### On the Phenomenon of Negative Emotive Words

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### PREFACE

Language, the magnificent tapestry of human communication, has been a subject of awe, fascination, and relentless inquiry since time immemorial. In these pages, I invite you to delve into the intricate fabric of language. Whether you are a researcher, a student, or simply curious about language, this book may enhance your appreciation of the boundless creativity of human expression.

My exploration of the unique linguistic phenomenon of Negative Emotive Words began during my research endeavors in sentiment analysis, where I first encountered these words and their intriguing behaviors that immediately captured my attention. So much so that over the past years, I have delved deeply into this subject and explored them from various perspectives across multiple languages. Through this exploration, I discovered the absence of a comprehensive work that would dedicate itself to these words; despite the existence of numerous papers that have explored facets of these words and their functions, a comprehensive monograph dedicated to the detailed examination of this phenomenon has been conspicuously absent in both Hungarian and international literature.

The present publication emerges as an attempt to bridge this gap, inviting readers to traverse a terrain that holds significant implications for our understanding of language and human communication. Additionally, the structure of the book is intentionally designed to facilitate its potential integration into educational settings. Hence, each chapter will conclude with recommended readings and thought-provoking questions, aimed at stimulating further discussion and exploration in both academic and instructional contexts.

As we delve into this subject, it becomes evident that the wide variety of meanings of these words are not solely confined to lexical entries in dictionaries. Through careful analysis and empirical investigation, we dissect the processes that allow us to comprehend the intended meanings while accounting for the ambiguity that sometimes may arise. Furthermore, we explore how these words are used in context, their contextual and domainspecific nuances, and the impact they have on communication dynamics.

At the outset of this book, we embark upon a crucial journey as we navigate through the fundamental syntactic and semantic attributes of Negative Emotive Words, establishing a clear foundation for terminology elucidation. Our exploration extends into the realm of psychological motivation, providing insights into the cognitive underpinnings of these words. The fulcrum of this book lies in an extensive analytical exploration based on corpus data. This dual-pronged analysis method scrutinizes Negative Emotive Words through both synchronic and diachronic lenses, weaving an intricate tapestry that reveals the nuanced shifts and evolution of these words

over time. The journey then evolves into a theoretical discourse on the synchronic and diachronic nature of Negative Emotive Words, culminating in a synthesis of analytical findings and theoretical insights.

This endeavor not only consolidates a systematic review of existing literature, the presentation and discussion of empirical findings, and the theoretical evaluation of corpus analysis results, but also aspires to contribute to an enriched comprehension and future exploration of this linguistic phenomenon. By synthesizing various strands of research and offering new insights, this work aims to foster a deeper understanding of Negative Emotive Words and inspire further investigation into their complexities.

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Szabó Martina Katalin

### CHAPTER I

# FOCAL POINT AND GOAL OF THIS BOOK: Introductory Thoughts. Filling the Gap - Exploring Negative Emotive Words in Linguistic Research. Structure of the book.

The topic of the current publication is a language-independent linguistic phenomenon, namely the group of Negative Emotive Words. Despite the fact that many papers deal with these words, more precisely some of their functions, a comprehensive monograph reviewing and examining this linguistic phenomenon in detail has yet to be written. With my current work, I aim to fill this gap in both Hungarian and international literature. By conducting a thorough investigation and analysis of Negative Emotive Words, this book seeks to contribute significantly to our understanding of language and human communication.

At the beginning of my book, I delve into an extensive review of the most important linguistic features of Negative Emotive Words, aiming to provide clarity on terminology issues.

Following this, I elucidate the significant features that characterize the semantic development path of Negative Emotive Words. Additionally, I briefly explore the issue of psychological motivation behind the use of these words. From a synchronic perspective, I proceed to present the syntactic and semantic features of Negative Emotive Words.

Subsequently, the focus shifts to a section dedicated to discussing the corpus linguistic research results of Negative Emotive Words. Here, I provide an overview of existing studies in the literature that utilize corpus linguistic methods and tools. Furthermore, I offer insights into the corpora created during these research endeavors, which enable a corpus-based examination of these words.

These parts of the book are followed by a substantial analysis section based on corpora, where I thoroughly analyze and discuss Negative Emotive Words using corpus data, examining them from both synchronic and diachronic linguistic perspectives. As a result, I have divided this chapter into two parts: first, I explore synchronic features, and then I delve into diachronic linguistic features. Throughout this review, I present the latest relevant corpus analysis research results, offering insights into the ongoing discourse on Negative Emotive Words.

A significant portion of this chapter is dedicated to a specialized study prepared specifically for this book, focusing on the examination of a particular Hungarian Negative Emotive Word, namely, *durva* (lit. 'coarse, rough'). This in-depth study aims to contribute valuable insights into the linguistic characteristics and usage patterns of this word within the Hungarian language context, shedding light on its semantic nuances. By analyzing *durva* in detail,

we hope to gain a deeper understanding of its role in communication, and the role of Negative Emotive Words in human communication from a wider perspective.

The book's penultimate chapter leverages the insights derived from corpus analysis, initiating a theoretical discourse that unfolds in three significant stages. Firstly, I embark on a comprehensive explication of the meanings and functions inherent in Negative Emotive Words. Building upon the foundations laid in the preceding sections, I delve into the intricate terrain of embedding Negative Emotive Words within the broader grammatical framework, exploring their syntactic and semantic intricacies. The final segment of this chapter delves into an extensive examination of the phenomenon of semantic development, bolstered by the results of the analytical inquiry as well as the conclusions drawn from the initial two chapters of the Discussion section. By synthesizing corpus analysis findings with theoretical insights, this chapter aims to deepen our understanding of the complex nature of Negative Emotive Words and their role within the broader context of language and communication.

In addition to the systematic overview of literature results, the presentation and discussion of data, and the theoretical evaluation of corpus analysis results, the book is intended to provide linguistic material for a deeper understanding and further research of the topic. As part of this endeavor, an Appendix to the book includes a portion of the linguistic materials from the corpus examination, presented from a particular viewpoint. It is my hope that the data presented here will not only contribute to a deeper understanding of the linguistic phenomenon in question but also serve as a valuable resource for future research endeavors, leveraging real language examples to enrich scholarly discourse and exploration.

Furthermore, at the end of each chapter, readers can find recommended readings and thought-provoking questions and tasks, designed to stimulate further discussion and exploration of the topic. By providing these additional resources, the book aims to facilitate a comprehensive understanding of Negative Emotive Words and inspire continued engagement and inquiry into this fascinating linguistic phenomenon.

In summation, the chapters of this book attempt to elucidate the linguistic intricacies of Negative Emotive Words through systematic exploration, empirical presentation, and theoretical synthesis. By providing a comprehensive analysis of this fascinating linguistic phenomenon, this work aims to deepen our understanding of language and human communication, while also serving as a valuable resource for scholars, researchers, and students interested in delving deeper into this area of study.

### **CHAPTER II**

EXPLORING NEGATIVE EMOTIVE WORDS - CONCEPTS AND TERMINOLOGY: The essence and characteristics of Negative Emotive Words. Clarification of terminology to aid in understanding the finer details of the research.

### 2.1. What are Negative Emotive Words?

By definition, Negative Emotive Words (henceforth NEWs) possess a primarily negative semantic content when considered in isolation (i.e., without context), yet they can partially or entirely shed this negativity in specific usage contexts (Szabó and Bibok, 2019). For example, in expressions like you really are terribly nice people or the party was terrific!, the words terribly and terrific assume special meanings distinct from their inherent negative semantics. In the former, terribly functions as an intensifier akin to very, while in the latter, terrific conveys a positive evaluation by the speaker towards the subject of the utterance, despite its original negative connotation. It's worth noting that NEWs are not solely based on their meanings but often carry strong emotional implications as well.

In order to classify a language element as a NEW, we employ the following criterion, as proposed by Szabó and Bibok (2019): the element must be capable of serving as a modifier of a positively evaluative word. Additionally, the identified NEW should be capable of being interpreted as neutral in meaning when there is no negative connotation attached to it. These criterions are crucial because while many words with negative semantic content can modify another word, such collocations often imbue the entire phrase with a negative meaning. However, a fundamental characteristic of a NEW is its ability to avoid necessarily imparting a negative semantic content to the entire utterance. For example, it may simply and exclusively intensify the head of the construction or express a positive evaluation by the speaker towards the given target. To gain a better understanding of this concept, as a first step, let's consider and compare the examples in (1).<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Andor (2011), Kugler (2014), Nemesi (1998) and Székely (2007) all mention that it is also

possible for intensifiers to shift in the opposite direction, from positive to negative polarity (e.g., tökéletesen buta ('lit. perfectly stupid'), jól elhibázta (lit. 'got sg fairly wrong' meaning 'got sg totally wrong'), etc.). However, they note that this case is much rarer than the reverse phenomenon (Andor, 2011). In this discussion, I will not address these positive polarity intensifiers.

<sup>&</sup>lt;sup>2</sup> These examples are English translations of Hungarian examples presented in (Szabó and Bibok, 2019). It's worth noting that based on some English examples found on the web, similar collocations also exist in the English language.

- (1) a. The houses on the estate are being built *alarmingly* fast.
  - b. The houses on the estate are being built terribly fast.

While (1a) obviously expresses the negative evaluative opinion of the speaker towards the given information, the example in (1b) does not. In the case of the latter, there is also a possible interpretation where the speaker simply aims to express the intensity of the depicted event, rather than evaluating this information negatively. In other words, the first example unequivocally bears a negative connotation due to the intensifier used by the speaker, whereas the second example does not carry the same negative connotation. Due to these semantic specificities, *terribly* can function as a modifier of a positively evaluative word in a positively evaluative utterance without any semantic contradiction between the modifier and the modified head (Nemesi, 1998; Szabó and Bibok, 2019). However, the word *alarmingly* cannot modify a positive word, or it can do so exclusively in a specific context. Consider the following examples:

(2) a. \*/? Alarmingly beautiful houses are being built on the estate. b. *Terribly* beautiful houses are being built on the estate.

In the first example, *alarmingly* functions as an intensifier, but it cannot be interpreted as a neutral intensifier since it invariably expresses a negative emotion of the speaker. Consequently, it cannot precede a positively evaluative word like *beautiful* without causing contradiction in each and every case, without exception. If interpreted in this way, the collocation *alarmingly beautiful* is not contradictory, and the utterance is comprehensible. However, it cannot be interpreted as a semantically neutral or positive evaluation of the speaker under any circumstances.<sup>3</sup> On the other hand, in the second example, *terribly* functions as an intensifier without necessarily conveying a negative evaluation. There is a possible interpretation in which the utterance expresses a positive evaluation by the speaker without any negative connotation or semantic fade. Therefore, the collocation *terribly beautiful* is not contradictory because the intensifier *terribly* does not necessarily imply any negative evaluation or emotion.

In conclusion, it is evident that certain words with a negative semantic content consistently impart a negative meaning to the entire utterance. Therefore, in such instances, we do not categorize them as NEWs.

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<sup>&</sup>lt;sup>3</sup> As a point of interest, see also the title of a recently published scientific paper: "Frustratingly Easy Label Projection for Cross-lingual Transfer" (Chen et al., 2022), where *frustratingly easy* exhibits a similar semantic relationship.

The existence of NEWs seems to be a language-independent feature. and it should not be regarded as a new linguistic phenomenon (Andor, 2011; De Smedt and Daelemans, 2012; Rahmati, 2015; Szabó, 2018a). As for language-independence, while much of the research on NEWs has been conducted in the English language (Dragut and Fellbaum, 2014; Jing-Schmidt, 2007; Paradis, 2008, 2001; Partington, 1993; Wierzbicka, 2002), there is a growing body of studies examining NEWs in other languages, such as Hungarian (Andor, 2011; Kugler, 2014; Laczkó, 2007; Nemesi, 1998; Péter, 1991; Tolcsvai Nagy, 1988). Andor (2011), for instance, suggests that the phenomenon may also be observed in languages like Romanian, Russian, and Japanese. Szabó et al. (2017b) provided a comparative analysis of English and Russian NEWs from a translation perspective, while Szabó and Otani (2022) scrutinized the semantic and pragmatic features of NEWs using data from Hungarian and Japanese. Jing-Schmidt (2007) explored emotive intensifiers in Chinese and German. In terms of historical linguistic aspects, Andor (2017) and Dér (2013a) argued that these words undergo a process of grammaticalization over time. Szabó et al. (2022a) analyzed the historical development of NEWs in an intensifier function using computational linguistics methods, while Szabó et al. (2023a) examined NEWs based on electronic datasets covering different time periods. Additionally, Hamilton et al. (2016b) and Szabó et al. (2024b) attempted to model how words change their meanings over time through computational semantic representation methods, touching upon NEWs in their study.

In the literature, NEWs are primarily discussed within the category of intensifiers, such as terribly, awfully, and desperately, as seen in constructions like terribly nice, awfully good, and desperately important (Chang and Shao, 2020; Szabó and Otani, 2022). However, they can also serve various other meanings and functions (Szabó et al., 2022). For example, they may convey a positive evaluation by the speaker, as in the Hungarian expression "brutális alaplap" (meaning 'high quality motherboard'). They can also express the speaker's surprise, as in *D-23 for prints? That's crazy!* Additionally, they can be used as interjections, like in the Japanese phrase やばい!課題を提出し 忘れた! which translates to 'Shoot! I forgot to hand in my homework!' In addition to the functions and meanings mentioned above, Daly et al. (2004), Szabó and Otani (2022), Szabó and Bibok (2023) and Wierzbicka (2002) have all emphasized the pragmatic functions and significance of negative emotive words in human communication. For example, Daly et al. (2004) highlighted that the expletive *fuck* is sometimes used as a marker of belonging to a specific community of practice. Wierzbicka (2002) regarded bloody in Australian English as a "bleached" discourse marker. Furthermore, Szabó and Otani (2022) and Szabó and Bibok (2023) argued that NEWs are capable of expressing a range of subjective and intersubjective stances of the speaker.

At the same time, despite their evolving roles, negative emotive words can still be used in accordance with their original meanings, such as the Hungarian word *durva* ('coarse, rough') in the constructions '*durva szemcse*' ('coarse grain') and *durva anyag* ('rough cloth'). Furthermore, they can also take on a figurative sense, expressing 'physically or verbally abusive' as seen in *durva férfi* ('rude man'). As argued by Paradis (2000a), "both historically and in contemporary language they have applications at both ends of the developmental cline, in that they have propositional readings, [...] or they can be applied as markers of degree, expressiveness and subjectivity."

In summary, NEWs exhibit multifaceted functions and meanings within language and communication. While they often transcend their original connotations through the emergence of new roles and contexts, they still retain their foundational significance, adapting flexibly to diverse linguistic and communicative demands. This richness and versatility render them pivotal and intriguing subjects within linguistic and communicative inquiry.

### 2.2. Terminology issues

Now, I will review some terminological issues that will be central to this monograph.

As a first step, let's delve into the term *sentiment*. In this publication, I employ the term *sentiment* to denote a specific semantic feature, namely evaluative meaning. I adopt this terminology from the field of computational linguistics rather than the more general linguistic term *polarity*. Sentiment analysis aims to automatically extract people's opinions, evaluations, appraisals, and attitudes towards entities such as products, services, organizations, individuals, issues, or events (Liu, 2012, as cited in Szabó et al., 2016).<sup>4</sup> My choice is informed by the considerations of Szabó and Otani (2022). In pragmatics, polarity essentially denotes the relationship between semantic opposites, such as hot-cold, long-short, and good-bad (Israel, 2004). Given our focus on evaluative-emotive semantic content, the term *sentiment* – specifically referencing evaluative meaning – proves more accurate and appropriate.

Alongside the concepts of *sentiment* and *polarity*, two additional terms warrant mention: *semantic prosody* and *semantic preference*. These terms are commonly employed in linguistic analysis. Therefore, as a subsequent step, let us scrutinize these terms relying on (Szabó et al., 2023a).

Sinclair (1987,1991) observed that "many uses of words and phrases show a tendency to occur in a certain semantic environment" and he coined

<sup>&</sup>lt;sup>4</sup> There are also many other names for these tasks, e.g., *opinion mining, opinion extraction, sentiment mining, subjectivity analysis* and so on (Szabó et al., 2016).

the term semantic prosody to denote this phenomenon. One of the first and most widely accepted definitions of semantic prosody, relying on the abovepresented observation, was proposed by Louw (1993): "a consistent aura of meaning with which a form is imbued by its collocates" (quoted by Oster and van Lawick, 2008). However, as Oster and van Lawick (2008) pointed out, this definition "does leave some room for interpretation as to what semantic prosody is exactly". Various approaches have been proposed to define semantic prosody. Hunston (2007) argued that "...a word may be said to have a particular semantic prosody if it can be shown to co-occur typically with other words that belong to a particular semantic set". At the same time, based on Kochetova and Ilyinova (2022), semantic prosody refers to whether words of positive or negative connotations occur in the postposition to the intensifiers. The concept of semantic prosody is sometimes used to refer to both semantic and pragmatic aspects. Moreover, it is not consistently and clearly stated whether it is solely based on collocation patterns, e.g., positive or negative value of the collocators, or rather related to kind of an embedded evaluation or connotation of the given word (Kenny, 1998; Oster and van Lawick, 2008; Wachter, 2012). Partly because of this lack of clarity, the analysis of semantic prosody may easily become subjective, and some authors even avoid using this term altogether (Bednarek, 2008).

The term *semantic preference* is sometimes used interchangeably with *semantic prosody*, although occasionally it refers to closely related but distinct phenomena (Bednarek, 2008; Begagić, 2013). Authors apply *semantic preference* not only to positive or negative evaluative meanings but also to the semantic field of the collocating words (see, for instance, Bednarek, 2008; Oster and van Lawick, 2008; Partington, 2004). Moreover, unlike *semantic prosody*, "semantic preference generally remains relatively closely tied to the phenomenon of collocation" (Partington, 2004). According to Begagić (2013), Partington (2004) delineates the operational scopes of *semantic preference* and *semantic prosody*: the former relates the node item to another item from a particular semantic set, whereas the latter can affect wider stretches of text.<sup>5</sup>

The primary objective of this publication is not to exhaustively review all these approaches and pit one against the other. Instead, while examining recent research findings and analyzing corpus data, I will adopt the terminology proposed by Szabó et al. (2023a) and categorize the broader and narrower contexts of NEWs as *contextual* and *collocational sentiments*, respectively. *Contextual sentiment* refers to the sentiment within the narrower (minimal) context in which a given NEW appears. It's important to note that the minimal context may not always align with the utterance in which the NEW occurs. Consider the following examples:

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<sup>&</sup>lt;sup>5</sup> For a more in-depth exploration of *semantic prosody* and *semantic preference*, refer to Szabó et al. (2023a).

- (3) A járművezetők [...] sajnos sok a. the<sup>6</sup> driver.PL.NOM [...] unfortunately many hailamosabbak esetben türelmetlenebbek. az case-PL.INE more.impatient, more.prone the durva szabályszegésekre. agresszív és aggressive and rude violation.PL.ALL. 'Drivers [...] are unfortunately more impatient in many cases, more prone to aggressive and rude rule violations.' (automotive corpus, see Section VII./3.2).
  - [...] durva kitörésektől. indokolatlan h a [...] harsh outburst.DEL.PL uniustified the előzgetésektől mentes harmonikus mozgás.NOM overtaking.PL.DEL free harmonious movement iellemzi nagy általánosságban az autós characterizes there great general.INE the driving morált.

morale.

'[...] harmonious movement free from harsh outbursts and unjustified overtakings characterizes the driving morale there in general.' (automotive corpus, see Section VII/3.2).

In (3a), the entire utterance carries a negative sentiment value. In contrast, the utterance (3b) exhibits an overall positive sentiment. I refer to these sentiment values that the complete utterances carry as *contextual sentiment*. This is the sentiment value that represents the ultimate value of the given utterance, regardless of the sentiment values of individual elements or collocations within it.

Let us delve deeper into the two examples! In the first case again, the examined NEW appears in an utterance with a negative contextual sentiment value. Upon examining its immediate context, particularly the collocations within the utterance, we can observe that it collocates with a negative sentiment word, modifying it (szabályszegések 'violations'). In the second example, the NEW also modifies a word with a negative sentiment value (kitörések 'outburst'); however, as we have seen, the overall utterance is positive. The term collocational sentiment refers to the sentiment of the word modified by the given NEW. Therefore, if a given NEW modifies a word with positive sentiment in a given utterance, we consider it to have a positive

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<sup>&</sup>lt;sup>6</sup> The abbreviations used in the glosses throughout this paper are the following: 1/2/3 = first/second/third person, ACC = accusative, ADE = adessive, ALL = allative, COND = conditional (mood), DAT = dative, DEL = delative, IMP = imperative, INE = inessive, INF = infinitive, INS = instrumental, NOM = nominative, PL = plural, POSS = possessed, PST

<sup>=</sup> past (tense), SG = singular, SUB = sublative, SUP = superessive, TRA = translative.

collocational sentiment. Conversely, if modifies a word with negative sentiment, we consider it to have a negative collocational sentiment.

In this section, we will not delve into the detailed analysis of the examples. However, I would like to draw attention to how it is possible for an utterance to have a negative or positive value, both containing a negative collocational sentiment word. Note the significance of the term *mentes* ('free from') in the latter utterance, which negates the existence of the negative elements of *harsh outbursts* and *unjustified overtakings*, thereby shifting the overall sentiment towards a positive tone of the utterance.

Here it should be noted that Szabó et al. (Szabó et al., 2023a) employ the term *collocational sentiment* specifically for the immediate right collocator of a NEW. This strategic choice stems from their focus on analyzing NEWs in intensifier positions, where NEWs frequently modify their immediate right collocators. Given the large dataset they processed, manual analysis was not feasible, hence computational linguistic analysis methods were employed to assess the sentiment value of the immediate right collocator. However, it is crucial to recognize that the word modified by a NEW may not always be the first right collocator, especially in functions beyond intensification. Identifying the specific modified word often necessitates manual analysis. In this publication, I will conduct such manual analysis (as detailed in Section VII), meticulously annotating all modified heads of the constructions. I will use the term *collocational sentiment* to denote the sentiment value of these modified heads.

To sum up, in this section, we delved into fundamental concepts and terminology critical to this monograph. We examined the notions of *sentiment*, *semantic prosody*, and *semantic preference*, elucidating their significance in understanding the semantic behavior of NEWs. We made a crucial distinction between *contextual sentiment*, representing the sentiment value of an entire utterance, and *collocational sentiment*, indicating the sentiment value of the modified head within a collocation. As we progress, our focus will shift to a comprehensive analysis of the semantic behavior of NEWs, particularly exploring their semantic evolution, psychological underpinnings, and intricate syntactic and semantic characteristics.

#### Recommended literature

Dragut, E., Fellbaum, C. (2014). The role of adverbs in sentiment analysis, In *Proceedings of Frame Semantics in NLP: A Workshop in Honor of Chuck Fillmore* (1929-2014). 38-41.

Partington, A. (2004). "Utterly content in each other's company": Semantic prosody and semantic preference. *International Journal of Corpus Linguistics* 9, 131-156.

- Szabó, M.K., Bibok, K. (2019). Értékvesztésre és értékváltásra képes lexémák újabb vizsgálata. *Argumentum* 15, 639-649.
- Wierzbicka, A. (2002). Australian cultural scripts—bloody revisited. *Journal of Pragmatics*. 34, 1167-1209.

### Summary and guiding questions, tasks

- 1) Compile a list of Negative Emotive Words (NEWs) that come to mind in the Hungarian language.
  - a) How many NEWs do you know?
  - b) Can you collect NEWs from other languages?
- 2) Investigate the prior semantic content of NEWs: Delve into the inherent semantic content of NEWs, examining them from the perspective of negative emotions. Analyze several NEWs from your list to determine which specific negative emotions they are semantically associated with.
- Research and analyze a corpus of your choice to identify instances of NEWs: Select a corpus, either digitized with a search interface or a traditional textual resource, and Analyze corpus data to identify instances of NEWs.
  - a) Examine their contextual and collocational sentiments and attempt to uncover patterns in their usage.
  - b) Investigate how NEWs impact language expression and interpretation. Explore whether these words have any effect on the semantic-pragmatic features of the given utterances beyond bare intensification.
- 4) Compare and contrast different definitions and conceptualizations of semantic prosody and semantic preference in the literature, and evaluate their applicability to the study of NEWs. How do semantic prosody and semantic preference contribute to our understanding of the semantic behavior of NEWs?

### CHAPTER III.

# ON THE SEMANTIC DEVELOPMENT OF NEGATIVE EMOTIVE WORDS: Semantic evolution of Negative Emotive Words. Desemantization and grammaticalization processes. Semantic motivation of intensifiers. Semantic prosody of Negative Emotive Intensifiers.

This chapter delves into the semantic evolution of NEWs over time, particularly focusing on their classification as intensifiers. As discussed in Section I, scholarly discourse predominantly frames NEWs within the category of intensifiers, for instance NEWs like *terribly*, *awfully* and *desperately* in constructions like *terribly nice*, *awfully good* and *desperately important* (Chang and Shao, 2020; Szabó and Otani, 2022). Synthesizing findings from relevant studies primarily focused on intensifiers, this chapter examines their significance in understanding the semantic evolution of NEWs.

Intensifiers have been a focal point for scholars interested in linguistic variation and change, with a rich tradition of studying their evolution over time (Aijmer, 2022). What is more, several studies have investigated the process of NEWs transitioning into intensifiers. Partington (1993) and Nemesi (1998) examined the delexicalization process of Negative Emotive Intensifiers, while others such as Jing-Schmidt (2007), Paradis (2001, 2000b), and Kugler (2014) explored this phenomenon from cognitive perspectives. Paradis (2008) analyzed degree words with a focus on scalarity and boundedness, while Wierzbicka (2002) approached the topic from a cultural pragmatic viewpoint. Furthermore, Dragut and Fellbaum (2014) conducted an examination of intensifiers, encompassing NEWs, from a computational linguistic standpoint, with a particular emphasis on automatic sentiment analysis. Similarly, Szabó et al. (2024b) contributed to this area of research by applying a computational semantic analysis method. Szabó and Bibok (2019) discussed polarity loss, referring to the process where a NEW transforms into an intensifier, attempting to establish a suitable lexical representation within a lexical pragmatic framework.

In order to better understand the role and evolution of intensifiers, it is important to examine which words primarily serve as intensifiers and which ones have a primary meaning and only secondarily function as intensifiers. In this context, Balogh (2009) investigated the group of intensifiers and distinguished between these two categories, such as words like *very*, which primarily serve as intensifiers, and those like *deeply* and *immeasurably*, which have primary meanings and only secondarily function as intensifiers. This approach allows us to gain a deeper understanding of the role and evolution of intensifiers by distinguishing between words that focus on intensification and others with broader meanings.

