense activity of reclassifying and redefining a controversial pattern of reality. In this way, a transitivity-based CDA framework displays how discourse manifests itself in existing social reality as a foundation for action to change reality.

There is no doubt that these interpretations will be completed with a more holistic perspective by using the findings of the preface analysis based on interpersonal and textual metafunctions, which form the other pillars of Halliday's SFL model.

References

- Bloor, T., & Bloor M. (2004). *The Functional Analysis of English. A Hallidayan Approach*. Arnold. https://doi.org/10.4324/9780203774854
- Bradbury, M., & McFarlane, J. (1976). *Modernism*. Penguin.
- Bradshaw, D. (2006). Obscenity and Censorship. In D. Bradshaw & K. J. H. Dettmar (Eds.), *A Companion to Modernist Culture and Literature* (pp. 508-519). Blackwell Publishing. https://doi.org/10.1002/9780470996331.ch10
- Butler, C. (2010). *Modernism: A Very Short Introduction* (1st ed.). Oxford University Press.
- Calzada Pérez, M. (2007). *Transitivity in translating: the interdependence of texture and context* (Vol. 8). Peter Lang.
- Childs, P. (2002). Modernism. Taylor & Francis eBooks.
- Childs, P., & Fowler. R. (2006). *The Routledge Dictionary of Literary Terms*. Taylor & Francis eBooks. https://doi.org/10.4324/9780203462911
- Chilton, P., & Schäffner, C. (2002). Introduction: Themes and Principles in the Analysis of Political Discourse. In P. Chilton & C. Schäffner (Eds.), *Politics as Text and Talk. Analytic Approaches to Political Discourse* (pp. 1-41). John Benjamins Publishing. https://doi.org/10.1075/dapsac.4.03chi
- Eggins, S. (1994). *An Introduction to Systemic Functional Linguistics*. Pinter Publisher.
- Eggins, S. (2004). *An Introduction to Systemic Functional Linguistics* (2nd ed.). Continuum.
- Fairclough, N. (1992). Discourse and Social Change. Polity Press.
- Fairclough, N. (2000). New Labour, New Language. Routledge.
- Fairclough, N. (2003). *Analysing Discourse. Textual Analysis for Social Research*. Routledge. https://doi.org/10.4324/9780203697078
- Gasiorek, A. (2015). *A History of Modernist Literature*. Wiley-Blackwell. https://doi.org/10.1002/9781118607305
- Genette, G. (1997). *Paratexts: Thresholds of Interpretation* (J. E. Lewin, Trans.). Cambridge University Press.
- Gillies, M. A., & Mahood, A. (2007). *Modernist literature: An introduction*. Edinburgh University Press. https://doi.org/10.1515/9780748631612
- Halliday, M. A. K. (1994). An Introduction to Functional Grammar. Edward Arnold.
- Halliday, M. A. K., & Matthiessen, C. M. (1999). *Construing experience through meaning: A language based approach to cognition.* Cassell.
- Halliday, M. A. K., & Matthiessen, C. M. (2004). *An Introduction to Functional Grammar* (3rd ed.). Oxford University Press.