This distinction between intensifiers that primarily serve their function and those with secondary roles is particularly relevant when considering Negative Emotive Intensifiers. As we know, all these words have a prior meaning and function other than intensification and they evolute into intensifiers (over time, in a step by step fashion). The passage is grammatically correct and well-structured. However, to enhance readability and clarity, it could be broken down into shorter, more digestible sentences.

In the semantic evolution of Negative Emotive Intensifiers, two distinct phases can be identified (Lorenz, 2002, cited in Dér, 2013a). Firstly, there is a process of *desemantization* over time, during which these words gradually lose their lexical meaning. Secondly, they undergo *grammaticalization*, transforming into lexical elements, specifically intensifiers (Dér, 2013a). However, due to the overlapping nature of these stages, they are often not clearly delineated in related research (Dér, 2013a).

Tagliamonte and Roberts (2005) provide detailed insights into the linguistic development of intensifiers. Initially, a word primarily used as lexical occasionally serves to amplify the quality of an adjective or adverb. Subsequently, it gains more frequent usage in this new function across a broader range of words. Some intensifiers, like *perfectly* or *awfully*, retain a closer connection to their prior lexical meaning, while others, such as *really* and *very*, undergo further delexicalization due to their frequent intensifying use (Wachter, 2012).

It is worth noting here that not all scholars contend that any Negative Emotive Intensifiers lack negative semantic motivation. Tolcsvai Nagy (1988), for example, presents a contrasting perspective. He posits that while "traditional" intensifiers like *kiváló* ('distinguished'), *nagyszerű* ('great'), or *csodálatos* ('wonderful') affirm positive value, terms like *állati* ('brutal') or *baromi* 'barbaric' suggest the relative nature of the values they convey; namely, their meaning implies an "ironic attitude" on the part of the speaker.

Drawing on Herda's analysis (2022), a crucial aspect emerges: the transition towards a grammatical function is underpinned by the emergence of a more abstract, procedural meaning within the expression. This signifies a shift where the descriptive content of a grammaticalizing expression recedes into the background, giving precedence to schematic implications (Evans and Wilkins, 2000; Hopper and Traugott, 2003; Heine et al., 1991; Sweetser, 1988, as cited in Herda, 2022). This shift triggers inference processes, with procedural meaning gradually outweighing conceptual content, along with appearancing of the speaker's attitude (Diewald, 2011; Varga, 2017).

In the case of Negative Emotive Intensifiers, this semantic evolution follows a systematic pattern. Over time, their prior meaning, including the negative semantic component, undergoes a step-by-step diminishment

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<sup>&</sup>lt;sup>7</sup> Both these words may function as an intensifier in the Hungarian language.

(Lorenz, 2002; Partington, 1993). As a result, collocational restrictions gradually "erode", allowing these words to collocate even with positive words (Schweinberger, 2021). The process of delexicalization leads to a reduction in lexical constraints, consequently increasing the frequency of usage (Lorenz, 2002). Notably, intensifiers that frequently collocate with negative words exhibit lower levels of delexicalization compared to those with a broader range (neutral and even positive) of collocates (Tagliamonte, 2008).

Relying on Paradis (2000a), the prior meanings of negative emotive intensifiers, such as the semantic content of words like *awful*, *dreadful*, *horrible*, or "*terrible* suggest an extreme point on a scale, typically associated with feelings of awe, dread, horror, or terror. Paradis (1997) refers to this characteristic as an "inherent superlative". This superlative quality is utilized to intensify expressions. However, as these words evolve into intensifiers, their propositional meaning weakens. Paradis (2000a) argues that this weakening is counterbalanced by pragmatic strengthening.

As indicated earlier, this semantic changing procedure occurs gradually over an extended time period. Consequently, scholars recognize that the underlying semantic motivations vary among different Negative Emotive Intensifiers. Partington (1993) introduced the concept of a *delexicalization continuum* to describe this process, wherein intensifiers progress from retaining their prior semantic content to mainly or exclusively serving an intensifying function. At the terminal stage of this continuum, elements exclusively serve the purpose of intensification. Conversely, as we move away from this endpoint, we encounter elements that preserve (at least to a certain extent) their prior semantic content even when used as intensifiers. Therefore, while intensifiers may appear interchangeable, they actually exist at various stages of semantic development in a specific time period, leading to nuanced distinctions in usage (Wachter, 2012).

Furthermore, it's worth noting an additional aspect regarding NEWs functioning as intensifiers: there is a possibility that these words may fade from language usage over time, particularly in their role as intensifiers. For example, the Hungarian NEW *kietlen* ('drear') was commonly employed as an intensifier in earlier stages of the Hungarian language, but is no longer prevalent today, at least not in the standard language form and its intensifying function (Prohászka, 1953, as cited in Nemesi, 1998; Szabó, 2018a).

Given that existing literature predominantly examines the intensifier function of NEWs and delves into the semantic evolution of Negative Emotive Intensifiers over time, it overlooks other potential functions of NEWs, such as their use in positively evaluating contexts or as interjections. However, to gain a comprehensive understanding of the semantic development of NEWs, it is imperative to explore all conceivable functions. I will elaborate on my approach to this in Section VIII.

Lastly, Szabó (2018a) drew attention to the phenomenon of *semantic prosody* concerning NEWs, also known as *discourse prosody* or *pragmatic prosody* (Andor, 2011). Given our prior exploration of *semantic prosody* in Section 2.2, I will now briefly outline its essential characteristics to contextualize the ongoing discourse. Sinclair (1991) was among the first to observe that certain expressions in texts tend to collocate predominantly with linguistic elements carrying either negative or positive semantic content. For example, in English, the adverb *utterly* and the verb *provide* exhibit such tendencies. *Utterly* typically occurs in contexts with a negative or ironic connotation (Louw, 1993, as cited by Andor, 2011), while *provide* often collocates with nouns possessing positive semantic content (Stubbs, 2001, as quoted by Andor, 2011). Despite lacking evaluative semantic content at the lexical level, these expressions acquire evaluative meanings through their collocational patterns, as noted by Louw (1993).

Semantic prosody should be considered in the context of the semantic development of NEWs, as it likely diminishes the affectivity of collocations containing opposite semantic values, such as negative and positive words (Szabó, 2018a). Szabó (2018a) proposed that semantic prosody could accelerate the desemantization process of Negative Emotive Intensifiers: as they increasingly collocate with neutral and positive words alongside negative ones, their semantic prosody tends towards neutrality and positivity. Consequently, this supports the likelihood of their more frequent occurrence in collocations with positive words alongside negative ones (for additional insights into semantic prosody, refer to Section II/2). Furthermore, Kugler (2014), building on Nemesi (1998), also draws attention to the diminishing (stylistic) effect of Negative Emotive Intensifiers; she suggested that the more extensively they are used, the less effective they become.

This chapter provided a comprehensive exploration of the semantic evolution of Negative Emotive Words, particularly focusing on their transition into intensifiers from a semantic-pragmatic perspective. It discussed key aspects such as desemantization, grammaticalization, and the distinction between primary and secondary intensifiers. In this context, it offered nuanced insights into the semantic motivations of Negative Emotive Intensifiers, as well as the influence of semantic prosody on their usage patterns.

In the upcoming Chapter IV, we will delve into the psychological motivations behind the usage of Negative Emotive Words (NEWs), offering valuable insights into the intricate relationship between language and emotions. This section will shed light on the underlying motivations for employing NEWs in communication.

### Recommended literature

- Jing-Schmidt, Z. (2007). Negativity bias in language: A cognitive-affective model of emotive intensifiers. *Cognitive Linguistics* 18(3). 417-443. https://doi.org/10.1515/COG.2007.023
- Paradis, C. (2001). Adjectives and boundedness. *Cognitive Linguistics*, 12, 47-64.
- Paradis, C. (2008). Configurations, construals and change: expressions of DEGREE1. *English Language and Linguistics* 12, 317-343.
- Partington, A. (1993). Corpus evidence of language change: The case of the intensifier. In Baker, M., Francis, G., Tognini-Bonelli, E. (Eds.) *Text and Technology: In Honour of John Sinclair*. John Benjamins, Amsterdam.

### Summary and guiding questions, tasks

- 1) Select a NEW and find examples of it in a corpus of your choice. Based on the corpus data, analyze the semantic prosody of the chosen word. How do you perceive the semantic prosody of the given word based on the corpus data?
- 2) Two distinct phases were identified in the semantic development of Negative Emotive Intensifiers: desemantization and grammaticalization. Examine Positive Emotive Words mentioned in Chapter 2.1 above that also evolve into intensifiers, such as *tökéletesen buta* ('lit. perfectly stupid') or *jól elhibázta* (lit. 'got sg fairly wrong' meaning 'got sg totally wrong') (Andor 2011, Kugler 2014, Nemesi 1998, Székely 2007). How do the processes of desemantization and grammaticalization differ or resemble in the development of Negative and Positive Emotive Words into intensifiers (if there any)?
- 3) Explore the societal factors shaping the semantic evolution of Negative Emotive Intensifiers. In your opinion, how do societal attitudes towards negative emotions influence the usage and perception of NEWs over time?

### CHAPTER IV.

UNDERSTANDING THE PSYCHOLOGICAL MOTIVATION BEHIND THE USE OF NEWS: Negativity Bias – Unconscious preference for negative information. Misattribution of Arousal – Attribution of excitement to a different emotion. Positivity Bias or Pollyanna Phenomenon – Higher frequency of positive words in language. Congruence – Alignment of language elements with the same polarity. The impact of these phenomena on the use of NEWs.

In this chapter, we delve into the intricate relationship between Negative Emotive Words (NEWs), emotions, and psychology. This chapter has a twofold goal. First, it briefly discusses the prior semantic content of NEWs from the perspective of emotions. Then, it examines the possible psychological motivations behind their usage.

According Szabó and Bibok (2019), Hungarian NEWs are often associated with the emotion of fear in terms of their emotive semantic content in the literature (cf. e.g. Kugler, 2014; Nemesi, 1998). Nemesi (1998) categorized these expressions as belonging to "the concept of dread", with no exception. However, Jing-Schmidt (2007), who systematized NEWs in the English language, associated certain NEWs not with fear, but with other negative emotions such as disgust and anger. Building on Jing-Schmidt's work, Szabó (2018a) argued that the prior semantic content of some Hungarian NEWs may be associated not (or not only) with fear but with disgust or anger (as well). Just to mention some examples, Hungarian NEWs like félelmetes(en) 'dreadful(ly)', borzalmas(an) 'horrible, horribly', rémesen 'awfully' are semantically motivated by the emotion of fear. However, some other NEWs like iszonyatos(an) 'loathing(ly)', mocskos(ul/an) 'filthy', piszkos(ul) 'dirty(ly)', rohadt(ul) 'rotten(ly)' could be associated with the emotion of disgust. Lastly, words semantically motivated by the emotion of anger include swearwords like (ki)baszott(ul) 'fucking' or kurva/kurvára 'bitch', among others.

In the second part of this chapter, I will seek answers to several questions. Firstly, what motivates the use of NEWs from a psychological perspective? In other words, why do we use negative words, such as intensifiers (without any negative evaluative meaning) or even positively? Secondly, are there any recurring patterns that characterize the creation of NEWs? In addressing these questions, I will draw on the works of Szabó (2019, 2018a,b).

Shmelev (2012) suggests that words with intense emotional and evaluative semantic content frequently undergo a process known as semantic shift, resulting in an acquisition of an opposite meaning. Rahmati (2015) corroborates this notion, identifying it as a phenomenon termed *semantic shift*.

Rahmati explains that in such cases, the word meaning "shifts" from its original to another meaning. In the context of NEWs, this semantic shift may lead to the transformation of negative content into a positive value.

To explore the psychological motivation behind the use of NEWs, we must consider three key psychological phenomena: *negativity bias, misattribution of arousal,* and positive bias, also known as the *Pollyanna phenomenon* or *hypothesis* (Szabó, 2018a, 2018b). In the following discussion, we will delve into each of these phenomena to understand why individuals are inclined to use negative words, such as NEWs, in various contexts, including intensification and positive evaluations.

The phenomenon of *negativity bias* suggests that we unconsciously pay more attention to unpleasant and threatening information compared to pleasant and positive information (Jing-Schmidt, 2007). This bias is supported by numerous empirical studies (Cacioppo and Berntson, 1994; Peeters and Czapinski, 1990; Pratto and John, 1991), and many authors attribute it to evolutionary reasons: as a self-protective mechanism, humans are naturally inclined to pay more attention to signs of fear, disgust, and anger (Jing-Schmidt, 2007).

According to Jing-Schmidt (2007), the use of Negative Emotive Intensifiers is closely related to the phenomenon of negativity bias. She suggests that speakers may unconsciously use these intensifiers to evoke more intense attention from their listeners. Kugler (2014) also supports this idea, mentioning negativity bias in connection with the Hungarian intensifier *félelmetesen* ('fearfully'). Similarly, Szabó (2019) suggests that negativity bias may also motivate the use of NEWs when they express positive evaluations in certain contexts. In other words, negativity bias could motivate the use of NEWs not only as intensifiers but also in positive evaluations.

Furthermore, this function of NEWs is in line with strategies of language impression, as discussed by László (1997), Nemesi (2000), and Péter (1991, 1984), among others.

Closely related to the *negativity bias* is the phenomenon of *misattribution of arousal*. This term refers to a psychological process in which an individual mistakenly attributes the experienced excitement to another emotion, rather than the one that actually caused the arousal (Schachter and Singer, 1962). For example, an individual may attribute the physiological response associated with fear to the experience of attraction. This mistake likely occurs because the physical responses to these emotions share similar physiological symptoms, such as an increase in blood pressure or more rapid breathing (Szabó, 2018a).

The phenomenon of *misattribution of arousal* was first identified by Schachter and Singer (1962) and has since been supported by numerous test results (Foster et al., 1998; Dutton and Aron, 1974).

Szabó (2018b, 2019) argues that this phenomenon can also motivate the use of NEWs. If the physiological responses to negative emotions, such as fear, are similar to those of excitement and interest, the use of a NEW may trigger a stronger emotional response and engagement from the listener in the speaker's communication.

Another psychological phenomenon to consider regarding the use of NEWs is the so-called *positivity bias*, which likely amplifies the affective impact of these words (Jing-Schmidt, 2007). According to the *Pollyanna hypothesis*, attributed to Boucher and Osgood (1969), there is a higher prevalence of positive words compared to negative ones as a linguistic universal. Since the use of positive words is the norm in communication, negative words, with their higher illocutionary power, may have a more intense effect on the recipient (Jing-Schmidt, 2007). Therefore, these words can maximize the communicative impact.

As Jing-Schmidt (2007) pointed out, the phenomena of negativity and positivity bias appear to contradict each other only on the surface. While the negativity effect influences neurological processes, the positivity effect is primarily characteristic of language use. Consequently, we experience their effects in different cognitive processes.

Kugler (2014) highlighted the connection between the *Pollyanna phenomenon* and the use of NEWs, suggesting that since language use tends to be positive overall, we may consciously or unconsciously exploit this tendency to influence others. Positive words being the norm in communication, negative words, with their higher illocutionary power, can have a more intense effect on the recipient. Therefore, the strategic use of NEWs could maximize communicative impact. (For further elaboration, refer to Szabó (2018a, 2018b).)

Yes, that looks good! Just a small adjustment for clarity:

The third factor to consider for NEWs is the principle of *congruence* (Kugler, 2014). According to Kugler (2014), *congruence* ensures that in the most natural and easily interpretable constructions, language elements of the same polarity are connected, meaning their values are aligned. When there is congruence between the elements of an expression, processing the structure requires less mental effort. However, if congruence is lacking, resulting in greater semantic complexity, the structure may require more mental effort to process, possibly resulting in a more marked form (Imrényi, 2013; Péter, 2008 as cited in Kugler, 2014). (For further details, refer to Szabó (2018a).)

Kugler (2014) discussed the connection between NEWs and the tendency of *congruence*, suggesting that when speakers use words with opposite values together, it requires greater mental effort for interpretation. This increased cognitive effort can enhance the intended effect. Partington (1993) shares a similar perspective in the context of Negative Emotive Intensifiers, suggesting that combinations of elements with opposite values

can have a more intense effect on the recipient compared to easily interpretable expressions. Szabó (2018a) supports this view, stating that congruence may motivate the use of Negative Emotive Intensifiers, especially considering that a NEW often modifies a positive word in these collocations.

Here, we have explored the psychological motivations behind the use of Negative Emotive Words (NEWs), uncovering how factors such as *negativity bias*, *misattribution of arousal*, *positivity bias*, and the principle of *congruence* influence their usage. These psychological phenomena provide valuable insights into the complex interplay between language, emotions, and cognition, shedding light on why speakers employ NEWs in various communicative contexts.

### Recommended literature

- Boucher, J., Osgood, C.E. (1969). The pollyanna hypothesis. *Journal of verbal learning and verbal behavior*, 8(1), 1-8.
- Kugler, N. (2014). A nyelvi polaritás kifejezésének egy mintázata, avagy milyen a *félelmetesen* jó? *Magyar Nyelvőr* 138, 129-139.
- Shmelev, A. (2012). Cognitive and Communicative Sources of Enantiosemy. In *Proceedings of the 10th World Congress of the International Association for Semiotic Studies* (IASS/AIS), Universidad de la Coruña. (España / Spain), 837-844. ISBN: 978-84-9749-522-6.
- Rahmati, F. (2015). Semantic shift, homonyms, synonyms and auto-antonyms. *WALIA Journal* 31, S3.

### Summary and guiding questions, tasks

- Analyze corpus examples to explore how the negativity bias and the misattribution of arousal influence the pragmatic effects of Negative Emotive Intensifiers. Search for corpus examples of both regular (nonnegative emotive) intensifiers and Negative Emotive Intensifiers in a database of your choice.
  - a. Compare these corpus examples from a pragmatic point of view: investigate how the expressive intentions of speakers are reflected in the use of Negative Emotive Intensifiers compared to non-negative intensifiers. Analyze them to understand how these intensifiers contribute to the speaker's expressive goals in discourse.
  - b. Identify instances where intensifiers trigger stronger emotional responses due to the mentioned psychological phenomena and explain these psychological mechanisms in detail.

- 2) Select a short text (minimum 200 words) from a source of your choice and identify words expressing positive and negative emotions.
  - a. Determine whether positive words are more frequent than negative words in the text.
  - b. Pay attention to negated emotive words (e.g., *not good, less bad*) and analyze their semantic impact on the collocation they occur in. Observe whether the author expresses negative evaluations using negative words or negated positive words, and conversely, whether positive evaluations are expressed using positive words or negated negative words.
  - c. Analyze how the frequency of positive and negative words, as well as the use of negated positive and negative words, affects the overall mood of the text.

### CHAPTER V.

## NEWS FROM SYNTACTIC AND SEMANTIC POINTS OF VIEW: The syntactic and semantic characteristics of Hungarian NEWs).

Various syntactic functions of NEWs. The syntactic constraints on the usage of suffixed and unsuffixed adverbial forms of NEWs.

In this section, I will provide a concise overview of the parts-of-speech that Hungarian NEWs can belong to, as well as the parts-of-speech of the words they modify. This systematization will be based on Szabó's research (2018a, 2019), and I will illustrate each case with real language examples.

Here, I will primarily focus on syntactic specifics and discuss semantic features in relation to them. A more detailed discussion of the semantic-pragmatic features of NEWs will be provided in Section VI during the corpus analysis part of the book.

First, let's discuss the syntactic features of NEWs when used as intensifiers.

Examples of NEWs functioning as intensifiers in the Hungarian language can be found in both morphologically marked and unmarked dependencies. For instance, *félelmetesen jó* ('dreadfully good') and *félelmetes jó* ('dreadful good') are examples of such intensifiers. Let's first consider the possible collocations of the suffixed Negative Emotive Intensifiers. In these cases, NEWs may modify an adjective (4a), an adverb (4b), a numeral (4c), or a verb (4d). In the examples, the examined NEWs are in bold, and the words modified by the NEWs are in Italics.

- (4) a. Az új Spotify-design annyira **mocskosul** the new spotify.design.NOM so dirty  $j\delta$  lett
  - good become.PST
  - 'The new Spotify design has become so dirty good' [twitter.com]
    [...] **eszméletlenül** gyorsan fogynak
  - b. [...] **eszméletlenül** gyorsan fogynak
    [...] unconsciously fastly diminish.3PL
    'They are diminishing unconsciously fast' [trendalelke.hu]
  - c. tényleg **rohadtul** *sok* minden really damn lot.of.things.NOM változott.
    - have.changed.3PL.PST

'a damn lot of things have changed' [madscientist.hu]

d. a csapat **rettentően** *törekszik* a the team.NOM terribly strive the megújulásra

renewal.ALL 'the team is striving terribly for renewal' [fl-hirek.csapata.hu]

A Negative Emotive Intensifier without a suffix may function as an adverb and modify an adjective (5a), an adverb (5b), or a numeral (5c).

- (5) a. a szinkronúszás **mocskos** *jó* the synchronized.swimming dirty good sport sport.NOM the synchronized swimming is a bloody good sport. [instagram.com]
  - b. **eszméletlen** gyorsan telik az unconsciously fast pass.3SG the idő.

'Time passes incredibly fast.' [facebook.hu]

Látod rohadt c. azt a sok üres helyet?! the see.2sG empty place.ACC that damn lot 'Do you see those damn lot of empty places?' [nemzetisport.hu]

At the same time, most NEWs in an unsuffixed adverbial form cannot modify a verb. For instance, while (6a) is grammatically correct, constructions like (6b) are ungrammatical.

(6) a. a csapat **rettentő** *törekszik* a the team.NOM terrible strive the megújulásra renewal.ALL

'the team is terrib[ly] striving for renewal'

b. \*a csapat brutális / őrült / elképesztő törekszik terrible / crazy / amazing \*the team.NOM strive megújulásra a the renewal.ALL 'the team is brutal[ly] / crazy / hair-raising[ly] striving for renewal'

As we can see, unsuffixed adverbial forms of NEWs, as seen in examples (5), can modify adjectives, adverbs, and numerals. However, when it comes to modifying verbs, as shown in examples (6), most of these constructions are ungrammatical in Hungarian. This indicates a syntactic constraint on the usage of NEWs in their unsuffixed adverbial form.

As for NEWs functioning as intensifiers, it is worth mentioning that they may occur in elliptical constructions as well, where the intensified word is practically absent from the construction (Szabó et al., 2022b). Let us consider the following example from Szabó et al. (2022b):

(7) Α vasárnap esti egy-másfél órás the Sunday evening one-one.and.a.half hour szórakozáshoz mennyiségű hardverre borzasztó awful amount hardware.SUB fun.ALL szükség. van he 3sG need NOM 'The Sunday night entertainment lasting an hour or an hour and a half requires an awful lot of hardware.' [origo.hu]

In this example, the expression borzasztó mennyiségű hardver ('an awful lot of hardware') is an elliptical construction since the word nagy ('big') is missing from it: borzasztó [nagy] mennyiségű hardver ('an awfully [big] amount of hardware'). Thus, the word borzasztó syntactically modifies the word mennyiségű, even though it semantically modifies the ellipted nagy. This type of construction is made possible by the fact that the syntactic heads of these constructions (in this case, the word mennyiség – 'amount') are so-called parametric nouns, which are predicates "related to a specific domain of human experience that is subject to quantification" (Lauwers, 2012). (For more details about this phenomenon, see Milićević (2017) and Szabó et al. (2022b).)

When a NEW does not function as an intensifier in the utterance, it may act as a *polarity-shifting word* or *polarity shifters*, according to Szabó (2019, 2018a). In this context, the speaker can convey two types of information. Firstly, despite its negative semantic content, the NEW expresses positive evaluation, as seen in examples like *durva buli* (lit. 'rough party' – 'great party') or *brutális alaplap* (lit. 'brutal motherboard' – 'amazingly good motherboard'). Secondly, the speaker may use the NEW to emphasize the remarkable or surprising nature of the information expressed by the utterance, or the target of the utterance itself (Szabó, 2019). For more details, see Section VI below.

Regarding the structural specifics of polarity-shifting NEWs, according to Szabó (2019), we need to consider three types of structures.

In one case, the examined NEW functions as a predicate in the utterance, and the evaluation expressed by it refers to the content of the subordinate clause. This is demonstrated using Andor's (2011) example.

(8) **Durva** volt, amit a hegedűs művelt a tough be.PST.3SG what the violinist do.PST.3SG the

hangversenyen.
concert.INE

'it was bloody good what the violinist did at the concert'

In the other case, the NEW modifies a noun as a qualifier. This is demonstrated in example (9) below.

(9) Annyira brutál buli volt. Ennyi brutal be.PST.3SG so.much SO party.NOM felszabadult érzés sosem volt bennem. liberated feeling.NOM never be.PST.3SG I.INE 'It was such an amazing party. I have never felt so liberated.' [instagram.com]

The third option is that the polarity shifting word modifies a verb, functioning as an adverbial. For instance,

(10)hogy mondjam brutálisan énekel meg kell a tell.1sG brutally sing.2SG the PΧ need to srác guy.NOM 'I have to admit that the guy sings amazingly [kzpost.info]

Note that although the utterances in (6a) and (9) are syntactically identical, the function and meaning of the NEWs in the two cases are not the same. While in example (6a), *rettentő* ('terrible[ly]') intensifies the meaning of the modified head, in the case of the utterance in (10), *brutálisan* ((lit.) 'brutally', 'amazingly') indicates the extraordinary, outstanding quality of the singing, giving the NEW a polarity-shifting function in this case. The difference becomes more apparent if we replace the examined NEW with a neutral intensifier word in (10):

(11) \*meg kell hogy mondjam *nagyon* énekel a srác

PX need to tell.1SG very sing.2SG the guy.NOM

(11) \*meg kell hogy mondjam *nagyon* énekel a

'I have to admit that the guy sings very much'8

<sup>8</sup> The example may be acceptable to the speaker if the word *nagyon* is interpreted as an evaluative word with a positive meaning. However, we will not consider this possibility here.

As we can observe, this replacement renders the utterance incomprehensible. The analyzed word cannot be substituted with a standard-register (nonnegative emotive) intensifier due to its lack of an intensifying semantic role in the given context.

Szabó and Otani (2022) mention that, in addition to the cases discussed above, NEWs may also function as interjections. Consider the example in (12) below.

(12) De durva! Ilven olaszok az how tough like.this the Italian.PL.NOM fociia. ahol még verekedni is szabad football.POSS where even fight also allowed 'It's amazing! Such is Italian football, where you can even fight' [blikk.hu]

As demonstrated by the example above, *durva* in its interjectional function frequently collocates with specific words. For instance, *de durva* (lit. 'so tough'), *nagyon durva* (lit. 'it's really tough'), *az durva* (lit. 'that's tough'), *hát ez nagyon durva* (lit. 'huh, it's really tough'), and so on.

In this chapter, an overview of the syntactic and semantic features of Hungarian NEWs were provided. The chapter discussed the various syntactic functions of NEWs, including their use as intensifiers, polarity shifters, and interjections. Examples illustrated how NEWs may modify adjectives, adverbs, numerals, verbs, nouns and subordinate clauses. What is more, they may stand without any modified head as an interjection. The syntactic constraints on the usage of suffixed and unsuffixed adverbial forms of NEWs were examined.

### Recommended literature

- Szabó, M.K. (2019). Az értékváltás jelensége a magyar nyelvben: A negatív emotív elemek egy sajátos használatáról. *Magyar Nyelv* 115, 309-323.
- Szabó, M.K. (2018a). A szentimentérték módosulásának a problémája a magyar nyelv szövegek szentimentelemzésében, különös tekintettel az értékvesztésre és az értékváltásra értékváltásra. PhD Dissertation.
- Szabó, M.K., Vincze, V. and Bibok, K. (2022b). ""Thank you for the terrific party!" An analysis of Hungarian negative emotive words". *Corpus Linguistics and Linguistic Theory*. Open access: https://www.degruyter.com/document/doi/10.1515/cllt-2022-0013/html.
- Andor, J. (2011). De durva ez a téma! Megfigyelések a melléknévi jelentés polaritásváltásáról. In *Hungarológiai Évkönyv*, 12. PTE BTK, Pécs (pp. 33-42).

### Summary and guiding questions, tasks

Search for a text in Hungarian and analyze it as follows:

- 1) Identify NEWs functioning as intensifiers in the text.
  - a) Analyze the syntactic roles of these NEWs.
  - b) Examine the syntactic behavior of suffixed and unsuffixed NEWs based on corpus examples.
- 2) Examine examples of NEWs functioning as polarity-shifting words. what are their structural specifics?
- 3) Can you find examples of NEWs modifying verbs in the text? If so, analyze the sense and function of these NEWs in the context of the utterances.

### CHAPTER VI.

### **NEWS IN CORPUS LINGUISTICS:**

Overview of research articles analyzing linguistic features of NEWs based on electronic text corpora. Corpora annotated for research on NEWs in Hungarian. Corpus Analysis Results. Synchronic Linguistic Perspective. Semantic-Pragmatic Features based on corpus data. Domain Dependency of NEWs. Implications of NEWs usage in different mental disorders compared to healthy controls. Diachronic Linguistic Perspective: Exploration of changes in the

Diachronic Linguistic Perspective; Exploration of changes in the syntactic and semantic features of NEWs over time.

In this section, I will summarize the research articles that attempt to discover the linguistic features of NEWs based on a bigger amount of language data, namely electronic text corpora. Then, I will briefly present corpora annotated specifically to assist research on NEWs in the Hungarian language. In the third larger part of the current chapter, I will delve into the main results of corpus analyses focusing primarily on NEWs in the Hungarian language, covering both synchronic and diachronic perspectives.

Corpus analysis has been instrumental in understanding the syntactic and semantic behavior of NEWs in various languages. Researchers have utilized electronic text corpora to explore the frequency, distribution, and syntactic roles of these words. The availability of NEW-specific corpora has further facilitated this research, allowing for more detailed and accurate analyses.

Firstly, I will discuss the synchronic linguistic perspective, covering semantic-pragmatic features, the domain dependency of NEWs, and their implications from a psychopathological standpoint. These analyses provide insights into the semantic-pragmatic features of NEWs, shedding light on their role in expressing emotions and evaluations within specific contexts. Furthermore, several research results suggest that the occurrence of NEWs, especially the presence and frequency of specific functions, closely relates to the text domain. Recent research has also highlighted that NEWs may exhibit different usage peculiarities in various mental disorders compared to healthy controls. This chapter provides an overview of these aspects.

Additionally, corpus analysis from a diachronic linguistic perspective allows researchers to track changes in the usage of NEWs over time. By exploring historical texts, researchers can observe how the syntactic and semantic features of NEWs have evolved, providing valuable information about language change.

## 1. Corpus-based analyses of NEWs in the literature

Despite the longstanding interest in NEWs, only a limited number of studies have utilized corpus data and computer-supported research methods to analyze them. In this chapter, we will briefly summarize these studies. It's important to note that we won't detail the results here; instead, we will provide an overview of the research conducted. The detailed presentation of the research results will be provided in Chapter 3.

Andor (2003) conducted a corpus-based analysis of specific Hungarian and English words (e.g., En. *terribly (intelligent)*, Hu. *borzasztó(an) (jó)* 'awfully (good)', etc.). He noted that these words are highly frequent in both languages and are often grouped into synonym clusters. Moreover, they frequently co-occur with adjectives bearing a negative connotation and are increasingly present in phrases conveying positive evaluative meanings.

Andor (2011) emphasized that due to the lack of a suitable spoken language corpus for his research, he gathered corpus data from the internet using Google search. He analyzed two collocations of the Hungarian word durva ('coarse, rough'), namely nagyon durva (lit. 'it's very tough') and de durva (lit. 'so tough'). Andor investigated the semantic (communicative content) and syntactic (predicate and/or adjective role) features of these expressions, as well as their collocations within utterances. His research was based on 200 examples.

Kugler (2014) investigated linguistic polarity in intensification and collocation preferences within a cognitive linguistic framework. She examined the collocating features of the Hungarian NEW *félelmetesen* ('frightfully'), determining whether the examined word tended to modify adjectives expressing positive or negative value. Kugler conducted this research using the Magyar Nemzeti Szövegtár (MNSZ), the national corpus of Hungarian, analyzing 85 examples of the NEW in question.

Dragut and Fellbaum (2014) approached the phenomenon of intensification, with a particular focus on Negative Emotive Intensifiers, from a language technology perspective. They noted a lack of research discussing intensifying adverbs in this linguistic research field apart from their own study. The authors examined the semantic role of seven specific intensifiers in utterances expressing evaluation. They aimed to determine whether these words carry evaluative semantic content themselves or merely strengthen the semantic content of their collocators. To achieve this, the authors relied on human judgment. They selected a total of 160 sentences containing one of the examined adverbs as testing material. Equivalent sentences without an intensifier were also included in the testing procedure. Participants were asked to evaluate the semantic content of the given sentences on a five-point scale (very positive, positive, neutral, negative, and very negative).

Carita Paradis analyzed intensifiers, including Negative Emotive Intensifiers, in several papers based on corpus data. For example, in Paradis (1997), she studied the semantic and intonational aspects of a set of DEGREE modifiers, including NEWs such as *frightfully, awfully* or *terribly* and the types of adjectival meanings they modify using the London–Lund Corpus (LLC) of spoken British English. In another study, Paradis (2000b) used more recent data from the spoken part of the British National Corpus (BNC) to compare the use of the same set of modifiers analyzed in her earlier work (Paradis, 1997) some twenty years later. Special attention was paid to how teenagers utilized DEGREE modifiers, as represented in the Bergen Corpus of London Teenage Language (COLT), which forms part of the spoken section of the BNC.

Wierzbicka (2002) examined the semantic and pragmatic features of the English word *bloody* in Australian English using two contemporary corpora: the Macquarie corpus of Australian English and the COBUILD corpus of British English, as well as parliamentary debates.

Szabó and Otani (2022) attempted to uncover the wide range of different uses and pragmatic functions of NEWs based on corpus data from Hungarian and Japanese. They compared the results between the two languages. For this purpose, the authors selected two specific NEWs, the Hungarian durva (lit. 'coarse, rough') and the Japanese  $\mathcal{PII}$  (yabai) (lit. 'dangerous'). They selected and annotated a total of 960 corpus examples.

Szabó and Bibok (2023) conducted a corpus-based analysis of NEWs within the framework of Discourse Grammar (Heine, 2013). This study focused on the semantic and pragmatic features of the Hungarian words *durva* (lit. 'coarse, rough') and *durván* (lit. 'coarsely, roughly') across three corpora. Additionally, domain-dependent peculiarities of NEWs were compared.

Regarding the application of computational analysis methods, such as language technology, in research on NEWs, there are very few papers that deal with NEWs, besides Szabó's and her co-workers works (Szabó et al., 2022a, 2023a,b, 2024a,b), this way. To the best of our knowledge, only a single paper has been published on English NEWs (Hamilton et al., 2016a). The authors partly dealt with a NEW, namely the word *terrific*, based on the examination of a large dataset. In order to demonstrate that *terrific* has become more positive over the last 150 years, the authors applied computational semantic tools and methods.

Szabó and Guba (2022) conducted a study focusing on NEWs, particularly in their intensifier function, within contemporary Hungarian language usage. Their research relied on a social media corpus, specifically Twitter data, with a special emphasis on gender differences. The corpus comprised 40,880 tweets written in Hungarian in 2021. The authors undertook a three-stage analysis of the database. Firstly, they performed an automatic analysis of the corpus, examining the frequency and collocation features of

Hungarian Negative Emotive Intensifiers. Subsequently, the filtered collocations underwent manual annotation to verify the analysis data. Finally, the usage patterns of male and female authors were compared, and the similarities and differences in their usage of NEWs were identified and discussed.

Szabó et al. (2022b) aimed to systematically examine the intensifier function of NEWs and their positive evaluative meaning using data from a Hungarian speech corpus. The authors conducted a comprehensive analysis of the qualitative and quantitative features of NEWs. Based on their findings, they proposed corresponding methods for representing their meanings, utilizing a lexical pragmatic approach and the concept of enantiosemy.

Szabó (2018a) addressed NEWs as a significant challenge within the realm of computational linguistics, particularly in the context of automatic sentiment analysis, also known as opinion mining. The author argued that NEWs merit attention not only from a theoretical and applied linguistic perspective but also from a language technology standpoint: lexicon-based automatic sentiment analyzers often produce inaccurate results due to the prior negative semantic content of NEWs.<sup>9</sup> In her PhD thesis, Szabó presented a manually annotated corpus focusing on NEWs, specifically when they function as intensifiers and express a non-negative evaluative meaning, a type she terms *value change*.

Furthermore, Szabó (2018a) developed and introduced a word association database that included NEWs as stimulus words along with their response words (i.e., associations). To ensure comparability, the stimulus words included not only NEWs but also other types of words, such as positive or neutral intensifiers.

Szabó et al. (2023b,c, 2024a) investigated NEWs from the perspective of specific mental disorders. Let us now proceed to review these studies.

Szabó et al. (2023c) analyzed the linguistic features of schizophrenic patients compared to a control group, focusing particularly on linguistic intensification. Given the connection between mental illnesses and emotion regulation, the authors paid special attention to Negative Emotive Intensifiers. (for more details on these specificities, see Section VI./6.3.1.3 below.) Their analysis employed both computational and manual methods to examine the

class within the group of adjectives. In other words, the automatic distinction between the different meanings and functions of NEWs proved to be difficult.

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<sup>&</sup>lt;sup>9</sup> Although this publication does not delve into the phenomenon of NEWs from the perspective of automatic sentiment analysis, it is worth noting that their semantic features can still pose challenges in various computational semantic tasks. Thus, their proper automatic treatment has not yet been adequately addressed within computational linguistics. For example, Héja and Ligeti-Nagy (2023) demonstrated during their research project aimed at automatically extracting polysemous adjectival meanings using unsupervised computational learning methods, that NEWs formed a coherent semantic

quantitative and qualitative features of intensifiers in the corpus. Szabó et al. (2023b) expanded this research to include two other patient groups: those suffering from schizoaffective and bipolar disorders. Once again, the authors utilized corpus data and employed computational linguistic and manual analysis methods. One of the focal points of their analysis was to determine whether there were notable differences among speakers in the use of standard-register intensifiers compared to Negative Emotive Intensifiers. Following basic automatic data processing and dictionary analyses to identify standard-register intensifiers and Negative Emotive Intensifiers, sentences containing any of them were filtered out for manual annotation. For Negative Emotive Intensifiers, all occurrences were manually annotated to determine their function as intensifiers in the given construction. Additionally, various linguistic features of Negative Emotive Intensifiers were annotated, with adjustments made to the annotation system to suit monologue analysis.

Then, Szabó et al. (2024a) analyzed spontaneous speech transcripts from Hungarian patients with schizophrenia, schizoaffective, and bipolar disorders again, aiming to identify distinctive linguistic features in these patient groups and controls. They employed machine learning techniques, particularly the random forest algorithm, to automatically differentiate among patient groups and controls based on the above mentioned distinctive linguistic features, including NEWs.

Szabó et al. (2022a, 2023a, 2024b) examined NEWs from a semantic-pragmatic development perspective.

In their study, Szabó et al. (2022a) investigated the historical development of NEWs by analyzing temporal trends in their semantic and collocational features. Using computer linguistic methods and tools, the authors studied a large diachronic corpus, analyzing the frequency, semantic features, and evaluative content (in other words *sentiment value*; see in Section II/2 for more details above) of the words collocating with NEWs. They explored whether there was any correlation between the morphological form of the words (presence or absence of suffix) and their usage patterns.

In contrast to the study by Szabó et al. (2022a), both Szabó et al. (2023a) and Szabó et al. (2024b) analyzed a corpus spanning only two decades of news texts, using a significantly larger amount of language data.

Szabó et al. (2023a) focused once again on Negative Emotive Intensifiers. Through automatic and manual analysis of the corpus, they scrutinized the sentiment features of Negative Emotive Intensifiers within narrower and wider contexts. On the other hand, Szabó et al. (2024b) employed a word embedding method to analyze the semantic features of Negative Emotive Words in the same corpus. By using specific lexicons and word embedding techniques, they aimed to identify semantic peculiarities inherent to Negative Emotive Words, as well as to observe the diachronic semantic changes of these words across distinct time periods. The primary

objective of this analysis was to determine whether computational semantic analysis methods can provide new insights into the linguistic nature of Negative Emotive Words and to assess the applicability of this approach in the automatic examination of linguistic evolution in low-resource languages such as Hungarian.

Both of these studies also investigated the role of suffixes in the semantic evolution of these words, exploring whether their presence influences the semantic development process. Additionally, they discussed general hypotheses concerning language feature changes over time.

This chapter provided an overview of corpus-based analyses of NEWs. As it was pointed out, despite the longstanding interest in NEWs, only a limited number of studies have utilized corpus data and computer-supported research methods to analyze them. The detailed results of these studies were not discussed here; instead, an overview of the research conducted was provided. The detailed presentation of the research results will be provided in Chapter 3.

## 2. Corpus resources for the analysis of NEWs

In this section, I will provide a brief review of the NEW corpora that have been created thus far.

An exhaustive and comprehensive examination of NEWs is challenging due to two main factors. Firstly, the use of NEWs, especially in specific functions and contexts, is highly dependent on the domain (for more on domain dependency, see Section VII/2.1.1 below). Therefore, having appropriate research material for their analysis is crucial. For instance, certain domains may lack examples of NEWs functioning as intensifiers or interjections, leading to their underrepresentation or absence in many corpora. Consequently, examining these use cases becomes difficult or nearly impossible using corpora that have not been specifically curated to support research on this particular linguistic phenomenon. Thus, a careful selection of domains and the collection of specific datasets from language resources, other than off-the-shelf text corpora, are essential. Secondly, the semantic-pragmatic features of NEWs are highly context-dependent, making manual annotation of corpus examples essential for a thorough investigation. While automated methods can provide valuable insights into large datasets, they often struggle to capture the nuanced meanings and usage patterns of NEWs accurately. NEWs exhibit a wide range of pragmatic functions and can undergo subtle shifts in meaning depending on the context in which they are used. For instance, words like bloody or damn can function as negative emotive intensifiers in certain contexts but may lose their negative connotations in others. Manual annotation allows researchers to carefully examine the context in which NEWs appear and to accurately capture their semantic nuances and pragmatic functions. Human annotators can identify subtle shifts in meaning, disambiguate between different senses of a word, and account for the complex interplay between syntax, semantics, and pragmatics. Therefore, while automated methods can provide valuable insights into large datasets, manual annotation remains crucial for achieving a deep and nuanced understanding of the semantic-pragmatic features of NEWs. Moreover, manual annotation enables researchers to create high-quality annotated corpora that can serve as valuable resources for further computational linguistic analysis, allowing them to better understand the context and usage patterns of NEWs.

First of all, to my knowledge, there is no English corpus created or annotated solely for the examination of NEWs. However, there are several Hungarian NEWs corpora, as well as a Japanese corpus annotated specifically for NEWs. In this section, I will provide a brief overview of these datasets.

The so-called NegEmotive corpus, created in 2017, was compiled from Twitter data (Szabó, 2018a; Szabó et al., 2017a). The initial dataset, collected from the Hungarian section of Twitter using automatic methods, comprised a total of 37,818 texts. From this dataset, the authors filtered out tweets containing at least one NEW, resulting in 610 tweets. Subsequently, this database was annotated by three annotators. During the annotation process, each example was meticulously analyzed, and based on the actual function and meaning of each NEW, its intensifier function and non-negative evaluative meaning were separately annotated. Additionally, words modified by NEWs were also annotated. Among the 610 tweets, 383 cases of these specific meanings and functions of NEWs were identified.

Another dataset (Szabó et al., 2023b) was derived from the HuMenDisCo corpus (Szabó et al., 2023d), a Hungarian Speech Corpus of Schizophrenia, Schizoaffective, and Bipolar Disorders. Initially, automatic corpus processing was conducted on the entire dataset, filtering out sentences containing at least one NEW (Szabó et al., 2023b). The authors (Szabó et al., 2023b) then annotated various syntactic and semantic features of NEWs, including their actual function (e.g., interjection or intensifier), the evaluative semantic content of the entire utterance (cf. *contextual sentiment*, see Chapter II./2 above), and the word modified by the NEW. Additionally, an automatic sentiment analysis of the first right collocators of NEWs was performed on the corpus (cf. *collocational sentiment*, see Chapter II./2 above), along with manual analysis of the data. In total, the corpus contains 136 annotated examples of NEWs.

Szabó and Guba (2022) conducted their research using a corpus of 40,880 Hungarian tweets from the year 2021. Their analysis proceeded in three stages. Firstly, they automatically filtered out each occurrence of NEWs based on a predefined list. Next, they refined the dataset by considering the parts of speech (adjective, adverb, verb, or noun) of the collocating words, removing

irrelevant data. This process resulted in 1,353 occurrences where the examined word collocated with an adjective, adverb, verb, or noun in the corpus. Subsequently, the authors performed manual annotation exclusively on these examples of NEWs. During the annotation process, annotators determined whether the analyzed token functioned as an intensifier in the given utterance. Based on manual annotation, they identified 641 occurrences where the examined word served as an intensifier out of the 1,353 occurrences analyzed.

Szabó et al. (2022a, 2023a) employed electronic corpora to scrutinize NEWs from a semantic-pragmatic development perspective over time. The corpus used in Szabó et al. (2022a) was collected from a large diachronic corpus (Magyar Történeti Szövegtár, MTSZ, Sass, 2017). To filter out relevant data, the authors applied a NEW dictionary. Subsequently, all relevant occurrences were manually extracted and collected in a separate database, along with their metadata (year and domain). Manual corrections were made for problematic occurrences (e.g., missing spaces, duplicates). The resulting cleaned database contained a total of 10,580 sentences. Additionally, an automatic sentiment analysis of the first right collocators of NEWs was carried out. Szabó et al. (2023a) introduced a NEW dataset comprising a large corpus of news texts published over two decades. Initially, each sentence containing at least one NEW was filtered out from the corpus, resulting in 42,457 corpus examples in total. Subsequently, specific NEWs were selected based on relevant recent research results and the research questions of the analysis, resulting in a total of 4,285 occurrences. A manual analysis was then conducted on the remaining dataset. During the manual annotation, annotators tagged two characteristics of NEWs: their actual function and contextual sentiment value (for the notion of contextual sentiment, see Section II./2 above). For the function, they annotated whether the given NEW in the example had an intensifier function or not.

Finally, Szabó and Otani (2022) presented datasets in Hungarian and Japanese, manually annotated for a systematic examination of two specific NEWs: the Hungarian *durva* (lit. 'coarse, rough') and the Japanese (yabai) (lit. 'dangerous'). The authors also analyzed word-form variations of these NEWs, such as *durván* of *durva* and *yabe* and *yabaku* of *yabai*. For the Hungarian dataset, they analyzed the HuTongueCorpus, consisting of spontaneous speech texts (Vincze et al., 2021). For the Japanese dataset, the Corpus of Everyday Japanese Conversation (CEJC corpus, Koiso et al., 2018) was utilized. All occurrences were filtered out, and various syntactic, semantic, and pragmatic features of NEWs were annotated. The corpus contained a total of 960 annotated examples.

The following table provides an overview of the above discussed corpora specifically created and annotated for the analysis of NEWs, along with their publication years.

Corpus		Year of		Annotated
Reference	Language	Creation	Source	Examples
Szabó et al.,				
2017a;				
Szabó,				
2018a	Hungarian	2017	Twitter	610
			Spontaneous	
			speech texts	
Szabó and	Hungarian,		(HuTongueCorpus,	
Otani, 2022	Japanese	2022	CEJC corpus)	960
Szabó and				
Guba, 2022	Hungarian	2021	Twitter	641
Szabó et al.,				
2022a	Hungarian	2022	Diachronic corpus	10,580
Szabó et al.,				
2023a	Hungarian	2023	News texts	4,285
			Schizophrenia,	
Szabó et al.,			Schizoaffective,	
2023b	Hungarian	2023	Bipolar Disorders	136

Table 1. Annotated corpus resources for the analysis of NEWs.

In summary, the analysis of NEWs benefits greatly from the availability of dedicated corpora annotated for their examination. While English lacks such specific corpora, Hungarian have seen significant advances in this area during the last few years. These corpora, often manually annotated, enable researchers to delve deep into the semantic-pragmatic features of NEWs, shedding light on their usage patterns and contextual nuances. As we move forward, the development of more such annotated corpora will be crucial for advancing our understanding of NEWs in various languages and domains, paving the way for more nuanced and context-aware natural language processing applications. I aim to contribute to this endeavor with further corpus analysis presented in Chapter 7 of this monograph (see below).

# 6.3. Corpus analysis results

This section presents the main corpus analysis results on NEWs, focusing primarily on the Hungarian language. The semantic-pragmatic features of NEWs are considered from both synchronic and diachronic perspectives. Firstly, the synchronic linguistic perspective is discussed, Firstly, the synchronic linguistic perspective is discussed, examining semantic-pragmatic

features of NEWs, the domain dependency of NEWs, and exploring NEWs from a psychopathological perspective. Finally, the diachronic linguistic perspective is examined, shedding light on historical shifts and trends within the corpus.

## **6.3.1.** NEWs from synchronic linguistic perspective

This section delves into the semantic-pragmatic features of NEWs from a synchronic linguistic perspective. We will explore how NEWs may function in utterances, adding semantic-pragmatic content to the communicated information. Additionally, we will investigate the domain dependency of NEWs, examining how their occurrence and interpretation vary across different text domains. Finally, we will analyze NEWs from a psychopathological perspective, focusing on their intensifier function and how they may reflect deficits in higher-order language functions associated with mental disorders. Through this analysis, we aim to gain deeper insights into the linguistic aspects of NEWs and their significance in different text domains and mental health contexts.

## **6.3.1.1** Semantic-pragmatic features

In Chapter V, we explored the semantic features of NEWs in relation to syntactic specifics. As noted, NEWs often function as intensifiers in utterances. For instance, in an utterance like *you really are terribly nice people*, the word *terribly* serves as an intensifier, similar in function to the intensifier *very*. Importantly, NEWs do not necessarily impart a negative semantic content to the entire utterance. Instead, they may simply intensify the head of the construction, as shown above, or even express a positive evaluation of the speaker towards the given target (for further details, see Chapter II).

At the same time, Szabó (2018a) argued that the linguistic behavior of Negative Emotive Intensifiers is not uniform in terms of their semantic motivation. This feature is primarily related to the evaluative semantic content (sentiment value) of the word they modify. According to her, in cases where these intensifiers collocate with a positive (13a) or negative (13b) evaluative word, they are usually desemantized and express intensification exclusively. In the following examples, the modified word is in italics and the intensifier is in bold.

(13) a. No magáról a versenyről nem mondok well itself.DEL the champion.DEL not say.1SG

nothing.ACC just so.much.ACC can.1SG say.INF hogy rohadt iό remélem! lesz. that rotten good be.FUT hope.1SG 'Well, I can't say anything about the competition itself, I can only say that it will be bloody good, I hope!' [MNSZ2] Nem értem a fanyalgókat, understand.1sG snarky.people.PL.ACC not the rohadt rossz Magvar igen vannak be.3PL rotten Hungarian yes bad filmek kifejezetten jó! de ez. especially movie.PL.NOM but this good 'I don't understand snarky people, yes, there are some damn bad Hungarian movies, but this one is especially good!'

tudok

mondani.

csak annvit

However, the author observed that in some of these cases, the function of the examined words was not solely intensification; they also served an interpersonal function. In such instances, the speaker's intention was not only to amplify the intensity of the evaluative semantic content but also to express the effect of the communicated content on them. Consider the following example.

(14)	Bírom,	amikor	valaki		tudja	
	dig.1sG	when	someone.NOM		know.3sg	
	magáról,	hogy rohadt		<i>szép</i> , de	de mégis rondának	
	herself.DEL	that rotter	1	nice but	still	ugly.ALL
	mondja	magát,	hogy	kapjon	pár	kedves
	say.3sG	herself.ACC	that	get.3sG	some	kind
	szót.					

word.ACC

semmit.

[MNSZ2]

h

'I dig it when someone knows that they are **damn** *beautiful*, but still say they are ugly in order to get a few kind words.' [ilajkyou.hu]

In this example, the intensifier not only intensifies the evaluative semantic content but also indicates the emotional impact of the communicated content on the speaker.