- Hasan, R. (1989). *Linguistics, Language and Verbal Art*. Oxford University Press.
- Hodge, B., & Kress, G. R. (1993). Language as Ideology (2nd ed.). Routledge.
- Kansu-Yetkiner, N., Duman, D. ve Avşaroğlu, M. (2018). Çevirmen Neredesin? Çocuk Edebiyatı Yanmetinlerinde Çevirmenin Kılıcı Rolü ve Görünürlüğüne Artsüremli Bir Yaklaşım: 1929-2013 [Translator, Where Are You? A Diachronic Approach to Translator's Agency and Visibility in Children's Literature Paratexts: 1929-2013]. *Çeviribilim ve Uygulamaları Dergisi, 24,* 17-34.
- Kovala, U. (1996). Translations, Paratextual Mediation, and Ideological Closure. *Target*, 8(1), 119–147. https://doi.org/10.1075/target.8.1.07kov
- Laver, M., Benoit, K., & Garry, J. (2003). Extracting policy positions from political texts using words as data. *American political science review*, 97(2), 311-331. https://doi.org/10.1017/S0003055403000698
- Linell, P. (2001). *Approaching Dialogue: Talk, Interaction and Contexts in Dialogical Perspectives* (2nd ed.). John Benjamins Publishings.
- Magistrale, L. (2009, October 23). *Transitivity System*. SlidePlayer. https://slideplayer.com/slide/581675
- Matz, J. (2006). The Novel. In D. Bradshaw & K. J. H. Dettmar (Eds.), *A Companion to Modernist Culture and Literature* (pp. 215-226). Blackwell Publishing. https://doi.org/10.1002/9780470996331.ch23
- Olson, L. (2006). Sex and Sexuality. In D. Bradshaw & K. J. H. Dettmar (Eds.), *A Companion to Modernist Culture and Literature* (pp. 143-152). Blackwell Publishing. https://doi.org/10.1002/9780470996331.ch14
- Potter, R. (2012). *Modernist Literature*. Edinburgh University Press. https://doi.org/10.1515/9780748634330
- Potter, R. (2013). *Obscene modernism: Literary censorship and experiment 1900-1940*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199680986.001.0001
- Schäffner, C. (2008). 'The Prime Minister said ...': Voices in translated political texts. *Synaps, 22,* 3-25. https://publications.aston.ac.uk/id/eprint/1912
- Semino, E., Deignan, A., & Littlemore, J. (2012). Metaphor, Genre, and Recontextualization. *Metaphor and Symbol*, *28*(1), 41-59. https://doi.org/10.1080/10926488.2013.742842
- Tahir-Gürçağlar, Ş. (2002). What Texts Don't Tell: The Use of Paratexts in Translation Research. In T. Hermans (Ed.), *Crosscultural Transgressions: Research Models in Translation Studies II: Historical and Ideological Issues*, (pp. 44-60). St. Jerome.
- Watts, R. (2000). Translating Culture: Reading the Paratexts to Aimé Césaire's Cahier d'un retour au pays natal. *TTR: Traduction, Terminologie, Rédaction, 13*(2), 29-46. https://doi.org/10.7202/037410ar

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Appendix

References for the Corpus

- Caldwell, E. (1949). *Allaha Adanan Toprak*. (F. Uray, Trans.). Remzi Kitabevi. (Original work published 1933)
- Dreiser, T. (1970). İnsanlık Suçu. (H. Kuntay, Trans.). Altın Kitaplar Yayınevi. (Original work published 1925)
- Faulkner, W. (2007). *Tapınak*. (N. Aytür, Trans.). Yapı Kredi Yayınları. (Original work published 1931)
- Huxley, A. (1997). *Cesur Yeni Dünya*. (E. İ. Polat, Trans.). Yaba Yayınları. (Original work published 1932)
- Huxley, A. (1961). Ses Sese Karşı. (M. Urgan, Trans.). Milli Eğitim Basımevi. (Original work published 1928)
- Huxley, A. (1978). Ses Sese Karşı. (M. Urgan, Trans.). Milliyet Yayınları. (Original work published 1928)
- Lawrence, D. H. (1945). *Leydi Chatterley'in Âşıkı.* (A. İnsel, Trans.). İnsel Kitabevi. (Original work published 1928)
- Lawrence, D. H. (1967). *Ursula*. (O. Okandan, Trans.). Halk Kitabevi. (Original work published 1920)
- Lawrence, D. H. (1970). *Aşık Kadınlar*. (N. Yeğinobalı, Trans.). Altın Kitaplar Yayınevi. (Original work published 1920)
- Lawrence, D. H. (1981). *Lady Chatterley'in Sevgilisi.* (A. Göktürk, Trans.). Can Yayınları. (Original work published 1928)
- Lawrence, D. H. (1990). *Gökkuşağı*. (T. Nutku, Trans.). Can Yayınları. (Original work published 1915)
- Lawrence, D. H. (2020). *Aşık Kadınlar*. (B. Şahin, Trans.). Dorlion Yayınları. (Original work published 1920)
- Miller, H. (2001). *Oğlak Dönencesi*. (A. Sağtür, Trans.). Can Yayınları. (Original work published 1939)
- Miller, H. (2014). *Yengeç Dönencesi*. (A. Pardo, Trans.). Siren Yayınları. (Original work published 1934)
- Miller, H. (2019). *Oğlak Dönencesi*. (A. Pardo, Trans.). Siren Yayınları. (Original work published 1939)

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