Szabó (2018a) also argued that when the collocator is neutral, meaning it does not have a sentiment value, the intensifiers display a varied pattern of desemantization in terms of the degree of their semantic motivation. In several cases, these intensifiers, owing to their prior negative content, imparted a negative evaluative sense to the entire utterance. For instance,

Nem valószínű, (15)hogy partot értek not likely that shore.ACC reach.3PL the borzasztóan hideg víz és sziget körüli a island.NOM round awfullv cold water.NOM and the erős áramlatok miatt strong current.PL.NOM due.to 'It is unlikely that they would reach land due to the awfully cold water around the island.' strong currents [the6thousandmileblog.wordpress.com/]

Another possible scenario occurs when a Negative Emotive Intensifier modifies a semantically neutral word, and it is desemantizatized, without any negative connotation. In this case, the intensifier expresses intensification exclusively (Szabó, 2018a). Here, the speaker uses the intensifier not to convey a negative evaluation, but rather to emphasize the effect of their utterance on the listener. Consider the following example:

(16) **Brutálisan** nagy halat találtak a búvárok, nem brutally big fish.ACC find.PST.3PL the diver.PL not fogsz hinni a szemednek be.FUT.2SG believe.INF the eye.POSS.DAT.2SG 'Divers found a terribly large fish, you won't believe your eyes' [hirek.ma/hirek]

In addition to the cases presented above, Szabó (2018a) identified a third scenario. In this case, the function of the Negative Emotive Intensifier is not solely intensification but also serves an interpersonal function. Consider the following example:

kegyetlen (17)[...] szilaj barnaság és kék szemek [...] wild tan and cruel blue eve.PL kellettek még ahhoz, ötvenes hogy az need.PST.3PL besides for that the fifties évekbeni női és férfiszívek men.heart.NOM vears.old women and felmelegedjenek bandavezér iránt warm.up.COND.3PL the gang.leader toward '[...] what is more, wild tan and cruel blue eyes were needed to warm up women's and men's hearts in their fifties toward the gang leader' [Krúdy Gyula: A kandúr]

In this case, the negative emotive content of the NEW induces an interpersonal function, which, in turn, contributes to the positive evaluative semantic content

conveyed by the utterance. This may seem contradictory at first, but it actually represents a very interesting pragmatic phenomenon: we can observe how the speaker exploits the communicative potential inherent in the negative emotive word. It is important to mention here that a similar pragmatic phenomenon was previously discussed when examining NEWs modifying evaluative collocators (as shown in example (14) above). However, in this instance, unlike the example (14) discussed earlier, the modified head of the construction is neutral. Szabó (2018a) argues that, due to the neutrality of the modified head, the interpersonal function of the NEW is crucial in establishing the positive meaning of the construction.

As for the intensifier function of NEWs, let us briefly discuss them from the perspective of scalarity. Intensifiers can generally be categorized into two main groups: scalar and totality modifiers (Paradis, 2001). According to Paradis (2001), scalar modifiers such as *very* or *fairly* indicate a range on a scale of the gradable property expressed by the adjectives they modify and are, in this respect, unbounded. On the other hand, totality modifiers, such as *absolutely* or *completely*, relate to a definite and precise value of the property expressed by the modified head and are bounded.

Based on the findings of Szabó and Guba (2022), NEWs can function as boosters (18a) or maximizers (18b):

- (18) a. **megdöbbentően** nagy ott a választék shockingly large there the selection.NOM 'There is a surprisingly large selection'
  - Valaki irjon b. légyszi mindegy write.IMP.3SG please never.mind somebody ki bárki mert már halálra already death.ALL who anybody because unom magam bore.1sG myself 'Write to me somebody please, I don't care who because I'm bored to death'

In the case of a booster like *very*, "the meaning (i.e., the implicature in pragmatic terms) is better than just good" (Wachter, 2012). In contrast to boosters, maximizers denote the upper extreme of the scale (Quirk et al., 1985). While *megdöbbentően nagy* ('surprisingly big') (18a) denotes a high degree, a high point on the scale (Quirk et al., 1985), the expression *halálra* (lit. 'to death') in (18b) maximizes the semantic content of the verb *un* ('to bore').

Lastly, it is worth noting that Negative Emotive Intensifiers can also indicate a different degree for some speakers, as in:

(19)Mert embertelen ió. ez nem csak because this not just inhumanly good, but félelmetesen ió! terrifyingly good 'Because this is not only inhumanly good, but terrifyingly good!' [moly.hu]

So, as observed, the speaker employs these words together as if they were indicating two distinct degrees on the scale of the gradable property expressed by the adjective  $j\acute{o}$  'good'.

Now, let us discuss functions of NEWs other than intensification.

As previously mentioned (see Chapter V above), when a NEW does not function as an intensifier in the utterance, according to Szabó (2019, 2018a), they may function as *polarity shifting words*. The author argues that with *polarity shifters*, the speaker can communicate two types of information. In one case, despite its negative semantic content, the NEW expresses positive evaluation, as in:

(20)Azt a durva bulit! Hogy én eddig such.a.ACC the tough party.ACC How.come I so.far nem voltam itt!!!:DDD be.PST.1SG not here 'Such a crazy party! How come I haven't been here before!!! :DDD' [MNSZ2]

In the other case, the speaker aims to emphasize the remarkable or surprising nature of the information expressed by the utterance or the target of the utterance itself (Szabó, 2019). For instance:

több hírt (21) $[\ldots]$ már is olvastam. hogy more news.ACC [...] already also read.PST.1SG that így-úgy-amúgy megoldották az aksik somehow solve.PST.3PL the battery.PL.NOM kapacitástöltésproblémáját, [...]. Elég durva és charging.problem.ACC capacity and [...] pretty tough hírek ezek. hiszen 5-6xoros vagy nagyobb these as 5-6x bigger news.NOM.PL or kapacitásokat is írnak [...]. Kb. write.3PL practically capacity.PL.ACC also [...] hihetetlen sztori. unbelievable the story.NOM

crazy news, as capacities of 5-6x or higher are also being stated [...]. The story is practically incredible.' [autonavigator.hu]

Lastly, in addition to the cases discussed above, according to Szabó and Otani (2022), NEWs may also function as an interjection. Wierzbicka (2002), in her examination of the English word *bloody*, characterized this usage as "emphatic" (neutral rather than "bad") and 'often added to a whole saying that expresses an attitude or an evaluation" (considered a "bleached" discourse marker, see also Section V above). Below, I reiterate example (12) as (22a).

- (22) a. De durva! Ilven olaszok az like.this how tough Italian.PL.NOM the focija, ahol még verekedni is szabad football.POSS where even fight also allowed 'It's shocking! Such is Italian football, where you can even have a brawl [blikk.hu]
  - Eii brutál! h. de Szigorúan zárt pályán tesztelve. Oh but brutal strictly closed court.INE tested 'Oh how shocking! Tested in a strictly closed court.' [facebook.hu]

When considering the various functions of NEWs, it is important to note that certain specific NEWs can function as polarity-changing words (Szabó, 2018a; Szabó and Bibok, 2019). For example, NEWs like *durva* (lit. 'coarse, rough'), *brutál* (lit. 'brutal'), or *eszméletlen* (lit. 'unconscious') can act as polarity shifters in addition to their function as intensifiers. However, NEWs such as *borzasztó* (lit. 'horrible') or *rohadt* (lit. 'rotten') cannot. This implies that when these words are used as evaluative words (and not as intensifiers), they consistently carry a negative evaluative semantic content, with no exception. This observation aligns with Wierzbicka (2002), who argued the following: when the English word *bloody* modifies a noun, it implies something negative (see the mentioned "bad feeling"), whereas in other cases, it implies an unspecified feeling.

Lastly, when considering how many functions NEWs can fulfill, it is important to note that only a few NEWs may function as interjections, such as *durva* (lit. 'coarse, rough') and *brutál* (lit. 'brutal').

In conclusion, this chapter has provided a comprehensive overview of the semantic-pragmatic features of NEWs based on corpus analysis results. We explored their role as intensifiers within utterances, highlighting the diverse ways in which NEWs can function in different contexts regarding their actual meaning. Additionally, we delved into their polarity-shifting function,

where these words, despite their negative semantic content, express positive evaluation or emphasize the remarkable nature of the information conveyed. Moreover, we mentioned that NEWs may serve as interjections, adding an emphatic dimension to the discourse. In a later extensive chapter of this book (Chapter VII below), we will conduct additional corpus-based investigations using a selected NEW, further expanding our corpus linguistic knowledge on NEWs summarized here.

## 6.3.1.2 On the domain dependency of NEWs

Here, we provide an overview of the domain dependency features of NEWs based on corpus analysis research findings. Studies suggest that the occurrence and frequency of specific functions of NEWs are closely related to the text domain. For instance, the interpretation of a NEW as a non-negative word, such as a positively evaluating word or an interjection, is largely determined by the context in which it appears. This chapter discusses in brief how the semantic-pragmatic features of NEWs vary across different text domains.

Several research studies (Szabó, 2019, 2018a, 2015; Szabó and Bibok, 2023) suggest that the occurrence of NEWs, especially the presence and frequency of specific functions, is closely related to the text domain. Some domains typically allow for non-negative interpretations, such as positive evaluations or expressions of surprise (also known as *polarity shifting*, see Chapter V and Szabó, 2019), while others do not. Therefore, whether a specific NEW is interpreted as non-negative is essentially determined by the text domain in which the utterance containing that NEW occurs.

Szabó (2015) conducted a comparative analysis of the frequency of the Hungarian NEW *brutális* ('brutal') as both a negatively and positively evaluative word across eight different text domains. Her findings revealed that, for instance, while the analyzed NEW had a positively evaluative function in one-third of the occurrences in economic texts, this usage did not even appeared in the examined political texts. Consider the example below.

(23)brutális énekes háza előtt Α gyűltek ezrek össze. the brutal singer.NOM house.POSS in.front thousand.PL gather.PST.3PL together 'Thousands gathered in front of the highly regarded / aggressive singer's house.' (Szabó, 2015)

If the above utterance appears in an advertisement, for example, the examined NEW can be interpreted as a positive word, meaning 'excellent, fantastic

singer'. However, if this example appears in a news text, such as criminal news, this interpretation is typically not possible, and the reader should interpret the given NEW according to its prior negative semantic content. Conversely, as per Szabó (2015), in the technology sub-corpora, the examined NEW proved to be much more frequent in the previously discussed positive evaluative meaning than in its negative meaning.

Szabó (2019) explores the phenomenon of domain dependency of NEWs within the conceptual framework of *enantiosemy*. The author considers polarity-shifting words as a type of *enantiosemy* (also known as *auto-antonimy* and *contronymy*). *Enantiosemy* refers to a phenomenon where a given lexeme has two opposite meanings simultaneously (Kicsi, 2010; Shmelev, 2012). Enantiosemy can be seen as a kind of polysemy, combining the characteristics of both polysemy and antonymy (Klégr, 2013). Szabó (2019) argues that some functions and meanings of NEWs, such as the positively evaluative meaning, should be treated as a specific type of enantiosemy, and the author calls this phenomenon *domain enantiosemy* <sup>10</sup>. This phenomenon indicates that the above-mentioned functions and meanings coexist with the prior meanings of NEWs in specific domains but not in others.

Szabó and Bibok (Szabó and Bibok, 2023) examined the domain dependency of different functions of the Hungarian NEW *durva* (lit. 'coarse, rough') and its variant *durván* (lit. 'coarsely, roughly'). In this study, the authors conducted manual investigations and systematic comparisons of three text corpora: Hungarian news texts published on a Hungarian web portal (Szabó et al., 2023a), written texts in the colloquial style of tweets (Szabó and Guba, 2022), and spontaneous speech texts (Vincze et al., 2021).

The authors emphasize that the manual annotation of the corpora was hindered by numerous problems, as in many cases it was not possible to make a clear decision regarding the appropriate, unambiguous annotation of the given NEWs. Nevertheless, the initial results of the corpus's manual examination suggest that the frequency distribution and even the mere occurrence of different semantic-pragmatic functions of NEWs are highly domain-dependent. For instance, the interjective use appears to be common in spontaneous speech, occurs less frequently in tweets, and is absent in the news corpus. Furthermore, when the examined NEWs function as evaluative words, they typically carry a negative meaning in news texts. Neutral usage, aimed at expressing extraordinary value or the speaker's surprise, is rare, with hardly any examples of positive usage. Additionally, in spontaneous speech texts,

<sup>&</sup>lt;sup>10</sup> The concept of *domain enantiosemy* was introduced by Szabó (2019) following another related term, namely *collocational enantiosemy* (Klégr, 2013). *Collocational enantiosemy* refers to a phenomenon in which the alternative interpretation of a lexeme depends on the semantics of its collocators (such as the object, the governing verb, etc.).

NEWs sometimes serve specific pragmatic functions not observed in the other two corpora, such as evidential and attention markers. They may be applied in order to express support and solidarity toward the speaker, or, as an attention marker, indicating that the listener can understand and follow what was said (on multifunctionality of DMs, see, among others, Fraser 2009 and Furkó 2020). What is more, in the examined speech texts, *durva* or *durván* sometimes forms an utterance alone, and in these cases they tend to be interpreted as discourse markers again. Then, they sometimes appear as a component of a multiword construction when the meaning of the whole expression cannot be calculated from the meanings of its individual components. The authors argue that, since these collocations are grammaticalized constructions, and do not have a specific, propositional meaning but procedural. Thus, these expressions may be considered multiword discourse markers. All these particularities are closely related to the fact that these speech texts are discourse-oriented. (I will further discuss this study and its results in Section VII./ 3.2.1.1 below.)

In conclusion, corpus analysis research reveals noticable variations in the semantic-pragmatic features of NEWs across different text domains. This variation is evident in the frequency distribution and occurrence of specific functions of NEWs, indicating a strong correlation between their usage and the text domain. The findings emphasize the crucial role of the domain in determining the semantic-pragmatic functions and interpretations of NEWs.

## 6.3.1.3 NEWs from a psychopathological perspective

In this chapter, we will summarize the results of several studies that examined the use of Negative Emotive Intensifiers within the context of specific mental disorders.

As mentioned earlier (see Section VI/1 above), Szabó and colleagues (2023b, 2023c, 2024a) conducted a series of investigations aiming to understand the differences in Negative Emotive Intensifiers usage among patients with schizophrenia, schizoaffective, and bipolar disorders. The chapter will provide an overview of these mental disorders and explain why NEIs are important from the perspective of emotional and linguistic characteristics in these illnesses. After that, I will review the key features and results of the mentioned research works.

Szabó et al. (2023c) analyzed the linguistic features of schizophrenic patients compared to a control group, focusing particularly on linguistic intensification. Szabó et al. (2023b) expanded this research to include two other patient groups: those suffering from schizoaffective and bipolar disorders. One of the focal points of their analysis was to determine whether there were notable differences among speakers in the use of standard-register intensifiers compared to Negative Emotive Intensifiers. Lastly, Szabó et al.

(2024a) analyzed spontaneous speech transcripts from Hungarian patients with schizophrenia, schizoaffective, and bipolar disorders again, aiming to identify distinctive linguistic features in these patient groups and controls. They employed machine learning techniques, particularly the random forest algorithm, to automatically differentiate among patient groups and controls based on the above mentioned distinctive linguistic features, including NEWs.

In the following part of this section, we will briefly summarize the results of these studies. However, before doing so, we will provide a brief overview of the mental disorders examined in these studies and explain why NEWs are of interest from the perspective of mental illnesses.

Bipolar disorder (BD), previously referred to as manic-depressive illness, is a recurrent chronic psychiatric condition characterized by episodes of mania, hypomania, and alternating or intertwining episodes of depression (Grunze, 2015). Mania is defined by an elevated mood, increased energy, and impulsive behavior, while hypomania involves similar symptoms but to a lesser degree. Depressive episodes are marked by feelings of sadness, hopelessness, and a lack of interest or pleasure in most activities.

Schizophrenia (SZ) is a severe and chronic mental health disorder characterized by symptoms such as delusions, hallucinations, disorganized speech or behavior, and impaired cognitive ability (Patel et al., 2014). Individuals with schizophrenia may also experience social withdrawal, lack of motivation, and difficulty in functioning normally in daily life.

In the case of schizoaffective disorder (SAD), individuals experience a combination of psychotic symptoms (hallucinations or delusions) and mood episodes (Malhi et al., 2008). SAD occupies an intermediate position between schizophrenia and bipolar disorder in the schizophrenia-bipolar spectrum, as it combines features of both conditions. This dimensional approach, as proposed by Peralta and Cuesta (2008), considers the relationship and overlap between SZ and BD, with SAD representing an intermediary condition.

In order to justify why it is worth addressing the issue of NEWs in the context of the aforementioned mental disorders, two aspects need to be considered: firstly, the question of emotions, and secondly, the phenomenon of intensification. Let us now examine these in more detail in relation to these three mental illnesses.

It is proven that there is a dysfunction in emotion regulation is characteristic of psychotic disorders (Kring and Elis, 2013; Chapman et al., 2020; Green et al., 2007). For example, individuals with SZ often struggle with sensing and predicting emotional events, integrating emotional impressions and contexts, as well as experiencing and maintaining emotional richness (Kring and Elis, 2013). Brain activity underlying these deficits often shows a lack of proper functioning in networks responsible for cognitive control, indicating insufficient integration of emotions and cognition (Kring and Elis, 2013). Moreover, abnormally elevated mood in BD is associated with specific

neurocognitive deficits consistent with neuropathology in neural networks critical for emotion regulation (Green et al., 2007).

As for linguistic intensification, recent research findings suggest that the use of intensifiers is closely related to emotion regulation (Athanasiadou, 2007; Strous et al., 2009). According to Athanasiadou (2007), intensifiers serve as linguistic markers of speaker subjectivity, primarily signaling the speaker's point of view and attitude. It is noteworthy that literature indicates variations in the use of intensifiers, for instance, in individuals with SZ (Strous et al., 2009).

The decision to focus on Negative Emotive Intensifiers (within the group of intensifiers) is justified by the aforementioned reasons. Analyzing these intensifiers based on corpus data may reveal unknown and important details concerning the cognitive processes underlying the examined mental disorders. Moreover, this analysis may provide insights into human cognitive functioning in general.

In Szabó et al. (2023c), the authors examine the linguistic characteristics of SZ patients, focusing on linguistic intensification. They apply computer linguistic tools and methods and analyze two main groups of intensifiers, namely standard-register (non-negative) and Negative Emotive Intensifiers. The study aims to explore the usage patterns of intensifying elements in SZ patients' speech texts compared to a control group. Key questions include: What is the usage frequency of standard-register and Negative Emotive Intensifiers among schizophrenic patients compared to the control group? (for more details on the standard-register and Negative Emotive Intensifier dichotomy see Chapter IV and VI/1. among others.) Which intensifiers are most commonly used by schizophrenic patients and control group members? Are there differences in the usage of intensifiers between the two groups? The researchers also examined the proportion of parts-of-speech of words modified by standard-register and Negative Emotive Intensifiers in the two speaker groups, as well as whether there is any pattern related to this that can be detected. Furthermore, they investigated the sentiment value of words modified by standard-register and Negative Emotive Intensifiers and whether there is a significant difference in this regard between the two speaker groups.

The main findings of the study are as follows: While the use of intensifiers in the control group showed a somewhat more varied language usage among the members, no significant differences were found. However, this was not the case for Negative Emotive Intensifiers; noticeable proportional differences were found between the patient group and the control group. This is in line with the peculiarities of their figurative language use. Research results (e.g. Rosetti et al. 2018) suggest that SZ can disrupt cognitive and linguistic processes necessary for understanding and using figurative language. Therefore, patients typically have difficulty understanding and using

figurative expressions, such as idioms or metaphors. (We will delve into this phenomenon in more detail later in this chapter).

Szabó et al. (2023b) extended this research to include two additional patient groups: those suffering from SAD and BD. One of the focal points of their analysis was to determine whether there were notable differences among speakers in the use of standard-register intensifiers compared to Negative Emotive Intensifiers.

A total of 90 participants were involved in the data collection, resulting in 526 separate transcripts. The corpus was manually transcribed and underwent automatic linguistic analysis (for more details, see Szabó et al., 2023b). After linguistic analysis, automatic data processing steps were performed, including sentiment and dictionary analyses.

Although the amount of data analyzed was limited, the study identified significant differences in language use, particularly regarding Negative Emotive Intensifiers. Results revealed that the BD group used the most Negative Emotive Intensifiers. In contrast, Negative Emotive Intensifiers were rarely used in the SZ-subcorpus and occurred only once in the SAD-subcorpus altogether. Another noteworthy outcome of the analysis was that SZ patients never used Negative Emotive Intensifiers in a positive context; they used them exclusively in negative or neutral contexts. <sup>11</sup> The authors concluded that, in the case of the SZ group, the prior negative semantic component of the examined words tends to determine the sentiment features of the utterance they occur in. Furthermore, the BD group used Negative Emotive Intensifiers more creatively, with almost half of the occurrences in positive or neutral contexts, which was somewhat similar to the language use of the control group.

Lastly, Szabó et al. (2024a) analyzed the above discussed spontaneous speech corpus again but this time the authors aimed to identify distinctive linguistic features in the patient groups and controls. They employed machine learning techniques, particularly the random forest algorithm, to automatically differentiate among patient groups and controls based on the above mentioned distinctive linguistic features, including NEWs. The results indicated effective distinction among the four groups, surpassing baseline results: the overall accuracy was 58.44%, with one of the best performances observed in the schizophrenia group.

The analysis also included experiments with standard-register intensifiers and Negative Emotive Intensifiers. Results indicated that including Negative Emotive Intensifiers improved overall accuracy, suggesting their potential as distinctive linguistic features in psychosis-spectrum disorders. Conversely, removing standard-register intensifiers from the linguistic

<sup>&</sup>lt;sup>11</sup> For more details, see the term *semantic prosody* (Sinclair, 1991 and Chapter II/2 above), which means that many words and phrases show a tendency to occur in a certain semantic environment.

features used in the machine learning experiments increased accuracy. These findings demonstrate the applicability of previous research results in applied linguistic research. As discussed (see above), previous studies have highlighted the distinct linguistic behaviors associated with the use of Negative Emotive Intensifiers across various speaker groups, as well as their differentiation from standard-register intensifiers. Szabó et al. (2024a) confirms that these linguistic peculiarities can be effectively leveraged in machine learning for the automatic differentiation of individual speaker groups.

The research results summarized above are significant from the viewpoint of higher-order language functions. These functions encompass discourse planning and comprehension, understanding humor, sarcasm, metaphors, indirect requests, and the generation and comprehension of emotional prosody (Mitchell and Crow, 2005). Several studies have indicated that mental disorders may significantly affect the higher-order language functioning of individuals. For instance, Mitchell and Crow (2005) found that patients with typical SZ illnesses perform poorly on tests measuring these functions. Pawelczyk et al. (2018) also noted that SZ patients scored significantly lower than controls in subtests measuring the comprehension of implicit information, interpretation of humor, explanation of metaphors, discernment of emotional and language prosody, and comprehension of discourse. In studies involving Hungarian patients, Bagi et al. (2016) examined the understanding of metaphor and irony in SZ, while Simon et al. (2011) focused on the understanding of irony in SZ and BD. Their findings revealed that both patient groups performed worse on the tests than the healthy control group, and interestingly, BD patients showed significantly higher brain activity when processing irony. Additionally, Baranyai et al. (2020) found that SZ patients displayed deficits in all dimensions of executive functions compared to healthy controls, while the signal detection and control functions remained intact in SAD patients.

Based on the research results of Szabó et al. (2023b), the use of Negative Emotive Intensifiers also reflects deficits in higher-order language functions. Therefore, their findings, along with further investigations into this language phenomenon in mental disorders, are crucial. As Mitchell and Crow (2005) emphasized, higher-order language functions are essential for accurately understanding someone's communicative intent, and deficits in these functions may significantly impact social interactions.

In this chapter, we have reviewed studies analyzing the use of NEWs, with a special focus on Negative Emotive Intensifiers, in the Hungarian language among individuals with SZ, SAD and BD. The primary finding of these research works was that NEWs display significant differences in the linguistic behavior of patients with these psychotic-spectrum disorders, especially in the case of SZ and SAD patients. These findings highlight the

potential of NEWs' language usage pecificities to offer valuable insights into the language behavior associated with mental disorders and serve as distinctive linguistic features for the automatic differentiation of individual speaker groups.

## 6.3.2. NEWs from a diachronic linguistic perspective

In this section, we will summarize research findings regarding the semantic-pragmatic development of NEWs from a diachronic linguistic perspective.

As previously mentioned in Sections II and III, NEWs are primarily discussed within the category of intensifiers in the relevant literature. Concerning their semantic- pragmatic evolution, the process of their change over time can be categorized into two distinct phases (Lorenz, 2002, as cited in Dér, 2013a): *desemantization* and *grammaticalization*. *Desemantization* involves the gradual loss of their lexical meaning, while *grammaticalization* transforms them into lexical elements, specifically intensifiers (Dér, 2013a) (see Section III for more details).

Furthermore, beyond their function as intensifiers, we have observed (refer to Section VI/1.1) that NEWs can convey meanings and functions other than intensification. For instance, they can express a positive evaluation by the speaker (Szabó, 2019), or they may serve as "emphatic" words, expressing an attitude or evaluation in a neutral rather than negative sense (Wierzbicka, 2002). (Szabó and Otani (2022) referred to these words as interjections.)

Since NEWs are primarily discussed within the group of intensifiers in the related literature, there are few papers that address the semantic-pragmatic development of NEWs over time in a non-intensifier function. Furthermore, the body of research focusing on NEWs based on corpus data is limited. To our knowledge, there are no specific corpus-based investigations on the historical development of non-intensifier NEWs' functions.

Here, I will provide a brief overview of papers covering the diachronic development of NEWs using electronic corpora.

Hamilton et al. (2016b) attempted to model how words change their meanings over time using a computational semantic representation method, and they also explored the evolution of some NEW in their study. Utilizing large electronic datasets spanning four languages and two centuries, the authors applied diachronic word-embedding computational methods to model historical changes. They developed a robust methodology for quantifying semantic change and used this methodology to reveal statistical laws of semantic evolution. Although Hamilton et al. (2016b) did not specifically focus on NEWs, they examined an English NEW, namely "awful," using their computational semantic method and visualized its semantic shift over time.

Their method and analysis results shed light not only on the nature of semantic change over time but also on the semantic development of NEWs.

As already mentioned (see VI/1. above), Szabó et al. (2022a) conducted a study on the historical development of NEWs, focusing on their intensifier function, utilizing computational linguistics methods and tools and a large Hungarian corpus data. They analyzed the Hungarian Historical Corpus (Magyar Történeti Szövegtár; MTSZ; Sass, 2017), which contains texts produced between 1772 and 2010. To collect relevant data, the authors compiled a NEW dictionary consisting of 230 NEWs<sup>12</sup>. Using this dictionary, they automatically queried each NEW from the corpus and collected the results, along with metadata such as the year and source domain, into a separate database. The cleaned database contained a total of 10,580 sentences. Significant manual effort was required to process the linguistic data, which was further analyzed using computational linguistic processing methods. Among the automatic data processing steps, the authors performed a sentiment analysis on the immediate right collocators of NEWs, determining the evaluative semantic content of these words as positive, negative, or neutral. The goal of this analysis was to reveal changes over time in the sentiment features of NEWs, as the authors argued that these changes may reflect the progress in the grammaticalization and desemantization procedures of NEWs.

Out of the 230 words in the dictionary, 186 occurred in the corpus, and several NEWs were further analyzed. The results indicated that the linguistic changes of the investigated NEWs over time were reflected by the features of their collocators, including parts-of-speech and sentiment values. For instance, in the case of the NEW *irtó* (lit. 'smeashing'), neutral collocators were common at the beginning of its semantic development process. Subsequently, negative collocators became more prevalent, possibly due to the evolution of language. Over time, positive collocators also emerged and became increasingly frequent. The authors suggested that the growing frequency of collocators carrying any sentiment value (positive or negative) may indicate that these words are becoming intensifiers, while an increase in the proportion of positive words may signal desemantization. The researchers manually also examined the corpus examples, and their assumption was confirmed by the manual examination as well. (For further details, see Szabó et al. 2022a).

The authors also noted that the presence of a suffix, such as an adverbial suffix, can influence the pace of the semantic change process for NEWs. For example, there was a notable difference in the frequency distribution of the intensifier role between *átkozott* ('cursed') and *átkozottul* ('cursedly'), as well

can be found in (Szabó et al., 2022b).

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<sup>&</sup>lt;sup>12</sup> During Szabó's and her coworkers' research, the NEW lexicon used in their corpus analyses was continuously developed, incorporating new research results and insights. The most recent version of the dictionary, considered to be complete,

as their sentiment features. Based on these characteristics, the authors suggested that suffixed forms may undergo a more rapid development in the semantic change process under consideration. Furthermore, they observed that if two NEWs shared the same stem, it did not necessarily lead to a similar trajectory in language development (e.g., *borzalmasan* and *borzasztóan* ('awfully, terribly'), sharing the same fictive stem "*borz*").

As mentioned (see VI/1. above), in contrast to the study by Szabó et al. (2022a), both Szabó et al. (2023a) and Szabó et al. (2024b) analyzed a corpus spanning only two decades of news texts, using a significantly larger amount of language data.

Szabó et al. (2023a) focused once again on Negative Emotive Intensifiers. Through automatic and manual analysis of the corpus, they scrutinized the sentiment features of Negative Emotive Intensifiers. This study analyzes the semantic development of these words, leveraging a large Hungarian corpus consisting of news texts published over two decades. The research employs both automatic text processing methods and manual annotation to scrutinize the sentiment features of Negative Emotive Intensifiers in varying contexts, examining hypotheses concerning the evolution of language features over time, such as the law of differentiation and parallel change. Additionally, the study investigates the influence of morphological forms on this process.

Sentiment analysis results revealed that Negative Emotive Intensifiers generally occur in negative contexts in the examined news texts, but significant differences exist among individual words regarding the frequency of negative and non-negative contexts. These differences may indicate different stages in the desemantization process of individual words over time (for more details see Szabó et al. 2023a). Moreover, notable differences between the contextual and collocational sentiments of certain NEWs were also observed.

Then, words like *borzalmas* and *borzalmasan* almost exclusively appear in negative contexts, whereas *borzasztó* and *borzasztóan* frequently occur in neutral and even positive contexts. For instance, while *borzasztó* ('awful') occurs with several context-dependent and positive polarity words, *borzalmas* ('horrible') collocates with words that closely belong to the domain of news texts and have a negative semantic content, such as *baleset* ('accident'), *bűncselekmény* ('crime'), and *földrengés* ('earthquake'). This suggests that the latter two intensifiers are more desemantized than the former two, despite belonging to the same fictive word stem.

Furthermore, the research examined the modification of both contextual and collocational sentiment features of Negative Emotive Intensifiers over time. It was found that the frequency of positive sentiments increases over time, indicating semantic shifts. For instance, as it was already mentioned, borzasztó and borzasztóan were more desemantized than borzalmas and

borzalmasan, even in the early stages of their development. However, study also revealed that this divergence increased over time, with borzasztó and borzasztóan becoming more associated with neutral and positive contexts.

The research findings align with linguistic theories such as *the law of differentiation* and *the law of parallel change*. NEIs demonstrate behaviors consistent with both laws; they follow parallel change by developing into intensifiers, yet they also exhibit differentiation, as seen in the varying contextual and collocational sentiments.

The study also highlights that the presence of suffixes can affect the speed of semantic change. For instance, *átkozott* ('cursed') and *átkozottul* ('cursedly') showed significant differences in their intensifier roles and sentiment features, suggesting that suffixed forms may develop faster in the semantic change process. This observation aligns with the results presented in Szabó et al. (2022a). However, the authors also argued that, as explained above, a common lemma of two words seems to have a broader impact on sentiment features than the morphological form.

Lastly, Szabó et al. (2024b) employed a word embedding method to analyze the semantic features of NEWs in the same corpus. By using specific lexicons and word embedding techniques, they aimed to identify semantic peculiarities inherent to NEWs, as well as to observe the diachronic semantic changes of these words across distinct time periods.

This case study applies the word2vec embedding method to analyze the semantic evolution of NEWs in Hungarian over two decades. By examining the context changes of these words, the study tracks their semantic drift, focusing on desemantization and grammaticalization processes. The analysis compares vector representations of NEWs across different time periods, using lexicons of standard-register intensifiers and sentiment words for more interpretable results. The study highlights the semantic proximity of NEWs to either negative words or standard intensifiers, reflecting their degree of lexicalization and desemantization.

Detailed examinations of frequent NEWs like *borzasztó(-an)*, *borzalmas(-an)* ('awful(ly), terrib(ly)'), and *durva(-n)* (lit. 'coarse(ly), rough(ly)') reveal notable patterns.

Overall, the findings highlight the dynamic nature of word meanings. The analysis of the semantically closest words to *durva* and *durván* revealed distinct semantic development characteristics. Notably, *durva* exhibited consistent semantic patterns over time, while *durván* showed notable changes. *Durván* showed an increase in positive words and standard-register intensifiers in the last period, indicating its evolution into an intensifier. This aligns with previous research on the influence of suffixes on the desemantization and lexicalization processes (see above).

Regarding the words related to the fictive stem "borz", research results align with previous research (see above), confirming that shared etymological

roots do not necessarily lead to similar language development paths. Moreover, they underscore the subtle differences between previously considered synonymous words, such as *borzalmasan* and *borzasztóan*, elucidating their unique semantic trajectories. Then, *borzasztó* shows more negative nearest neighbors compared to *borzasztóan*, emphasizing the role of affixes in semantic evolution.

The study examines the contrasting predictions of the Law of Differentiation and the Law of Parallel Change again. Authors argue that both linguistic laws influence the semantic evolution of NEWs, illustrating how contradictory principles can coexist depending on context and period.

In conclusion, this section has explored the semantic-pragmatic development of NEWs from a diachronic linguistic perspective. The diachronic analysis, utilizing computational linguistic methods and large corpus data, revealed significant insights into the historical changes of NEWs. Overall, this section underscores the dynamic nature of word meanings and the complex interplay of linguistic factors in the evolution of these words.

### Recommended literature

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- Szabó, M.K., Guba, C., Szabó, K. (2022a). Adalékok a negatív emotív fokozók időbeli szemantikai változásához. In *A Nyelvtörténeti Kutatások Újabb Eredményei XI*. Szeged. 387-402.
- Szabó M.K., Vincze V., Dam B., Guba Cs., Bagi A., Szendi I. (2024a). Predictive and distinctive linguistic features in Schizophrenia-Bipolar Spectrum Disorders In *Proceedings of the 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation* (LREC-COLING 2024). 12938-12953.
- Wierzbicka, A. (2002). Australian cultural scripts—bloody revisited. *Journal of Pragmatics* 34, 1167-1209.

## Summary and guiding questions, tasks

- 1) How do NEWs' meanings and functions vary across different text domains?
  - a. Explore various text domains, extract excerpts from each, and analyze the presence of NEWs within them. Conduct a comparative analysis to discern the types of NEWs present in each domain and their respective functions. Identify both similarities and differences in usage patterns of different NEWs.
  - b. Select a specific NEW and investigate how its meaning shifts depending on the domain of its usage.
- 2) Reflecting on previous tasks, consider the text corpora summarized in Table 1. Determine which text corpora would be valuable for further analysis and devise strategies for annotating these corpora to facilitate comprehensive analyses of NEWs within them.
- 3) What insights did you gain from this section regarding the interplay between NEWs, emotions, figurative language usage, and linguistic intensification, particularly from a psychopathological perspective?

#### CHAPTER VII.

#### A CASE STUDY:

## **DURVA.** A HUNGARIAN NEGATIVE EMOTIVE WORD:

On the meaning and semantic development of durva based on Hungarian dictionaries. Corpus analysis results: Preliminary synchronic linguistic analysis results. Durva in the automotive text domain: linguistic characteristics and pragmatic functions. Diachronic linguistic analysis results: Historical evolution of durva over time. in news texts. Revisiting Historical evolution of durva in the automotive text domain.

In this chapter, I delve into the multifaceted nature of the Hungarian NEW *durva*. This selection is informed by recent research findings (Szabó, 2018a; Szabó et al., 2022b; Szabó et al., 2023a; Szabó and Bibok, 2023), highlighting its frequent use in expressing positive evaluations in Hungarian tweets and speech texts, alongside its domain-specific characteristics. *Durva* is also noted to be evolving into an intensifier, as suggested by word association test results (Szabó, 2018a).

The chapter presents recent insights into the semantic-pragmatic features of *durva* and traces its semantic development over time.

To establish a foundational understanding, I begin by reviewing entries from Hungarian lexicons that define *durva*.

The subsequent sections focus on synchronic and diachronic linguistic analyses. The synchronic analysis provides preliminary results from corpus studies, exploring the current linguistic characteristics and pragmatic functions of *durva* across various domains of language use. Specifically, its role as an intensifier or sentiment word in contemporary Hungarian discourse will be examined.

A dedicated subsection investigates *durva* within the automotive text domain, uncovering its specialized usage and semantic nuances within this industry-specific context. This analysis aims to elucidate how *durva* is employed in automotive-related texts and its distinctive syntactic and semantic features within this specialized discourse.

Turning to diachronic analysis, the chapter explores the historical evolution of *durva*. This longitudinal study tracks shifts in usage and semantic evolution over time, particularly focusing on its role and meanings in news texts. Insights gleaned from these analyses contribute to a comprehensive understanding of how *durva* has evolved in usage and meaning across different linguistic domains.

Lastly, the chapter provides a detailed examination of *durva* within the automotive text domain, offering further insights into its usage trends and semantic development specific to automotive contexts.

# 7.1 On the meaning and semantic development of *durva* based on Hungarian dictionaries

In this chapter, I explore the intricate semantic nuances and evolutionary trajectory of the Hungarian NEW *durva* through comprehensive analyses derived from seminal Hungarian dictionaries. Specifically, I synthesize insights gleaned from key lexicons such as Bárczi and Országh (1959), Czuczor and Fogarasi (1862), and Zsemlyei (1993). These lexicons provide a detailed categorization, encompassing the NEW's multifaceted meanings across various contexts. Subsequently, I delve into the historical perspective offered by Czuczor and Fogarasi (1862) and Zsemlyei (1993), shedding some light on *durva*'s evolution over time and its semantic evolution.

Based on Bárczi and Országh (1959) (ÉrtSz I/1082), the term *durva* ('course, rough') encompasses a spectrum of meanings, categorizable into five primary dimensions. Here, I summarize the essential content from this lexicon entry.

- 1) Refers to an uneven surface, lacking smoothness, characterized as rough or coarse. This category includes:
  - a) Refers to crushed, powdery substances that contain grains or pieces larger than desired.
  - b) Describes objects, devices, or tools that are rough, wrinkled, or toothed, with relatively large grains, folds, or teeth.
  - Denotes thick, hard, coarse fibrous materials or fabrics made from such materials.
  - d) Describes surfaces that are rough to the touch, crusty, or stiff.
- 2) Denotes crudely crafted, non-detailed creations. Examples include:
- durva hamisitvány (lit. 'rough fake, cheap forgery'): Indicates a quickly manufactured copy that is easily recognizable.
- In architectural contexts, it refers to intentionally avoiding finer details to achieve a monumental effect.
- *durva vázlat* (lit. 'rough draft, first draft'): Implies an initial, undetailed draft that approximates the final form without elaboration.
- 3) Describes poorly made, imperfect, or demanding tasks, including:
  - a) Durva munka ez a bútor (lit.) 'This piece of furniture is harsh': Indicates furniture that is poorly made.
  - b) Physical work that places heavy demands on the human body or harms the delicacy of the skin.

- 4) Refers to individuals or groups who offend others' self-esteem and sensitivity through behavior, speech, or actions, being violent, cruel, or rude. This category differentiates:
  - a) Describes a merciless, grumpy, or indelicate person, often due to irritation.
  - b) In fictional or archaic contexts, relates to a job or occupation that is ill-mannered, cumbersome, churlish, or unpolished.
- 5) Denotes any action performed by a person described in "4. meaning", involving the use of harsh words or treating others roughly or rudely. Further distinctions include:
  - a) Actions or utterances that disregard usual social order, sophisticated social forms, or conventions of interactions, violating them.
  - Actions or utterances that offend good taste or moral sense, being indecent or obscene.
  - c) Refers to hurtful, unpleasant, offensive sounds.

It is noteworthy that overlaps can be observed between the first and third categories in terms of their semantic nuances.

The lexicon by Zsemlyei (1993) stands as the most recent etymological dictionary of the Hungarian language, delineating several distinct meanings of the word *durva*:

- 1) Refers to a rough, hard, coarse surface or material that is palpably rough to the touch.
- 2) Describes something as rude or churlish in nature.
- 3) Denotes a strong or sharp sound or light.
- 4) Indicates an intensity so pronounced that its high degree is deemed offensive.
- 5) Refers to something rough-and-ready or superficial, such as an object or thing.
- 6) Describes an unchivalrous or obscene expression or word, lacking propriety.
- 7) Used as a predicate to denote something shocking.

When comparing the lexical entries of Bárczi and Országh (1959) and Zsemlyei (1993), these lexicons generally align in their definitions of *durva*. However, notable differences emerge between them. Firstly, Zsemlyei (1993) introduces a seventh meaning, denoting *durva* as 'shocking' when used as a predicate, a nuance absent in Bárczi and Országh (1959). Secondly, Zsemlyei (1993) includes a fourth meaning, describing *durva* as 'so intensive that its high degree is already offensive', a concept not covered in Bárczi and Országh

(1959). Conversely, Bárczi and Országh (1959) include a reference to "Physical work that requires too much of the human body or harms the delicacy of the skin", a definition absent in Zsemlyei (1993). These distinctions underscore the nuanced variations in the semantic interpretations of *durva* across different Hungarian lexicons.

Lastly, let us consider Pusztai and Gerstner (2006). The editors distinguish among the following meanings:

- 1) Something with an uneven surface, rough texture; composed of relatively large grains; or having a thick fibrous material.
- 2) Something that is roughly elaborated, not exact, or precisely determined.
- 3) Refers to rough-and-ready work or tasks that are physically demanding or harmful to the hands.
- 4) Describes something or someone that offends others, characterized as violent, ruthless, or rude. It also includes actions or words that offend good taste, decency, or moral sense.
- 5) Used in archaic or fictional contexts to describe someone or something as unsophisticated or uneducated. It can also refer to a person's appearance, implying a lack of delicacy or attractiveness.
- 6) Refers to a hurtful or earsplitting noise, such as rolling or lamination sounds.

Overall, we observe that the meanings provided by Pusztai and Gerstner (2006) are more detailed and specific in certain aspects compared to the earlier lexicons of Bárczi and Országh (1959) and Zsemlyei (1993). However, no novel meanings or usages are introduced.

Let us now undertake a comprehensive exploration of the lexical meanings associated with *durva* from a diachronic linguistic perspective.

Czuczor and Fogarasi (1862), in their seminal work, delineated only two primary senses of the Hungarian word *durva*:

- 1) It denotes something in its natural, unrefined state, typically referring to materials such as *durva bőr* 'rough leather', *durva posztó* 'rough baize', *durva kövek* 'rough stones', etc.
- 2) Figuratively, it describes individuals who are uneducated, lacking refinement, or displaying unkind behavior, as exemplified in expressions like *durva ember* 'rude person', *durva hang* 'rude voice', *durva szó* 'rude word', *durva beszéd* 'rude language', etc. *Durva bánásmód* 'severe treatment', *durva magaviselet* 'rude behavior'.

Regarding the historical evolution of the meanings and functions of *durva*, the Zsemlyei (1993) lexicon highlights that from its initial concrete meaning of 'rough to the touch, hard, coarse surface, material' (as mentioned above), subsequent semantic shifts have led to abstract interpretations and expanded usage contexts.

In addition to the aforementioned lexical entries, to the best of my knowledge, there is a notable absence of scholarly literature specifically dedicated to tracing the historical trajectory of 'durva', apart from my own research contributions detailed in Section VI/2 (Szabó et al., 2023a). In the forthcoming subsection, I will synthesize these findings and present a contemporary corpus-based study aimed at elucidating the current usage dynamics of *durva*.

Lastly, it is noteworthy that documented evidence attesting to the use of *durva* as an intensifier can be traced back to writings from the 18th century (Szabó et al., 2023a; Zsemlyei, 1993), underscoring its enduring presence and evolving semantic nuances over time.

## 7.2 Corpus analysis results

In this section, I present the findings from our corpus analyses on the Hungarian term *durva*, conducted in collaboration with my co-authors (Szabó and Bibok, 2023; Szabó and Otani, 2022). Subsequently, I discuss the latest outcomes of my own research based on a recently compiled text corpus.

The first part of my current analysis adopts a synchronic perspective, systematically investigating the semantic-pragmatic features of *durva* across the entirety of the corpus. Here, I categorize and systematize the various meanings and usages of *durva* that emerge from the corpus data, aiming to elucidate its multifaceted meanings and functions not fully captured in standard Hungarian lexicons. These findings contribute to a deeper understanding of its versatile linguistic roles beyond conventional dictionary definitions.

In the second part of the examination, I trace the semantic-pragmatic evolution of *durva* by analyzing texts spanning a considerable period. Turning to diachronic perspectives, it is noteworthy that, to date, no comprehensive study has thoroughly explored the linguistic evolution of *durva* over time. This research gap underscores the significance of my study in filling this void and providing valuable insights into the historical development of this lexical unit.

## 7.2.1 Synchronic linguistic analysis results

Next, I will present the latest corpus analysis results on the Hungarian NEW *durva* in spontaneous speech, tweets, news, and automotive text domains. This analysis aims to uncover its nuanced semantic-pragmatic features across diverse textual contexts.

My current study builds upon prior research efforts (Szabó and Otani, 2022; Szabó and Bibok, 2023), focusing on a comprehensive analysis of durva(-n) within various corpora. Specifically, we examined its occurrences in the HuTongue Corpus, which includes spontaneous speech texts. Transitioning to news texts, our findings highlighted domain-specific peculiarities of this NEW.

This section extends previous research findings to illuminate the multifaceted roles of *durva* in specific domains like automotive texts, providing insights into its semantic evolution and contextual adaptation. These results underscore the importance of elaborated lexicon entries that accurately capture the full spectrum of its usage nuances.

## 7.2.1.1 *Durva(-n)* in spontaneous speech, tweets and news texts

In this section, I will delve into the linguistic analysis of the Hungarian NEW durva(-n) as it appears in spontaneous speech, tweets, and news texts. The primary focus will be on examining the semantic-pragmatic features of the base form durva. Additionally, I will summarize the research findings related to its suffixed form,  $durv\acute{a}n$ , aiming to provide a comprehensive overview of their usage patterns and contextual nuances across different textual domains.

As previously mentioned (see Section VI/1 above), Szabó and Otani (2022) conducted a comparative study to explore the range of different uses and pragmatic functions of NEWs in Hungarian and Japanese. They presented their findings from a corpus analysis. In Hungarian, they selected the word *durva* and also analyzed its variant *durván*.

This study utilized data from the HuTongue Corpus, which consists of spontaneous speech texts (Vincze et al., 2021). The corpus included 1,149,457 tokens, excluding punctuation. All instances of the selected NEWs were extracted, and the authors annotated various syntactic, semantic, and pragmatic features. For syntactic features, they classified whether the NEW was functioning as an adjective, adverb, or interjection, i.e., whether it constituted a standalone utterance (Ameka, 1992; Andrason, 2022; Norrick, 2009). Semantically, they annotated whether the NEW served an intensifier function, had a literal meaning, or carried evaluative semantic content, such as the sentiment value (positive, negative, or neutral) of the utterance (see Section

VI/1 for further details). Additionally, the authors analyzed the occurrences from a pragmatic perspective.

In total, 257 occurrences were examined. The unsuffixed form *durva* appeared in the corpus approximately five times more frequently than the suffixed form *durván* (213 occurrences of *durva* compared to 44 of *durván*). The analysis was framed within Politeness Theory (Kádár, 2017; Kockelman, 2003; Östman, 1995; Quirk, 2010).

The findings revealed that *durva* and *durván* exhibit distinct features and functions. The primary function of *durva* is as an interjection, without serving as an intensifier. Notably, *durva* performed specific pragmatic functions in nearly half of the instances. For example, it appeared in utterances expressing agreement and support toward the speaker, or as an attention marker indicating comprehension and attentiveness (Fraser, 2009). Thus, *durva* often functions as a positive politeness marker. Conversely, *durván* typically functions as an intensifier and rarely exhibits special pragmatic functions, with only two noted exceptions (see Szabó and Otani, 2022 for detailed examples). Regarding semantic sentiment, both *durva* and *durván* predominantly convey positive or neutral values. When neutral, they often highlight the extreme nature of the topic or the speaker's surprise.

As previously mentioned (see Section VI/1 above), Szabó and Bibok (2023) analyzed the semantic and pragmatic features of the NEW *durva* and its variant *durván* across a large dataset comprising three electronic corpora from different text domains. These included written texts in the colloquial style of tweets (Szabó and Guba, 2022), Hungarian news texts published on a Hungarian web portal between 2002 and 2018 (Szabó et al., 2023a), and spontaneous speech texts (Vincze et al., 2021) that were also used by Szabó and Otani (2022) (see above).

In the corpus of tweets, there were 85 examples of *durva* and 26 of *durván*, totaling 111 instances. In the news texts, *durva* appeared 1,581 times and *durván* 1,439 times, making a total of 3,020 occurrences. As mentioned earlier (see Section VI/1 above), the authors analyzed NEWs within the Discourse Grammar Framework (Heine, 2013), comparing the domain-dependent features of NEWs.

In their analysis of the semantic-pragmatic features of the examined NEW *durva* and its variant *durván*, Szabó and Bibok (2023) differentiated among the following meanings and functions:

- 1. Literal Sense: This includes uses where the word retains its basic meaning, such as in *durva szivacs* ('rough sponge') and *durván kezeli a felületet* ('treats the surface roughly').
- 2. Sentiment Word: The authors argued that the "sentiment" of a word expresses an evaluative-emotive semantic content (positive, negative, or neutral) (Szabó, 2018). For instance, it may convey the speaker's

negative or positive evaluation of the information, indicating desirability or undesirability from the speaker's viewpoint. Additionally, it can express the speaker's surprise, suggesting that the information is surprising, special, unexpected, or noteworthy. Syntactically, in these cases, the NEW is related to an argument structure, e.g., *durva motor* (lit.) 'harsh motorcycle', meaning 'a brilliant motorcycle'), *a buli durva volt* (lit.) 'the party was harsh', meaning 'the party was very good'). The authors also explained their use of the term "sentiment" from computational linguistics rather than the more general linguistic term "polarity" (for more details, see Section II/2 above).

- 3. Intensifier Function: As previously mentioned, these words are known as *polarity losers* (Szabó and Bibok, 2019; Szabó et al., 2022b; see Section III).
- 4. Interjective Function: This usage of NEWs was highlighted by Szabó and Otani (2022).
- 5. Other Meanings: For example, *durván* can mean 'approximately,' as in *durván 5 éve* ('approximately 5 years ago').

Regarding interjective usage, Szabó and Bibok (2023) provided some significant details in relation to NEWs. Interjections are traditionally viewed as asyntagmatic and non-constructional, constituting an utterance by themselves (Ameka, 1992; Norrick, 2009). They are typically considered to lack syntactic structure, exhibiting syntax-external behavior. However, Andrason (2022) proposed a less radical approach to interjections, adopting a prototype-driven perspective. In their recent publication, Szabó and Bibok (2023) relied on this latter approach during their corpus analysis and differentiated between two types of interjections: those words that do not have any syntactic relations (23a) and those that have some syntactic relations to a certain extent (23b). Examples of these two uses provided by the authors are as follows:

- (23) a. Durva. Még szerencse, hogy időben tough still luck.NOM that time.INE észrevettétek [...] notice.PST.2PL [...] 'Phew. Luckily you have noticed it in time [...]' [twitter corpus]
  - Tudod. b. ilven félálomban kelek föl. know.2sg this half.sleep.INE get.up.1SG mondom Úristen. odanézek. Nagyon look.over.1sG say.1SG good.NOM very durva.

tough

'You know, I wake up in a half-sleep, I look over there, I say, Good God. How harsh.' [HuTongue corpus]

As a consequence of the criteria presented above, the authors did not classify the NEW *durva(-n)* as an interjection when the construction was syntactically complete (i.e., when there was a grammatical subject for the word *durva*) or when, based on the context, the subject (in other words, the target of the sentiment) could be precisely interpreted and syntactically incorporated into the construction. For illustration, let us consider an example provided by the authors:

(24)Azdurva. hogy a Jobbik csinálja a a legiobb ellenzéki programot. that the tough that the Jobbik.NOM do.3SG the best oppositional program.ACC 'The shocking thing is that Jobbik produces the best opposition program.'

Their analysis method involved manual annotation of the corpus examples. The authors meticulously analyzed each occurrence and annotated them using predefined annotation tags.

The results of their investigation can be summarized as follows:

- 1. The frequency distribution of the semantic-pragmatic functions of NEWs is highly domain-dependent. For instance, the interjective use is common in spontaneous speech but occurs less frequently in tweets (although this category is still present) and is absent in the news corpus. For more details and a possible explanation of this feature, see Szabó and Bibok (2023). Here, we provide two examples of this usage:
- (25)a. Durva. Még szerencse, hogy időben észrevettétek [...] tough still luck.NOM that time.INE notice.PST.2PL [...] 'Phew! Luckily you have noticed it in time [...]' [twitter corpus] b. Busszal iár? Na. mondod. nem bus.INS go.3sG well say.2sG not
  - De. Hát nincs jogsija, Vili.
     but well be.not driving.licence.POSS Vili.NOM
     Durva, én nem tudtam [...]

tough I no know.PST.1SG [...]
'- Does she travel by bus? Huh, don't say that. – It's true. She doesn't have driving licence, Vili. – Oh, I didn't know [...]'

Moreover, in the HuTongue Corpus, *durva*(-*n*) exhibits specific pragmatic functions in some cases that are not observed in the other two corpora (e.g., as evidential and attention markers). This feature is closely related to the fact that the HuTongue Corpus contains discourse texts.

The above-presented results also indicate that the interjective usage of *durva(-n)* is a significant function and should be considered during the systematization of the functions and meanings of this NEW.

Another noteworthy domain-dependent feature is that the so-called "other meaning" of *durván* is common in news texts but rare in the corpora of tweets and spontaneous speech.

Regarding sentiment features, *durva* as an evaluative word predominantly carries a negative meaning in the news text corpus (e.g., *durva diákcsíny* 'rude student prank', *durva bánásmód* 'rude treatment', *durva kijelentés* 'rude statement'). Neutral cases are rare, and there was only one example of positive usage in the entire dataset.

Additionally, specific collocations (such as *de durva* (lit.) 'so rough', *tök durva* (lit.) 'damn tough') are common in speech texts and tweets but not in news texts.

Based on the results of their corpus analysis, the authors contend that the current lexical entries for the NEW *durva* in major Hungarian lexicons are inadequate because they do not encompass several meanings and functions of this word. They argue that the term *polarity shift* (Szabó, Bibok 2019) is insufficient to cover all cases where *durva(-n)* does not function as an intensifier. Therefore, the authors propose introducing the term "sentiment" to address those instances where these words express the speaker's evaluation towards a specific target or information. When *durva(-n)* functions as a sentiment word, it may convey a negative, positive, or neutral value.

Finally, the authors highlight that some uses of durva(-n) are associated with Sentence Grammar (SG), while others are related to Thetical Grammar (TG) (Heine et al., 2013a). Instances where the examined words function as intensifiers or sentiment words are linked to SG because they are grammatically dependent and contribute to the propositional meaning of utterances from a semantic perspective (Heine et al., 2013b).

On the other hand, interjective NEWs are connected to TG because they are syntactically autonomous, positionally mobile, and their meaning is primarily procedural rather than conceptual (Ahn and Yap, 2022; Kaltenböck et al., 2011).

As previously discussed (see Section VI/1 above),Szabó et al. (2023a) introduced a NEW dataset comprising a large corpus of news texts published over two decades. Initially, each sentence containing at least one NEW was filtered out from the corpus, resulting in 42,457 examples in total. Specific NEWs were then selected based on recent research results and the research questions of the analysis, resulting in 4,285 occurrences. A manual analysis was conducted on the remaining dataset. During the manual annotation, annotators tagged two characteristics of NEWs: their actual function and contextual sentiment value. For the function, they annotated whether the given NEW in the example had an intensifier function or not.

Szabó et al. (2023a) investigated the semantic patterns of the NEW *durva(-n)* in its intensifier function, exploring sentiment features such as negative, neutral, or positive sentiments both in narrower (*collocational sentiment*) and broader (*contextual sentiment*) contexts. While their study primarily focused on the semantic evolution of the NEW over time, it also yielded synchronic insights into the features of durva(-n) that are pertinent to summarize here.

Based on the results, *durva* and *durván* emerged as the most frequent NEWs in the examined corpus among 10 different NEWs, particularly in the intensifier function (as previously mentioned, see Section VII/2 above). When comparing NEW pairs that function as intensifiers and trace back to the same root stems, the authors found that the presence of a suffix generally increases the frequency of a NEW in the intensifier function. However, there was one notable exception: the word pair *durva* and *durván*. These word forms occurred in the corpus with nearly the same relative frequency.

Regarding the sentiment analysis results, *durva* and *durván* exhibit a nearly equal proportion of neutral collocators (*collocational sentiment*; for detailed information, see Section II/2 and VII/2 above) compared to negative collocators. However, they predominantly occur in a negative context (*contextual sentiment*) in the vast majority of cases. Additionally, based on the collocational sentiment results mentioned earlier, *durva* and *durván* appear to be more neutral than *borzasztó* and *borzasztóan*, but the contextual sentiment results suggest the opposite. This discrepancy leads the authors to argue that in semantic studies of this nature, analyzing both contextual and collocational sentiment features can provide valuable insights into the semantic characteristics of these words, offering a deeper understanding of their functions and evolutionary patterns over time.

As previously discussed (see Section VI/1 above), Szabó et al. (2024b) employed a word embedding method to analyze the semantic features of NEWs in the same corpus. By using specific lexicons and word embedding techniques, they aimed to identify semantic peculiarities inherent to NEWs, as well as to observe the diachronic semantic changes of these words across distinct time periods. This case study applies the word2vec embedding method

to analyze the semantic evolution of NEWs in Hungarian over two decades. By examining the context changes of these words, the study tracks their semantic drift, focusing on desemantization and grammaticalization processes. The analysis compares vector representations of NEWs across different time periods, using lexicons of standard-register intensifiers and sentiment words for more interpretable results. The study highlights the semantic proximity of NEWs to either neutral and positive words or standard-register intensifiers, reflecting their degree of lexicalization and desemantization.

Detailed examinations of frequent NEWs like *borzasztó(-an)*, *borzalmas(-an)* ('awful(ly), terrib(ly)'), and *durva(-n)* (lit. 'coarse(ly), rough(ly)') reveal notable patterns. For *durván*, there was a significant semantic shift over time, with a marked decrease in negative connotations and an increase in its role as an intensifier. This evolution is characterized by the emergence of positive words and standard-register intensifiers among its closest semantic neighbors, demonstrating a clear trajectory towards desemantization and lexicalization.

In contrast, the word *durva* exhibited consistent semantic patterns over time, without significant changes; the analysis revealed that the closest semantic neighbors of *durva* did not show significant changes across the examined periods, highlighting its semantic stability.

This way, the study underscores the influence of morphological features, such as suffixes, on the semantic development of NEWs, noting that these features can significantly affect the distribution and functions of the words.

#### 7.2.1.2 *Durva* in the automotive text domain

In this section, I will delineate the semantic-pragmatic features of the Hungarian NEW *durva* as identified in a corpus of automotive texts. This corpus was meticulously curated specifically for the current analysis to facilitate a comprehensive semantic-pragmatic exploration of this word, alongside an in-depth investigation into its semantic-pragmatic evolution over time.

Initially, I will introduce the corpus itself, detailing its creation and methodology. The corpus was manually compiled from the Arcanum Digitheca webpage [https://www.arcanum.com/], which offers access to digitized versions of various printed resources, including journals and newspapers.

Subsequently, I will outline the methods and procedures employed for annotating the corpus data. This includes the systematic tagging and classification of instances containing the NEW *durva*, aiming to elucidate its functional roles and contextual nuances within the automotive domain.

Lastly, I will present significant research findings pertinent to synchronic linguistic analysis. Diachronic results will be expounded upon in a subsequent subsection, providing a holistic view of the given NEW's semantic development across different temporal contexts.

In the current investigation, to select a proper language data I relied on my previous results on the domain dependent features of NEWs (see Section VII/1.2 above) and I chose a periodic from the automotive text domain. I selected the so-called *Autó-Motor* ('car-motorcycle') journal. *Arcanum* published it from January 1950 to December 2020. Based on a simple word-to-word match using the search engine of the homepage I selected all the occurrences of the word *durva* in each issue. This way I found 893 corpus examples altogether.

In order to build a dataset that can be further analyzed and processed, I had to copy all the occurrences into a separate database. To download the occurrences on an automatic way would have been quite difficult because of the following features: The webpage provides the scanned pdf pages of "Autó-Motor" journal and the articles of which usually have a multi-column structure. Consequently, when I automatically download a specific text in a plain text format, it might turn out to be wrongly edited, in the wrong line order, and with several typos as a consequence of the Optical Character Recognition of the pdf format of the files (Szabó et al., 2020). I carefully considered the difficulties and options and decided to manually create the dataset from the files, avoiding a tiresome data correction procedure which should follow the automated procedure. I collected all the utterances that contained the NEW durva as a wordform. It means that here I did not deal with those cases where this word had a suffix such as durván. I conducted the work using Excel. The metadata pertaining to each occurrence (publication data) was meticulously recorded as well.

After data collection, each example was meticulously examined and manually annotated. This work was fundamentally exploratory; I explored the spectrum of semantic-pragmatic functions of 'durva' based on lexical entries and prior research findings (see sections VII/3.1 and VII/3.2.1.1 above). It is emphasized that there was no predefined category system; the final main and subcategories of semantic contents of *durva* emerged based on the data during the course of this work.

As I mentioned above, the whole corpus contains 893 occurrences altogether. However, one example was incorrect, it could not be unambiguously interpreted, so it was excluded it from the annotation process. Thus was 892 examples remained and were annotated.

Here, I will present the results of this corpus analysis, along with corpus examples, focusing initially on synchronic linguistic perspectives.

Category 1

The analyzed corpus comprises 146 examples that correspond to the semantic category delineated by Bárczi and Országh (1959) as the first category (refer to Section VII/3.1 above). This category defines *durva* as describing something with an uneven surface, not smooth but rough or coarse. As previously noted, the dictionary further subdivides this broader sense into four distinct subcategories, a classification that aligns with the findings from my corpus analysis.

Here, I will illustrate this systematic approach with corpus examples. Firstly, in example (26), the word *durva* denotes a crushed powdery substance characterized by grains and larger pieces that are not finely ground, as indicated in (26a). Notably, Bárczi and Országh (1959) do not mention this usage, but intriguingly, *durva* is applied not only to solid materials like sand or powder but also to liquid substances, as evidenced in (26b). In such contexts, it signifies an undesirable size of resulting pieces and inconsistent substance texture.

- [...] listavezetőként neki először (26)kellett a. [...] head.of.the.list.xxx he.DAT need.PST.3SGfirst nekiveselkednie durva murvás pálváknak tackle the tough gravel track.ALL.PL [...] [...]
  - '[...] as the head of the list, he had to tackle the rough gravel tracks first [...]' (2006)
  - finoman b. [...] a elporlasztott benzincseppeken [...] the finaly atomized gasoline.droplet.INE.PL kívül sok. durva benzincsepp aránylag course gasoline.droplet.PL.NOM also exceptlot relatively keletkezik. produce.3sG
    - '[...] in addition to finely atomized gasoline droplets, many relatively coarse gasoline droplets are also produced.' (1979)

Regarding size-related features, in several instances, *durva* denotes the large size or robustness of an object. This usage extends beyond powdery materials to encompass objects such as stones, holes, humps, and others. For example:

(27) a.		Durva	hepehupák,		itt-ott		sziklás
		rough	hump	.PL.NOM	here.a	and.there	rock
		kimászás	a	teknőből,	meg	akad	néhány
		climb.out	the	hollow.DEL	and	there.are	some
		farönk	is	keresztben.			

log.NOM also across.INE

'Rough humps, here and there are some rocky climbs out of the hollow, and there are also a few logs across.' (2006)

durva kőgáttal h Α patakot egy kis tóvá duzzasztották [...] stone.dam.INSTR the stream.ACC a rough small lake.xxx dam.PST.3SG [...] 'The stream was dammed into a small lake with a rough stone dam [...]' (1994)

Another semantic nuance of *durva* pertains to objects, devices, or tools characterized by a rough, wrinkled, or toothed surface, often featuring relatively large grains, folds, or teeth in certain instances. For example:

- (28)a. Α hibás felületet megtisztítjuk durva csiszolóvászonnal rozsdátlanítiuk. defective surface clean.1PL the and coarse sand.cloth.INSTR derust.1PL 'We clean and de-rust the defective surface with a coarse sand-cloth.' (1963)
  - b. [...] a kemény szemcséjű, odafagyott jég [...] the hard grained frozen ice NOM törlőajkakat, úgy kicsorbítja, elkoptatja mint egy durva reszelő. like cut.3sg wear.3sG the wiper.lip.PL.ACC like file.NOM coarse '[...] the hard-grained, frozen ice cuts and wears the wiper blades like a coarse file.' (1975)

*Durva* denotes a thick, hard, coarse fiber or fibrous material, or fabric made from such fibers in several instances. For example:

(29)Ilvenkor célszerű [...] az akkumulátor csapját in.this.case practical [...] the battery tap.POSS.ACC gyökérkefével dörzsölni vagy **durva** ronggyal tisztára [...] root.brush.INSTR rough cloth.INSTR clean.xxx or rub [...] 'In this case, it can be practical to rub [...] the battery contact clean with a root brush or a rough cloth [...]' (1964)

Then, the word *durva* may also denote a rough to the touch, crusty, or stiff surface:

(30)Az. üvegszálas sisak belső kárpitját félrehúzva. fiberglass helmet.NOM inner upholstery the pulling.aside.xx annak belső felülete és raita általában durva. **a**7 inner surface rough, and INE usually the üvegszövet mintázata is látható. tapintható. glass.fabric pattern.POSS also visible palpable 'Pulling aside the inner upholstery of the fiberglass helmet, its inner surface is rough, and the pattern of the glass fabric is usually visible and palpable.' (1982)

It should be noted that there is a specific meaning of *durva* which aligns with the first semantic category discussed in the systematization by Bárczi and Országh (1959), but the authors do not specifically mention this particular semantic content. Consider the following example:

Soriázni (31)durva éleket. felületet pedig deburr rough edge.PL.ACC the surface.ACC and the gondosan csiszolni. előkészíteni többször alapozni, several.times prime sand carefully prepare a fényezéshez [...] varnishing.ALL [...] Smooth the rough edges, prime the surface several times, sand it, and carefully prepare it for varnishing [...] (1997)

Here, *durva* denotes an edge that is not properly rounded but sharp. Thus, some semantic aspects of this usage have already been discussed previously, namely, that this feature is undesirable, related to the size of the object, and involves tactile sensation. However, the semantic content here appears to differ somewhat from the examples provided earlier.

## Category 2

Another meaning type of *durva* relates to the behavior, speech, or actions of someone. This semantic category is detailed in ÉrtSz2 under categories 4 and 5 (see Section VII/3.1 above). According to ÉrtSz2, this meaning encompasses actions or speech that offend the self-esteem and sensitivity of others, characterized by violence, cruelty, rudeness, mercilessness, grumpiness, or indelicacy. The lexicon notes that such behavior arises from irritation or be a consequence of someone's occupation.

In summary, based on the dictionary, *durva* in this sense describes a mode of behavior that influences interpersonal interactions. It reflects the attitude of a person or group towards others. However, in the context of

automotive texts, *durva* is often used to express not only attitudes towards people but also methods of handling objects. Consider the following examples:

- (32) a. Új továbbá a **durva** kapcsolásra érzéketlen 4 new additionally the rough change.ALL insensitive 4 fokozatú váltómű speed gearbox.NOM' 'Additionally, the 4-speed gearbox is new, which is insensitive to crude changes' (1959)
  - b. [...] fittyet hányva kifejezetten erőszakos [...] snapping.finger particularly violent the gázadásokra durva a gas.pressing.ALL.PL and the rough kormánymozdulatokra [...] steering.movements. ALL.PL [...] '[...] snapping finger at the extremely violent way of stepping on
    - '[...] snapping finger at the extremely violent way of stepping or gas and tough steering movements [...]' (1999)

fémet

viszont

nem

At the same time, I argue that within this semantic category, we should also consider cases where an aggressive or harmful nature is not necessarily related to a human being, but instead to entities such as corrosive chemical agents. For instance:

[...] polished metal.ACC the raw however not szabad durva vegvi anvagokkal kezelni harsh chemical allowed material.INSTR.PL treat.INF [...] [...] '[...] raw polished metal, on the other hand, should not be treated with harsh chemicals [...]' (2011)

nyers polírozott

(33) [...]

This meaning is obviously distinct from the previously discussed semantic content describing human behavior. However, I argue that these meanings share similarities.

Furthermore, within this broader semantic category, there are examples where *durva* simply expresses the manner of a particular event or activity. Compare examples in (34).

(34) a. Kétszer is defektet kapott, azután two.times even puncture.ACC get.PST.3SG then egy **durva** landolásnál elhagyta a hátsó a tough landing.xx left.PST.3SG the rear diffúzort, és fékhiba is lassította. diffuser.ACC and brake.failure.NOM also slow.PST.ACC 'He suffered punctures even two times, then left the rear diffuser on a rough landing and was also slowed by brake failure.' (2017)

b. [...] López durva pofozkodásba kezdett Mullerrel [...] López tough slapping.ALL start.PST.3SG Muller.xx [...]
[...] '[...] López started slapping with Muller in a rough way [...]' (2015)

In example (34a), the word *durva* describes the manner in which the car lands. The act of *landing* itself is not inherently negative, but the addition of *durva* makes the construction negative. In other words, *durva* acts as a qualifier, indicating that the landing was not gentle or appropriate, but rather hard, physically demanding, and improper.

In contrast, in example (34b), the word *slapping* itself conveys a negative activity. Here, *durva* adds to the meaning of the construction by emphasizing the roughness of the action, but it does not qualify the construction itself. In this case, *durva* intensifies the activity and underscores its brutality. Although *durva* does not inherently make the entire construction negative, it serves an intensifying role.

In instances like the latter example, I categorize *durva* as an intensifier. The concept of intensification will be further discussed below.

#### **CATEGORY 3**

As previously discussed (see Section VII/3.1), Bárczi and Országh (1959) outline several nuances within the broader senses of 2 and 3 for *durva*: crudely crafted, poorly done, lacking in detail, such as *durva hamisítvány* (lit.) 'harsh fake'; rough forgery; construction intentionally avoiding finer details, like *durva vázlat* (lit.) 'rough draft'. In the corpus analysis of the current analysis, these instances were classified under Category 3, defining this type of meaning as non-descript, which does not necessarily carry a negative connotation. In other words, *durva* may denote rough-and-tumble or rough-and-ready characteristics, which can be negative, but this vagueness may also indicate intentional sketchiness or vagueness, which is not negative in context.

There were 59 instances of this meaning identified in the corpus. Let's examine some examples below.

- (35)Az kisütővillás a. ún. vizsgálat csak az the so-called discharge.fork test.NOM only the alkalmas: akku durva minősítésére qualification.POSS.SUP suitable battery rough töltött vagy töltetlen. charged uncharged 'The so-called discharge fork test is only for the rough qualification of the battery: charged or uncharged.' (1973)
  - b. Durva példával élve: mintha example.INSTR live.xx as.if rough papírszeletkét akarnánk egy kis egy small piece.of.paper want.COND.1PL a a fésűn átdugni. push.through.INF comb.ILL 'To give a rough example: as if we wanted to put a small piece of paper through a comb.' (1972)
  - mai. 1/40-esΑ műanyag Polistil-kocsik C. the todav's 1/40 plastic Polistil.car.PL durva utódai csupán hatvanas rough descendant.POSS.PL only the sixtv évek csodáinak. marvel.POSS.PL.DAT vear.PL 'Today's 1/40 plastic Polistil cars are only the crude descendants of the marvels of the sixties.' (1991)

In (35a), *durva* implies that the qualification of the battery is approximate rather than precise. Similarly, in (35b), it suggests that the comparison or example provided is exaggerated. In these instances, *durva* does not necessarily imply a negative evaluation by the speaker towards the subject. (However, the entire statement might convey a negative sentiment depending on the broader context.) Lastly, in (35c), *durva utód* conveys a meaning similar to that discussed in (Bárczi and Országh, 1959), categorized under Category 2, referring to a hastily and clumsily made copy that is easily recognizable (e.g., *durva hamisítvány*, (lit.) 'harsh fake', as mentioned above).

## Category 4

Let us now explore cases where *durva* functions as an intensifier.

As previously mentioned (see Section VII/3.1), the lexicon by Zsemlyei (1993) uniquely includes the meaning of "so intensive that its high degree is already offensive" in the lexical entry for *durva*, distinguishing it from other Hungarian dictionaries. However, this intensifying function was found to be quite prevalent in the analyzed corpus, with a total of 416 instances detected.

It is important to note that *durva* does not exclusively serve as a pure intensifier in several examples; alongside intensification, it may also convey additional semantic nuances. For example, as seen in example (34b) above, *durva* may intensify the meaning of the modified head while simultaneously adding elements of 'brutality' or 'mercilessness' to the collocation, emphasizing the rough nature of the action.

Regarding the actual manual annotation in practice, during my current analysis, I classified occurrences as intensifiers when they conveyed a sense of 'significant', 'intense', or 'severe', without necessarily excluding additional meanings. Let us examine the following examples:

- (36) a. [...] a **durva** gázadásra túlpörög a [...] the rough acceleration.SUP overspin.3SG the hátsókerék.

  rear.wheel.NOM

  '[...] the rear wheel overspins on rough acceleration.' (1961)
  - b. A csont **durva** erőbehatásra könnyen the bone brute force.SUB easily eltörik.

'The bone is easily broken by violent force.' (1988)

In examples like (36), I considered the cases of intensification. However, there were instances where it was challenging to annotate with a precise tag because it was unclear whether the word was being used purely for intensification or if it conveyed another semantic content. As mentioned above, there are instances where the meaning of intensification coexists with another semantic content. In other words, durva does not exclusively have an intensifier meaning and function in certain cases. This was evident in example (34b) above, which I repeat here in (37a) below.

- (37) a. [...] López **durva** pofozkodásba kezdett Mullerrel [...] López tough slapping.ALL start.PST.3SG Muller.xx [...] [...] [...] '[...] López started slapping with Muller in a rough way [...]' (2015)
  - h. Α napokban szenvedő alanya past.few.days.INE subject.POSS also the suffering szabálytalanságnak. voltam egy ilyen durva such tough malpractice.DAT be.PST.1SG a 'I have also been the subject of such rough malpractice in the past few days.' (1995)

In these situations, I followed the approach of Szabó et al. (2022b) to make a final decision. Szabó et al. (2022b), drawing on Paradis (2000b)'s methodology, argue that words, including nouns, that can co-occur with intensifiers must have a DEGREE component in their semantic content. This feature of the modified head of the construction is necessary for the INTENSITY component of the given NEW to be activated (for more details, see Section VI/1 below and Szabó et al., 2022b).

In the above examples, pofozkodás 'slapping' and szabálytalanság 'malpractice' – applying Paradis (2000b)'s framework – are degree nouns, possessing a DEGREE semantic component in their structure. By carefully considering the meaning of the entire utterance and the broader context, and based on this specific semantic feature of the modified head, I was able to categorize most instances accurately. I considered examples like those in (37) as intensifiers. However, words like használat 'use', bánásmód 'treatment', módszer 'method', kísérlet 'experiment' and ajtócsukódás 'closing the door' are evidently not degree words.

A thorough examination of this feature for each modified head of the collocation facilitated my annotation work in cases of ambiguity. Thus, using this approach, it was easier to differentiate between intensifier and non-intensifier categories in some ambiguous cases.

During the corpus analysis, I also examined the sentiment features of the heads by a durva as an intensifier; in other words, the collocational sentiment (Szabó et al., 2023a), as well as the broader sentiment context in which the given NEW occurs, known as contextual sentiment (Szabó et al., 2023a). As previously stated (see Section II/2), the term *contextual sentiment* refers to the sentiment of the *narrower or minimal context* in which the NEW appears. This "minimal context" is useful as its' sentiment value does not necessarily coincide with the sentiment of the entire utterance containing the given NEW. In contrast to contextual sentiment, collocational sentiment pertains to the sentiment of the word modified by the given NEW. Accordingly, if a given NEW tends to appear in a positive sentiment context within our corpus, we classify it as having a positive contextual sentiment. Similarly, if it tends to modify words with positive polarity, we classify it as having a positive collocation sentiment, and vice versa. It should also be noted that the analyzed word is not necessarily the immediate right collocator of the NEWs (for more details and examples, see Section II/2 above).

Regarding collocational sentiment, out of the 416 cases, 338 were inherently negative (e.g., *szabályszegés* 'violation', *torpanás* 'stalling', *meghibásodás* 'malfunctioning', etc.) and 78 were neutral (e.g., e.g. *erőhatás* 'influence', *visszaváltás* 'redemption', *beavatkozás*, 'intervention', etc.). There were no positive constructional heads among the corpus examples.

Regarding the contextual sentiment features, during the corpus analysis, I sought to ascertain whether the context of the given NEW expressed a positive, negative, or neutral sentiment. The objective was to determine if *durva* appears in a negative context, aligning with its prior negative connotation, or if it manifests in a neutral or even positive setting. Based on my manual annotation, *durva* occurred in a negative collocation in 400 cases (38a), a neutral context in 15 cases (38b), and a positive context in only one case (38c).

- Guintoli Jerezben (38)a. a is Guintoli NOM the Jerez.INE also beszédtéma volt. hiszen egy durva conversation.topic.NOM be.PST.3SG since a rough bukást szenvedett el. amiért nem is crash.PST.ACC suffer.PST.3SG SO not even folytathatta tesztet. continue.PST.COND the test.ACC 'Guintoli was also a topic of conversation in Jerez, as he suffered a rough crash, so he could not even continue the test.' (2015)
  - b. Α megnyerő és biztonságot sugalló the attractive safety.ACC and suggesting úttartásba csak kipörgésgátló a roadholding.ALL iust the traction.control.NOM berendezés munkáia némi dadogást, visz work.POSS some stuttering.ACC svstem bring.3sG durva kigyorsítások főként kanyarokból való a curve.PL.DEL be.xx rough acceleration.PL especially the esetén [...] in.case.of [...]

'Only the work of the traction control system brings some stuttering to the attractive and safety-inspiring roadholding, especially in the case of rough accelerations from curves [...].' (2000)

differenciálművel [...] a részlegesen önzáró c. [...] partially self-locking equalizing.gear.INSTR the nem túlbuzgó menetstabilizálóval és a and the no overzealous stability.control.INSTR, durva kigyorsításokra egészen képes az quite rough acceleration.PL.SUP capable the autó car

'[...] with the partially self-locking equalizing gear and the not overzealous stability control, the car is capable of quite rough accelerations' (2013)

Lastly, I would like to highlight that, in comparing the results on collocational and contextual sentiment, I observed that neutral words collocating with *durva* are more frequent than neutral contextual sentiments. In other words, the "non-negative" semantic feature of the modified head of the construction does not necessarily lead to a non-negative sentiment of the context itself (see also Szabó et al., 2023a).

### Category 5

As a next step, let us examine those instances where *durva* serves as a sentiment word in the corpus examples.

According to Szabó and Bibok (2023), a NEW can be categorized as a sentiment word when it conveys evaluative or emotive semantic content (positive, negative, or neutral). For instance, it may reflect the speaker's positive or negative assessment of the information presented, or indicate surprise (for further details, see Section 3.2.1.1 above). Syntactically, in such cases, the NEW is typically associated with an argument structure (in contrast to its interjective function, as discussed below).

In the current corpus, there were a total of 90 instances where *durva* functioned as a sentiment word. Among these occurrences, *durva* conveyed a negative sentiment in 44 examples (39a), neutral sentiment in 16 (39b), and positive sentiment in 30 (39c).

- (39)halálos a. Viszonylag nem durva. és nem relatively tough and not deadly no eredményű eseteket mutattunk be de resulting case.PL.ACC present.PST.1PL PREF but mondhatni, kezdődik. így you.can.say like.this start.3SG 'We presented cases that were relatively mild and not fatal - but we can say that it starts like this.' (1987)
  - h. Az. idei Acropolis igazi savát-borsát this.vear highlight.ACC the Acropolis.NOM real azonban nem is a szokatlanul **durva** 9 however not the unusually crushing pályák, példátlanul erős mezőny hanema track.PL unprecedentedly strong field but the ielentette. mean.PST.3SG

'However, the real highlight of this year's Acropolis was not the unusually crushing tracks, but the unprecedentedly strong field of competitors.' (1999)

a nagykönyvben: Ahogy fekete és vörös c. big.book.INE black and the red as színdomináció. látványos öltések. color.dominance.NOM spectacular stitch.PL, durva sportülések rough sport.seat.PL 'According to the book: color dominance of black and red, spectacular stitches, rough sports seats' (2015)

As we can observe, in (39b) and (39c), durva – unlike in (39a) – conveys a non-negative evaluative stance towards the given information or target. In (39b), it emphasizes the extraordinary and unique nature of the tracks, while in (39c), it expresses a strongly positive sentiment, highlighting the excellence of the sport seats in terms of quality or appearance. Thus, in (39b), the collocation  $szokatlanul\ durva\ p\'aly\'ak$  ('unusually crushing tracks') underscores the exceptional, unprecedented features of the tracks, indicating that durva – in contrast to (39a) and (39c) – is a marker of extremity rather than a value judgment.

Now, it is pertinent to delve into a specific discovery from our corpus analysis in greater detail. As previously mentioned, within examples classified under Category 3, there are instances where *durva* signifies a superficially developed copy of something, easily recognizable as such. Essentially, it denotes poor quality, a substandard replica, or forgery. Let's reconsider the earlier example (35c) in (40).

(40)Α mai. 1/40-esműanyag Polistil-kocsik durva utódai csupán hatvanas évek csodáinak. the today's 1/40 plastic Polistil.car.PL rough descendant.POSS.PL only the sixty vear.PL wonder.POSS.PL.DAT 'Today's 1/40 plastic Polistil cars are only the crude descendants to the marvels of the sixties.' (1991)

It was previously noted that this meaning can be identified in (Bárczi and Országh, 1959) under Category 2, where the authors define it with the example *durva hamisitvány* (lit.) 'rough fake' 'cheap forgery' (see above). However, our corpus analysis revealed that the interpretation of such instances heavily

relies on the broader context, and these types of collocations may have entirely different connotations. Consider the following example from our corpus:

durva 22 (41)Szóval В replica motoria a replica.NOM engine.POSS So the tough 22 В nagyjából maradt a 280 roughly remain.PST.3SG the manufacturing 280 lóerőn. kevés az persze ez. sem horsepower.SUP of.course little the this also.not 1200 kg-os kasztnihoz.

1200 kg cast.SUB

'So the engine of the crude 22 B replica remained roughly at the original 280 horsepower, but, of course, it is also a lot for the 1200 kg cast.' (2010)

Based on the broader context of the example, it is evident that the replica in question is exceptional, of high quality, and remarkable. Therefore, in this context, durva carries a positive evaluative meaning, making it a positive sentiment word. In other words, when modifying a word meaning 'replica' or 'copy', *durva* does not necessarily imply poor quality or inferior design compared to the original.

# Category 6

Lastly, let us examine instances where *durva* cannot be considered as any of the above-mentioned types but exhibits specific pragmatic functions.

I could adopt the terminology of Szabó and Otani (2022) and Szabó and Bibok (2023) for this type and classify these cases as interjections. However, I am not convinced that this term is sufficiently broad for my purposes here because *durva* may fulfill a wide range of pragmatic functions, not all of which can be classified as interjections. The question of terminology is crucial because terms often reflect different perspectives on the functions and status of markers, influencing what is included in or excluded from the class (Aijmer & Simon-Vandenbergen 2011).

I considered two other terms: discourse markers and pragmatic markers. Based on Aijmer and Simon-Vandenbergen (2011), discourse marker is probably the most frequently used term and is therefore found as a broad covering term. However, the term is tricky because it is also used narrowly to define markers as "sequentially dependent elements which bracket units of talk" (Schiffrin 1987, quoted by Aijmer and Simon-Vandenbergen 2011). Pragmatic marker is preferred to discourse marker when the markers have a pragmatic rather than a discourse-marking function. This occurs when

markers serve to mark illocutionary force or have an interactional function, such as taking the urn or yielding it. *Pragmatic marker* is most commonly used as a general or umbrella term covering forms with a wide variety of functions on both the interpersonal and textual levels (for more details on these terms, see Section 8.1 below).

Considering both terms, I have decided to use the term *pragmatic marker* during the annotation procedure. I will then thoroughly consider the options when analyzing the annotated cases (see Section 8 above).

In the automotive corpus, there were a total of 7 instances where *durva* was used as a pragmatic marker. Below, I will provide some examples of these occurrences.

(42)	a.	Mentem	a	hondás	S	haver	ommal	300-zal,	
		go.PST.1SG	the	Honda	l	friend	l.COM	300.instr	
		jött		a	kanya	ır,	bevet	tem,	
		come.PST.3S	G	the	turn.N	IOM	take.F	PST.1SG	
		jött		a	kanya	ır,	bevet	tem,	de
		come.PST.3S	G	the	turn.N	IOM	take.F	PST.1SG	but
		hirtelen	kisod	ródtam.					
		suddenly	drift.c	out.PST.	1sg				
		- Hú, ez	durva	a -	mond	ja	az	ápolónő	
		Wow that	tough	-	say.35	SG	the	nurse.NOM	
		[]							
		[]							
		'I went with	-	-					
							_	drifted out	
		Wow, that's					(2008	)	
	b.	"[…] az	F-1	•		aspek	tusáva		
		találkozva		•		a	fejem	ıben:	
		basszus,			!"				
		[] the				•	t.POSS.		
		meeting		go.PST	.3sg	the	head.	POSS.INE	
		damn	this	tough					
				-	e aspec	ets of F	F-1 I wa	as thinking: d	amn,
		this is tough	ı!"' (20	09)					

Each annotation tag is summarized below, along with a brief overview of semantic features and meanings.

Annotat	Number	Shades of meaning
ion tags	of	
	occurrenc	
	es	

ALL:	892					
6	7	pragmatic marker				
5	90	negative, positive or neutral sentiment word				
4	416	intensification				
		e) something of poor quality, a poor replica or forgery				
		d) exaggeration;				
		c) rough estimate;				
		elaboration (not negative);				
		feature); b) intentional, deliberate sketchiness, lack of				
3	59	a) rough-and-ready, lacking detail (negative				
2		action itself).				
		or object as in a and b; it is the manner of the				
		(the action is not specifically aimed at a person				
		d) the manner of the given happening or activity				
		c) corrosive chemical agent;				
		b) handling objects in an indelicate manner;				
	1/4	grumpy, or indelicate with others;				
2	174	a) someone is violent, cruel, rude, merciless,				
		f) rough to the touch, crusty or stiff surface; g) edge that is not properly rounded but sharp;				
		such fibers;  f) rough to the touch crusty or stiff surface;				
		e) thick, hard, coarse fiber or fabric made from				
		tool;				
		d) rough, wrinkled or toothed object, device,				
		c) a big size or robustness;				
		usual;				
		b) grains, drops or pieces larger than desired or				
1	146	a) uneven, rough, coarse surface;				

Table 2. Meanings and shades of meanings of each cases

The frequency distribution of all the main semantic categories among the 892 corpus examples is presented in the following figure.

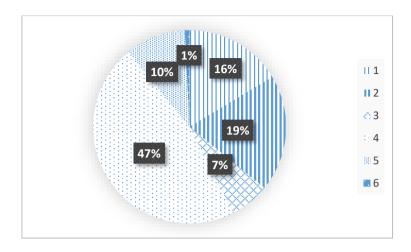


Figure 1. The frequency distribution of the 6 main semantic categories

As observed, the most prevalent function and meaning of *durva* was its role as an intensifier. This category significantly outweighed others in frequency, encompassing nearly half of all cases. Specifically, 58% of instances involved *durva* serving as an intensifier, expressing sentiment, or functioning as a pragmatic marker. (It's worth noting that these functions are not detailed in (Bárczi and Országh, 1959).)

Appendices 1 and 2 at the end of this publication provide details on the collocators of *durva*, including their frequency data and sentiment values.

To summarize, this chapter has delved into exploring the multifaceted semantic-pragmatic functions of the Hungarian word *durva* through meticulous manual annotation of corpus examples. The analysis revealed that *durva* encompasses various nuanced meanings and functions, each carefully examined in the absence of a predefined categorization system. Instead, each example underwent detailed scrutiny and annotation based on lexical entries and previous research findings.

Overall, this chapter illuminates the diverse usages and nuanced meanings of *durva* across different contexts, underscoring its versatility and complexity within the Hungarian language. Furthermore, it also identifies certain shortcomings in the lexical entries of the dictionaries examined.

## 7.2.2 Diachronic linguistic analysis results

In this section, we transition from the synchronic examination to a diachronic analysis. We will first review extant scholarly findings, followed by a presentation of our corpus analysis results on the Hungarian NEW *durva*. This segment of the study traces the semantic and pragmatic evolution of *durva* by analyzing texts that span a considerable temporal range.

As previously emphasized, no exhaustive study has thus far delved into the diachronic development of *durva*. By adopting a diachronic perspective, this analysis aims to elucidate the shifts in meaning and usage of *durva* over time, thereby enriching our understanding of its semantic and pragmatic dimensions. This investigation not only fills a critical gap in Hungarian linguistic research but also offers insights into the broader processes of language change and semantic evolution.

#### 7.2.2.1 Durva(-n) in news texts

To the best of my knowledge, there is scarcely any paper that deals with the semantic development of the Hungarian durva(-n) over time, except for the works of Szabó and her co-researchers (Szabó et al., 2023a, 2024b). For more details, see Section VII.2 above, where I briefly presented those research findings. Here, I will summarize the results concerning durva and durvan.

Szabó et al. (2023a) introduced a new dataset comprising a large corpus of news texts published over two decades. Initially, each sentence containing at least one NEW was filtered out from the corpus, resulting in 42,457 examples. From these, specific NEWs were selected based on relevant recent research results and the research questions of the analysis, yielding 4,285 occurrences. A manual analysis was then conducted on this dataset. During manual annotation, annotators tagged two characteristics of NEWs: their actual function and contextual sentiment value. Specifically, they annotated whether the NEW had an intensifier function. Here, authors examined the semantic patterning of NEWs with an intensifier function, focusing on sentiment (negative, neutral, or positive) features in both narrower and wider contexts, referred to as *collocation* and *contextual sentiments*. The corpus was divided into four time periods to compare the data of the sub-corpora and identify semantic-pragmatic changes of NEWs over time.

Regarding the frequency distribution of *contextual sentiments* of *durva* and *durván*, it was observed that negative contexts predominated in the first time period; these NEWs appeared almost exclusively in negative contexts initially, with *durván* occurring in negative contexts without exception. Over the years, however, this trend changed. The frequency of neutral and positive

contexts increased over time, and in the last period, the number of positive cases notably increased.

The study also addressed whether the common lemma of two given NEWs (such as *durva* and *durván*) or their morphological form (presence or absence of an adverbial suffix) had any notable effect on sentiment features. The results indicated that the common root was decisive in this specific case: *durva* and *durván* displaying a similar semantic development pattern, including the speed of change.

As discussed, Szabó et al. (2023a) conducted comprehensive analyses, employing both automatic and manual methods to scrutinize the sentiment features of Negative Emotive Intensifiers (NEIs) in various contexts. Concurrently, Szabó et al. (2024b) utilized word embedding techniques to explore the semantic features of NEWs across different time periods. Their primary aim was to evaluate how computational semantic analysis can elucidate the linguistic nature and evolution of these words. Both studies also delved into the influence of suffixes on the semantic evolution of these words and discussed hypotheses regarding language feature changes over time.

The research applied the word2vec embedding method to track the semantic evolution of NEWs in Hungarian over two decades, focusing on processes like desemantization and grammaticalization. Through comparisons of vector representations and the use of lexicons, the study illustrated the semantic proximity of NEWs to negative or positive words and standard-register intensifiers, reflecting their level of lexicalization and desemantization.

Specifically, *durva* exhibited consistent semantic patterns over time, suggesting stable associations, while *durván* showed significant changes. Initially closely associated with negative semantic neighbors, *durván* displayed a notable decrease in such associations from the second period onwards. By the fourth period, it evolved into an intensifier, evident from the inclusion of standard-register intensifiers among its closest semantic neighbors. These findings highlight the dynamic semantic evolution of *durván* compared to the relatively stable semantic associations of *durva*, aligning with previous research on suffixes' impact on desemantization and lexicalization processes.

In conclusion, these studies underscore the dynamic nature of word meanings and offer valuable insights into the semantic evolution of NEWs in Hungarian, demonstrating the importance of computational methods in understanding linguistic evolution and change.

Lastly, Szabó and Otani (2022) adopt a synchronic perspective in their analysis of *durva* and *durván*, providing insights that are highly relevant to our discussion. Their corpus analysis reveals that these words predominantly occur in positive or neutral contexts, indicating a significant desemantization process where their original negative semantic associations have largely faded.

Moreover, they highlight the distinct semantic features and syntactic patterns exhibited by these words in spontaneous speech, which signify advanced stages of semantic-pragmatic development.

Furthermore, Szabó and Otani (2022) argue that despite the substantial semantic-pragmatic evolution of both word forms (durva and durván), they have not converged in terms of their functions or frequency distributions. This observation underscores the impact of specific linguistic domains, such as spontaneous speech versus formal texts, on the trajectory of semantic-pragmatic development (as discussed in the current section and in Section VII.1.2 above).

In this section, I provided a brief overview of previous research findings regarding the semantic evolution of durva(-n) over time. These preliminary findings contribute to understanding the dynamic nature of word meanings and shed light on the semantic evolution of these NEWs through empirical analyses. Next, in the following chapter, I will present the diachronic analysis results on durva in the automotive text domain.

### 7.2.2.2 Durva in the automotive text domain

In Section VII/7.2.1.2, I discussed the automotive corpus constructed specifically for this research, outlining the data collection and annotation procedures. Additionally, I presented key findings relevant to synchronic linguistic analysis. In this section, I will delve into the diachronic corpus analysis, focusing on the semantic-pragmatic evolution of the term durva over time.

The first part of this section will detail the frequency distribution of each function of *durva*, highlighting their modifications across different time periods and comparing these changes. The second part will focus on the evolution of sentiment features associated with *durva* over time. This comprehensive diachronic analysis aims to provide deeper insights into how the meaning and usage of *durva* have shifted within the automotive text domain, thereby contributing to our broader understanding of language change and semantic development.

In order to facilitate a comparative analysis across different time periods, the corpus was subdivided into decade-based sub-periods. Given that only the year 2020 was represented in the corpus for the 2020s, this decade was combined with the 2010s for analytical purposes. The overall frequency distribution of *durva* – regardless of its specific function and semantic content – over these decades is presented below.



Figure 2. Overall frequency distribution of durva (regardless of its current function and semantic content)

As illustrated in Figure 2, the term *durva* had the lowest number of occurrences in the 1950s. Its usage peaked in the 1970s and 1980s, followed by a notable decrease in the 1990s. However, the overall trend indicates that the frequency of *durva* has increased steadily over the decades. This upward trajectory suggests a growing prominence or shifting function of the NEW in the automotive text domain, warranting further exploration of its semantic and pragmatic development over time.

The resulting data for each annotation tag within each sub-corpus are presented in the table below. This detailed breakdown allows for an in-depth analysis of the specific functions and semantic roles of *durva* across different time periods, providing insights into how its usage has evolved over the decades.

	1	2	3	4	5	6	ALL
1950	12	22	13	28	1	0	76
1960	16	20	14	50	3	0	103
1970	17	44	6	93	1	0	161
1980	25	43	11	86	11	0	176
1990	27	15	12	37	7	0	98
2000	29	11	1	50	39	4	134
2010- 2020	20	19	2	72	28	3	144

Table 3. Resulting data on each annotation tag in each sub-corpora

Examining the data in Table 2, the most notable results pertain to Categories 5 (Sentiment Words) and 6 (Pragmatic Markers). For Category 5, there were hardly any occurrences in the first three decades, but starting from the 1980s, the number of occurrences markedly increased. This suggests a growing use of *durva* as a sentiment-expressing term over time. In contrast, for Category 6, the function of *durva* as a pragmatic marker had no occurrences recorded by the 2000s. This indicates some shift in how *durva* is employed in discourse, reflecting changes in its pragmatic functions and possibly in linguistic norms within the automotive text domain.

To evaluate the results in terms of the distribution among each meaning and function, the data from Table 2 are presented below in percentage terms. For this calculation, the number of occurrences in each decade was divided by the total occurrences of the given meaning or function across all decades. (The values are rounded to two decimal places.)

	1	2	3	4	5	6
1950	15.79	28.95	17.11	36.84	1.32	0.00
1960	15.53	19.42	13.59	48.54	2.91	0.00
1970	10.56	27.33	3.73	57.76	0.62	0.00
1980	14.20	24.43	6.25	48.86	6.25	0.00
1990	27.55	15.31	12.24	37.76	7.14	0.00
2000	21.64	8.21	0.75	37.31	29.10	2.99
2010- 2020	13.89	13.19	1.39	50.00	19.44	2.08

Table 4. The percentage distribution of each annotation tag in each subcorpus (divisor: the total number of occurrences)

Based on these calculations, we observe several trends. Notably, the more "classic, traditional" meanings – represented by Categories 1, 2, and 3 – consistently exceed the newer meaning represented by Category 5 (Sentiment word) during the first approximately 50 years. However, from the 2000s onwards, this tendency is reversed, with Category 5 exceeding these individual functions in frequency. The percentage distribution of each annotation tag across the different sub-corpora is illustrated below:

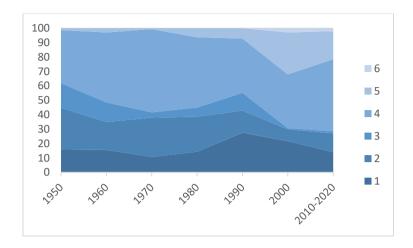


Figure 3. Changes in distribution of each annotation tag over the decades

The following line charts facilitate a comparative analysis of the frequency distribution changes across specific categories. These charts were generated using relative frequency values, where the number of occurrences in each specific function is divided by the total number of occurrences.

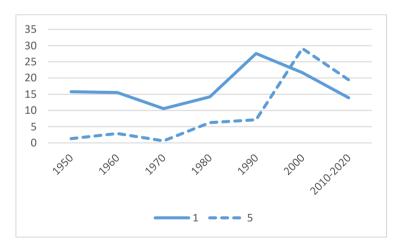


Figure 4. The changes in frequency distribution of categories 1 and 5 over the decades

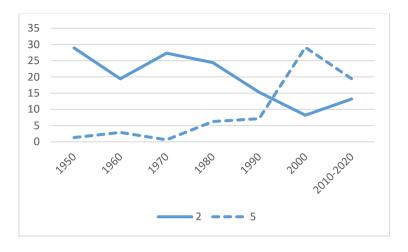


Figure 5. Changes in frequency distribution of categories 2 and 5 over the decades

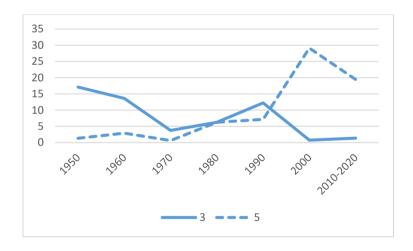


Figure 6. Changes in frequency distribution of categories 3 and 5 over the decades

Based on the figures above, a significant semantic-pragmatic shift has been detected: in all three comparisons, the frequency of Categories 1, 2, and 3 was surpassed by Category 5 in terms of frequency. The frequencies of Categories 2 and 3 have consistently decreased over the decades. Another noteworthy observation is that while the frequency of Category 5 steadily increased from

the 1950s to the 2000s, the pronounced growth in the frequency of this semantic category began notably from the 2000s onward.

I also have simply summarized the frequency of these three categories and compared them to the frequency of Category 5. These results are presented below.

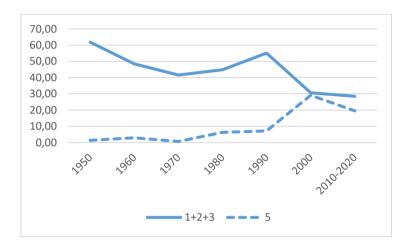


Figure 7. Changes in the frequency distribution of Category 1,2 and 3 together, compared to Category 5

This figure illustrates the trends in frequency distribution over time for Categories 1, 2, and 3 collectively, contrasted with the frequency distribution of Category 5 (Sentiment word). The comparison highlights the relative shifts in usage between the more traditional meanings (Categories 1, 2, and 3) and the emergence and growth of the sentiment-related function represented by Category 5.

Lastly, an intriguing finding from the analysis is that the frequency distribution of the intensifier function of *durva* showed little notable change over the years. Please refer to the figure below for details.

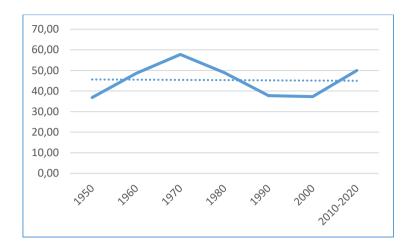


Figure 8. Changes in the frequency distribution of Category 4

Although there are fluctuations in the frequency of Category 4, these changes do not demonstrate a clear trend of increase or decrease. This characteristic is also reflected in the trend line. The frequency of this semantic category ranges between 36.84% and 57.76% across the seven decades when compared to all occurrences of *durva*. The lowest frequency was observed in the 1950s, while the highest occurred in the 1970s.

Now, I will examine the evolution of sentiment values associated with *durva* over time.

To explore the evolution of sentiment features associated with the analyzed NEW *durva* over time, I will first analyze instances where *durva* served as an intensifier in the corpus.

According to Zhang (2013), analyzing and comparing the frequency distributions of specific words alongside pleasant and unpleasant words across different time periods allows us to trace the semantic development of those words. Zhang (2013) argues that if an originally negative intensifier predominantly modifies non-negative items, it suggests that the intensifier has diverged from its original negative semantic content, indicating that the given intensifier has already diverged from its original negative semantic content, i.e. a process of delexicalization. For a detailed exploration of the relationship between preference and the more literal and metaphorical meanings of intensifiers, refer to Bednarek (2008). Therefore, examining the sentiment features of a negative emotive intensifier may illuminate how and to what extent a given word has shifted away from its negative semantic associations (the negative pole of semantic continuum) over time.

The figure below presents the frequency distribution of the three contextual sentiment values (negative, positive, and neutral).

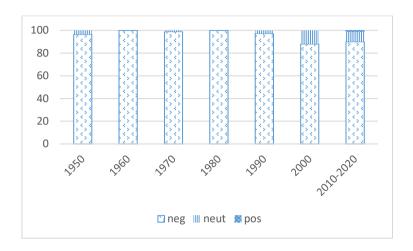


Figure 9. Changes in the frequency distribution of contextual sentiments of durva as intensifiers (Category 4) over time

As observed, examples of *durva* used in a positive context began appearing notably in the last sub-corpus. Concurrently, there has been a steady growth in the frequency of neutral contexts since the 1990s. This trend suggests a notable shift in how *durva* is employed across different sentiment categories over time.

I also investigated the collocational sentiment features of *durva* to understand its semantic changes over time. As previously mentioned (see VII/3.2.1.2 above), the corpus analysis revealed collocations of *durva* with negative and neutral words, but no examples with positive words were found. Here I analyzed this data across decades however, I did not observe any systematic differences or indications of semantic development in this aspect.

Lastly, let us examine the results regarding *durva* as a sentiment word. The figure below illustrates the contextual sentiment trends across decades. Therefore, in these cases, *durva* no longer serves solely as an intensifier but also functions as a sentiment word itself.

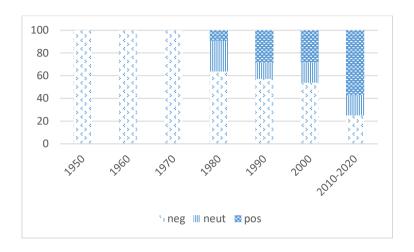


Figure 10. Changes in the frequency distribution of contextual sentiments of durva as a sentiment word (Category 5) over time

An examination of *durva* in a sentiment word function led to a spectacular result in terms of changes over time. As we can see, up to the 80's, only negative occurrences can be observed. However, from that time period, both neutral and positive cases appear, and the ratio of negative and non-negative cases shifts continuously in favor of the latter over the decades. It can also be observed that the frequency distribution of positive sentiments is continuously and conspicuously increasing. The table below also lists the distribution data, in percentage terms.

	negative	neutral	positive
1950	100	0	0
1960	100	0	0
1970	100	0	0
1980	63.64	27.27	9.09
1990	57.14	14.29	28.57
2000	53.85	17.95	28.21
2010- 2020	25.00	17.86	57.14

Table 5. The percentage distribution of each contextual sentiment value of durva functioning as a sentiment word in each subcorpus

Lastly, I conducted an examination of the collocational sentiment results pertaining to the aforementioned semantic category, disaggregated by decades. However, akin to the findings concerning negative emotive intensifiers discussed earlier (see above), this analysis did not uncover discernible indicators of semantic evolution or development.

In the appendices at the end of the publication, I present the collocations of *durva*, accompanied by their frequency data and sentiment values (refer to Appendices below).

#### **Recommended literature**

- Andrason, A. (2022). Argument structure of emotive interjections: Evidence from Polish. *Lingua* 277, 103400. https://doi.org/10.1016/j.lingua.2022.103400
- Fraser, B. (2009). An account of discourse markers. *International review of Pragmatics*, 1(2), 293-320.
- Heine, B., Kaltenböck, G., Kuteva, T. (2013a). On the origin of grammar. *New perspectives on the origins of language*, 379-405.
- Heine, B., Kaltenböck, G., Kuteva, T., Long, H. (2013b). An outline of discourse grammar. *Functional approaches to language*, 175, 233.

## Summary and guiding questions, tasks

- 1) Review of automotive corpus analysis results:
  - a) What are the distinctive semantic features of *durva* in the context of automotive texts?
  - b) Examine the results and the presented examples specifically from a pragmatic perspective. How does *durva* function pragmatically within this specialized domain?
- 2) Comparative Analysis: Compare the findings from the analysis of
  - Compare the findings from the analysis of news texts with those of automotive texts. What notable differences can be highlighted between the usage and functions of *durva* in these two domains?
- 3) Lexical Entry Review:
  Examine the dictionary entries for *durva* in the discussed Hungarian dictionaries (Bárczi and Országh 1959, Czuczor and Fogarasi 1862, Zsemlyei 1993). Based on the corpus analysis results presented in this section, what additional meanings or usages should be included in the dictionary entries for *durva* in these examined dictionaries?

#### CHAPTER VIII. DISCUSSION OF THE RESULTS:

Exploring semantic and pragmatic dimensions of NEWs based on the corpus analysis results. Meanings and functions of NEWs. Place of NEWs in the grammatical system. Semantic development of NEWs over time.

In this concluding chapter, I synthesize and analyze the key findings of the corpus analysis presented in the previous chapter, and utilize them to draw broader conclusions about the linguistic specificities of NEWs in the Hungarian language. By examining the specific NEW, the word *durva* within the automotive corpus, this monography provides a microcosm to explore broader linguistic phenomena associated with NEWs. This focused investigation of *durva* serves as a foundational study to generalize about the semantic and pragmatic behavior of NEWs in Hungarian.

Here, the first section explores the diverse meanings and functions that NEWs can adopt, building upon the case study of *durva* to illuminate their operational dynamics in Hungarian. Emphasis is placed on delineating the wide range of semantic roles of NEWs and examining their pragmatic functions in influencing speaker intentions and listener interpretations.

The second section situates NEWs within the broader grammatical framework of Hungarian, drawing on insights from Szabó and Bibok (2023) to explore their roles within the Discourse Grammar framework (Heine, 2013). This section argues for the applicability of Discourse Grammar in theorizing about the functions and meanings of NEWs across various communicative contexts.

The third section focuses on diachronic analysis, tracing the semantic-pragmatic evolution of NEWs over time. By leveraging observations from corpus analyses, this section aims to provide a comprehensive explanation for the historical development of NEWs' meanings and functions. It seeks to elucidate how these linguistic units undergo semantic-pragmatic changes across different temporal periods.

This chapter aims to integrate findings from the case study of *durva* with broader linguistic theories, offering insights into the behavior of NEWs in general. By contributing a detailed analysis, it aims to enrich our understanding of the dynamic nature of NEWs, their grammatical integration, and their evolution over time. Ultimately, this research contributes to the field of linguistics by providing a nuanced exploration of NEWs, with implications for lexicography, language education, and further research on the semantics and pragmatics of emotive language.

### 8.1. Meanings and functions of NEWs

In this chapter, relying on the semantic-pragmatic features observed and discussed in the previous sections, I will summarize the meanings and functions of NEWs in general. First, I will establish the main criteria that define a NEW, and then I will delve into their various linguistic roles and usages. This chapter will elaborate on these functions and their criteria, and also provide detailed examples to illustrate how NEWs can occur in different contexts, potentially shifting from negative to neutral and positive connotations. Additionally, we will explore how NEWs can maintain their prior negative meaning while also acquiring new pragmatic functions over time.

## 8.1.1 Criteria identifying a NEW

To establish the main criteria for identifying a NEW, I build on the previous discussions (see Section II). The criteria are as follows:

- i. A NEW inherently possesses a negative semantic content or connotation in isolation, devoid of contextual influence.
- ii. The negative meaning of a NEW can diminish or be completely neutralized depending on the given contextual factors.
- iii. A NEW should be capable of functioning as an intensifier; however, its ability to act as a positive sentiment word or pragmatic marker is not a requisite criterion (for a detailed discussion, refer to Section VII/1.1).
- iv. In its role as an intensifier, a NEW must be capable of modifying positively evaluative words.

Let's now examine these criteria in detail to fully understand the complexity and nuances of NEWs.

The first criterion for classifying a word as a NEW is that it inherently possesses a negative semantic content or connotation when considered in isolation, devoid of any contextual influence. This means that the intrinsic meaning of the word is negative by default, without any additional context to alter its interpretation. For example, words like *brutal*, *awful*, and *damn* carry an inherently negative connotation. When these words are used in a sentence without any additional context, they are perceived negatively. *Brutal* evokes images of violence or severe harshness, *awful* denotes something extremely bad or unpleasant, and *damn* is often used to express anger or frustration. The inherent negativity of these words is deeply embedded in their semantic structure.

The second criterion for classifying a word as a NEW is its ability to diminish or neutralize its inherent negative meaning depending on the given contextual factors. This characteristic is fundamental to understanding the nature and usage of NEWs, as it highlights their dynamic and flexible nature in communication. While NEWs inherently possess a negative semantic content, this negativity can be modulated or entirely neutralized based on the context in which they are used. Contextual factors such as the surrounding words, the speaker's intention, the tone of delivery, and the cultural or social setting can all influence the perceived meaning of a NEW. For instance, the word *brutal* might have a harsh connotation in isolation, but in a context like *brutal workout*, it can be interpreted positively, signifying a highly effective or intense exercise session. The ability of NEWs to alter their negative connotation over time is a result of their semantic-pragmatic development.

The third criterion for classifying a word as a NEW is its capability to function as an intensifier. This means that a NEW should be able to amplify or emphasize the meaning of another word or phrase within a sentence. This intensifying function is a fundamental characteristic of NEWs, distinguishing them from other types of words with negative connotations. However, it is important to note that the ability to act as a positive sentiment word or pragmatic marker is not a requisite criterion for a word to be classified as a NEW. We will elaborate on and justify these points below.

Some NEWs may develop positive connotations in certain contexts, but this is not a necessary characteristic for all NEWs. For instance, a NEW such as *brutális* ('brutal') may function as an intensifier, as well as a positively evaluating sentiment word in certain contexts (Szabó et al., 2022b): in a collocation such as *brutális jó* (literally 'brutal good' – 'bloody good') it functions as an intensifier, and in another like *brutális buli* ('brutal party') it functions as a sentiment word, denoting either a positive evaluation or a negative one depending on the wider context. However, other NEWs, such as *borzasztó* ('awful') and *rohadt* (lit. 'rotten' – 'damn'), may not exhibit this flexibility and remain primarily negative as a sentiment word. As Szabó et al. (Szabó et al., 2022b) argued, "these words are not capable of shifting their polarity from a negative to positive one." Consider the following examples provided by the authors:

(43) a. Α Sportcsarnokban (mielőtt leégett sports.hall.INE before burn.down.PST.3SG the volna) ott olyan borzasztó buli hogy sírva fakadtam! volt. be.COND there such awful party.NOM crying arise.PST.1SG be.PST.3SG that 'It was such a terrible party in the Sports Hall (before it burned down) that I burst into tears!'

[nlcafe.hu] h. Az a sok rohadt telefon engem that the phone.NOM I.ACC many rotten idegesített. nagyon verv annov.PST.3SG 'All those damn phone calls got on my nerves.' [Balogh 2012. Vigyázzmenet]

The examples above demonstrate that the given words impart a negative evaluative meaning to the utterances, reflecting the author's adverse assessment of the target. During the interpretation process, no positively evaluative meaning is conveyed; these words, when not functioning as intensifiers, consistently maintain a negative connotation. However, it is important to note that these NEWs can lose their negative connotation when employed as intensifiers. Refer to the examples provided by Szabó et al. (Szabó et al., 2022b) again:

a. Borzasztó finom, borzasztó egyszerű és borzasztó awful delicious awful simple and awful sok teret enged a kreativitásunknak.
lot space.ACC let.3SG the creativity.POSS.1PL.DAT 'It's terribly delicious, it's terribly simple and it provides a planty of room for our creativity.'
[jokaja.hu]
b. Én önző vagyok a nagyszerű ízek és
I selfish be.1SG the great flavor.-PL.NOM and az elmény tökéletesítése terén és
the experience.NOM perfecting.POSS.3SG.NOM in.the.field.of and úgy gondolom, pont ez tesz engem ilyen rohadt
so think.1SG exactly this make.3SG I.ACC such rotten jó seffé.
good chef.TRA

'I'm selfish about perfecting great flavors and experience, and I think that these are what make me such a damn good chef.'
[boraszportal.hu]

In this example, the word *borzasztó* is used three times as an intensifier to emphasize different qualities. Despite its prior negative connotation, in these collocations, it intensifies the attributes of being delicious, simple, and allowing ample room for creativity. This demonstrates how *borzasztó* can shed its negative meaning and instead amplify the positive qualities of the described objects or situation.

Based on Szabó (2018a), about a quarter of NEWs may function as non-negative sentiment words (for more details see also VII/1.1. and Szabó et al., 2022b, Szabó and Guba, 2022).

Similarly to the above-discussed feature, the role of pragmatic markers (e.g. interjections, which are typically used to express spontaneous feelings or reactions), is not a required feature for NEWs based on the third criterion. While some NEWs might function as pragmatic markers (e.g., *damn* as an exclamation), where they serve to convey immediate emotional responses, this specific function does not define them categorically. Instead, as mentioned, the essential criterion for NEWs is their capability to function as intensifiers, amplifying the meaning of the words they modify.

The last criterion states that a NEW, when functioning as an intensifier, must be capable of modifying positively evaluative words. By attaching themselves to inherently positive evaluations, NEWs contribute to emphasizing or intensifying the favorable qualities or characteristics described. For instance, consider the NEW *borzasztó* (awful) in Hungarian. When paired with the positively evaluative word *jó* (good), as in *borzasztó jó* (awfully good), the NEW *borzasztó* enhances the positive assessment of the subject, highlighting its exceptionally favorable or impressive attributes.

As previously stated (see Section II/1 above), this distinction is crucial because while many words with negative semantic content can function as modifiers of other words, these collocations frequently impart an overall negative meaning to the entire phrase. However, a fundamental characteristic of a NEW is its capacity to intensify the head of a construction without imparting a negative semantic content to the entire utterance. The examples discussed in Section II/1 are reiterated below.

- (45) a. The houses on the estate are being built *alarmingly* fast.
  - b. The houses on the estate are being built *terribly* fast.

As discussed (Section II/1), in (45a), the word *alarmingly* modifies the adjective *fast*, indicating that the speed of construction is causing alarm or concern. This usage inherently carries a negative evaluation from the speaker about the rapid pace of the construction. On the other hand, in (45b), the word *terribly* modifies the adjective *fast*, and unlike *alarmingly*, *terribly* does not inherently convey a negative evaluation. Instead, it neutrally intensifies the speed of construction without necessarily implying a negative assessment by the speaker.

In accordance with the previously discussed features, example (46a) below is semantically incongruous, whereas example (46b) is acceptable.

- (46) a. \*Alarmingly beautiful houses are being built on the estate.
  - b. *Terribly* beautiful houses are being built on the estate.

In (46a), the modifier *alarmingly* collocates with the adjective *beautiful*. However, the expression *alarmingly beautiful houses* is logically inconsistent because *alarmingly* typically conveys a negative connotation or a sense of concern, which conflicts with the positive evaluative term *beautiful*. Thus, the phrase as a whole becomes semantically contradictory, highlighting that *alarmingly* cannot effectively intensify a positively evaluative word in a way that maintains a pure positive connotation. Conversely, in (46b), the word *terribly* modifies the adjective *beautiful*. Unlike *alarmingly*, *terribly* can function as an intensifier without inherently contradicting the positive evaluation conveyed by *beautiful*. This usage shows that *terribly* retains its pure intensifying function while allowing *beautiful* to maintain its positive evaluative meaning.

Based on this analysis, it becomes evident that words like "alarmingly" do not meet the criteria of NEWs. NEWs are characterized by their ability to intensify the head of a construction without imposing a negative semantic content on the entire utterance (for further details see Nemesi 1998 and Szabó and Bibok 2019).

## 8.1.2 Other important characteristics of NEWs

In addition to the aforementioned criteria, I will now enumerate several key features that further delineate the characteristics of NEWs.

As for the intensifying function of NEWs, as previously noted (see Section VII. 1.1), the linguistic behavior of negative emotive intensifiers varies in terms of their semantic motivation, closely tied to the evaluative semantic content (sentiment value) of the words they modify, as observed by Szabó (2018a). We have observed instances where these intensifiers not only intensify but also convey the emotional impact of the communicated content on the speaker. Furthermore, when paired with a neutral collocator (one lacking inherent sentiment value), the degree to which these intensifiers lose their semantic load (desemantization) exhibits significant variability. In many cases, they convey a negative evaluation by the speaker towards the information communicated (for further elaboration and examples, see Section VII. 1.1).

Then, I have consistently emphasized that in the literature, NEWs are primarily analyzed within the category of intensifiers, such as *terribly*, *awfully*, and *desperately* in constructions like *terribly nice*, *awfully good*, and *desperately important*. However, as noted, NEWs can fulfill several other roles and functions. For example, NEWs can also act as a (positive, negative, or neutral) sentiment words (Szabó and Bibok, 2023) (see Section VII/3.2.1.1 above). Specifically, these words may express the speaker's positive or negative evaluation of the given information or target (indicating whether the

information is desirable or undesirable from the speaker's perspective), as well as the speaker's surprise (indicating that the information is surprising, special, unexpected, noteworthy, contrary to expectations, etc.) (see also Wierzbicka, 2002, and Section II/2 above). Examples previously discussed in (39) (see Section VII/3.2.1.2) are reiterated here. Consider the following examples:

- (47) Viszonylag nem durva, és nem halálos a. relatively deadly not tough and not eredménvű be eseteket mutattunk de resulting case.PL.ACC present.PST.1PL PREF hut mondhatni. kezdődik így vou.can.sav like.this start.3SG 'We presented cases that were relatively mild and did not result in death - but you can say that it starts like this.' (1987)
  - b. Az idei Acropolis igazi savát-borsát the this.year Acropolis.NOM real highlight.ACC azonban szokatlanul durva nem is however unusually crushing not the példátlanul erős mezőny pálvák. hanema track.PL but the unprecedentedly strong field jelentette.

mean.PST.3SG

- 'However, the real highlight of this year's Acropolis was not the unusually crushing tracks, but the unprecedentedly strong field of competitors.' (1999)
- a nagvkönvvben: Ahogy fekete és vörös c. the big.book.INE black and red as látvánvos öltések. színdomináció. durva color.dominance.NOM spectacular stitch.PL, rough sportülések sport.seat.PL 'According to the book: black and red color dominance,

spectacular stitches, rough sports seats' (2015)

(47a) implies that the cases being presented are relatively mild and not fatal. 'relatively non-harsh' The phrase *viszonylag* nem durva. meaning suggests that these cases do not involve extreme, severe, or brutal circumstances. Since the formulation mitigates the severity of the cases, durva conveys its prior negative semantic content here.

As for (47b), durva emphasizes the extraordinary and unique nature of the tracks. Thus, the collocation szokatlanul durva pályák ('unusually crushing tracks') underscores the exceptional, unprecedented features of the tracks, indicating that duva – in contrast to (47a) and (47c) – is a marker of extremity rather than a value judgment.

(47c) describes visual elements such as dominant color schemes and distinctive stitching, along with outstanding sports seats. The term *durva* describes the exceptional quality and aesthetic appeal of the sports seats; they are visually striking, with prominent features.

Regarding the functions of NEWs as sentiment words and intensifiers, it is noteworthy that distinguishing whether a NEW functions solely as an intensifier in a collocation can be challenging. This distinction is crucial, as highlighted in Section VII/3.2.1.2, where several examples illustrate the nuanced interpretation of NEWs in linguistic contexts.

As previously noted, Szabó et al. (2022b) draw on Paradis's (2000b) theoretical framework concerning nouns to argue that words capable of cooccurring with intensifiers must possess a semantic component related to DEGREE. This DEGREE component in the modified head of a construction is essential for activating the INTENSITY component of the associated NEW. In their analysis of adverbial constructions where NEWs modify verbs, Szabó et al. (2022b) emphasize the critical role of the DEGREE semantic component in determining whether the modifying word functions as an intensifier.

This linguistic feature elucidates why examples such as those in (47) cannot be considered as intensifiers. In these instances, the semantic content of the modified head lacks the requisite DEGREE component necessary to activate the INTENSITY function of the NEW.

In the corpus analysis detailed in Section VII/3.2.1.2, I adopted Szabó et al.'s (2022b) approach to categorize certain words such as *pofozkodás* 'slapping', *szabálytalanság* 'malpractice', *lökés* 'bump' as degree nouns, each possessing a DEGREE semantic component in accordance with Paradis's (2000b) framework. In this context, NEWs modifying these nouns were interpreted as intensifiers within the specific examples provided.

Conversely, nouns like *használat* 'use', *bánásmód* 'treatment', *módszer* 'method', *kísérlet* 'experiment', *ajtócsukódás* 'door closing' do not exhibit a DEGREE semantic component in their structural makeup. Consequently, these nouns are incapable of taking a degree word as a modifier. Therefore, in my corpus analysis, I did not classify NEWs modifying nouns lacking a degree semantic component as intensifiers of their respective collocators.

This distinction emphasizes the significant impact of the semantic components of the collocating element on whether we interpret the NEW as an intensifier or a sentiment word.

In addition to their roles as intensifiers and sentiment words, as discussed previously (see Section VII/3.2.1 above), NEWs can also function as pragmatic markers.

As discussed above (see Section 7.2.1.2), before manual annotation, I considered the terms *interjection*, *discourse marker*, and *pragmatic marker*.

During the annotation process, I applied the notion of *pragmatic marker* to annotate those cases when the given NEW (new emotive word) had a specific pragmatic function that could not be classified within any of the other five categories(I will further discuss this terminological issue in the subsequent section, see below).

According to Szabó and Bibok (2023), NEWs in these specific pragmatic functions can be categorized into two types: those that lack syntactic relations entirely and those that exhibit some syntactic connection to a certain extent (for further details, refer to Section VII/3.2.1.1 above). Here are the previously discussed examples:

(48)Durva. Még szerencse, hogy időben a. észrevettétek [...] still luck.NOM that tough time.INE notice.PST.2PL [...] 'Phew. It's lucky you noticed it in time [...]' (twitter corpus) Tudod. ilven félálomban kelek föl. h. know.2sg this half.sleep.INE get.up.1SG Úristen. odanézek. mondom Nagyon look.over.1sG sav.1sG good.NOM very durva. tough 'You know, I wake up in such a half-sleep, I look over there, I say, Lord God. How crazy.' [HuTongue corpus]

In these cases, NEWs serve specific pragmatic roles such as positive politeness markers, expressing agreement and support towards the speaker, or as attention markers indicating comprehension and engagement with the discourse. They can also function as evidential markers, signaling the speaker's assessment of the information's source or validity (Szabó and Otani, 2022). This diverse usage allows NEWs to convey various subjective and intersubjective stances of the speaker.

For instance, in the Hungarian examples in (48), the NEW *durva* is used as an interjection to express surprise or amazement. In the first example, *durva* marks a relieved reaction, implying a sense of gratitude that the situation was noticed in time. In the second example, *durva* conveys a sense of amazement or disbelief in response to a surprising or remarkable situation (cf. also the so-called *interest markers*, Wang & Hu, 2023). These instances illustrate how NEWs reflect the speaker's emotional response and interpersonal stance.

Drawing from the findings of the current and some previous corpus analyses (Szabó and Bibok, 2023; Szabó and Otani, 2022), it is evident that thes types of usage constitutes a significant function of certain NEWs. This

aspect should be duly accounted for in the systematic classification of the functions and semantic nuances associated with these lexical items.

In the subsequent section, I will delve deeper into the issue of terminology. Given that my analysis is grounded in a specific theoretical framework that distinguishes between Sentence Grammar and *Thetical Grammar*, I propose the term *thetical expression* (or simply *thetical*) for this usage. This terminology aligns seamlessly and clearly with the concept of *Thetical Grammar*, ensuring consistency and clarity in the discourse. This approach not only maintains coherence with the theoretical underpinnings but also facilitates a more precise categorization of the linguistic phenomenon under discussion.

Furthermore, as previously noted (see Section II/1 above), despite the evolving functions of NEWs over time-such as their adoption as sentiment words or pragmatic markers – they retain their prior semantic usage. For instance, the Hungarian word *durva* can be observed in constructions like *durva szemcse* ('coarse grain'), where it maintains its literal meaning. Additionally, *durva* may also carries a figurative connotation, indicating something 'physically or verbally abusive', as exemplified in phrases like *durva férfi* ('rude man') (Szabó and Otani, 2022). This functionality underscores the semantic flexibility of NEWs, encompassing both literal and figurative interpretations across different linguistic contexts.

At the conclusion of this section, it is crucial to highlight two significant aspects of the phenomenon under examination. Firstly, it is essential to reiterate the inadequacy of lexical entries for NEWs in Hungarian lexicons, as they often fail to encompass the full range of meanings and functions these words possess. This limitation was evident in the case of the Hungarian NEW *durva* (see Section VII/3.1 above), and based on the findings of our current analysis, it is reasonable to speculate that similar gaps may exist for other NEWs as well. The insufficiency of lexical entries hampers comprehensive linguistic analysis and understanding, necessitating further refinement and expansion of lexicons to accurately reflect the diverse semantic and pragmatic roles of NEWs.

Secondly, in the study of NEWs, it is crucial to acknowledge that the distribution of their semantic-pragmatic functions is heavily influenced by domain specificity. For example, Szabó and Bibok (Szabó and Bibok, 2023) have highlighted that NEWs used as theticals are underrepresented in news texts, possibly due to their subjective nature. Consequently, NEWs serving in thetical functions may not align well with the formal and objective discourse typical of news reporting, thereby impacting their frequency of occurrence in such domains.

Moreover, domain-specific characteristics significantly influence the semantic nuances of NEWs. For example, a specific meaning of *durván* such as 'approximately' is prevalent in news contexts but less frequent in corpora

derived from tweets and spontaneous speech. This variation underscores how the frequency distribution of specific meanings of NEWs varies across different textual domains within the same language.

Overall, the specific domain dictates the frequency with which NEWs appear with different meanings, and, NEWs exhibit varying frequencies across different domains. What is more, the domain determines how these words can be interpreted within their respective contexts, thereby constraining the potential meanings available for a specific NEW within a given domain.

From the features discussed above, it follows that the absence or underrepresentation of specific meanings or functions of NEWs within a particular dataset does not necessarily imply their absence or underrepresentation across all text domains of the given language. Moreover, the frequency distribution of certain uses of NEWs within a specific corpus should not be extrapolated as a universally valid linguistic feature independent of the text domain. Understanding these domain-dependent characteristics is crucial for a comprehensive analysis of NEWs and for advancing their systematic categorization and lexical representation in linguistic studies.

### 8.2. Place of NEWs in the grammatical system

In this chapter, we will delve into the placement and function of NEWs within the grammatical system, examining their interaction with other linguistic elements such as intensifiers, discourse markers and interjections. The exploration will draw upon a range of scholarly perspectives to illustrate how NEWs may be integrated into the broader grammatical framework.

As discussed in Section 8.1, we revisited the various functions of NEWs, focusing on their specific semantic-pragmatic functions. The primary objective of the current examination is to account for the functions of NEWs, including those related to their prior semantic content and intensification, as well as to address additional roles they may play.

Taking into account the specific meanings and functions of NEWs, there are different approaches that should be considered. Several terms are related to the functions of NEWs, namely *discourse markers, pragmatic markers, theticals* and *interjections*. Although this study does not aim to provide a detailed review and evaluation of the various approaches, I will briefly discuss what these terms mean in fundamental terms, so that I can subsequently rely on them in our argumentation regarding NEWs.

Discourse markers (DMs) are crucial linguistic elements that function to organize discourse and guide listeners or readers through the flow of conversation. They play an essential role in managing the coherence and structure of discourse, facilitating smooth transitions, emphasizing key points, and clarifying the relationships between ideas (Schiffrin, 1987).

Heine et al. (2021) observe that the term DM encompasses a variety of linguistic phenomena, including social exchange formulae, hesitation fillers, and clausal expressions. Following the observations of Heine et al. (2021), I adopt the following characteristics of DMs: "(1) Discourse markers are (a) invariable expressions which are (b) syntactically independent of their environment, (c) typically set off prosodically from the rest of the utterance, and (d) their function is to relate an utterance to the situation of discourse; that is, to the organization of texts, speaker-hearer interaction, and/or the attitudes of the speaker".

The authors categorize DMs as a specific subtype of the broader category known as *theticals* (Heine, 2018; Heine et al., 2017, 2013b; Kaltenböck et al., 2011) (For a more detailed discussion of theticals, see the current section below.) One key characteristic that distinguishes DMs from other theticals is their largely invariant nature; they typically do not permit internal modification (Heine et al., 2021; Fischer, 2007). This stability in form contrasts with other theticals, which often exhibit greater flexibility and variation.

The differentiation between the terms DM and *pragmatic markers* is crucial because the terms often reflect different perspectives on the functions and status of these markers, influencing what is included in and excluded from the class. However, there is little consensus on the terminology, partly due to the various theoretical perspectives from which pragmatic markers are analyzed.

As discussed above (see Section 7.2.1.2), before manual annotation, I considered the terms *interjection, discourse marker*, and *pragmatic marker*. During the annotation process, I applied the notion of *pragmatic marker* to annotate those cases when the given NEW (new emotive word) had a specific pragmatic function that could not be classified within any of the other five categories.

Pragmatic markers (henceforth: PMs) have been referred to by numerous names, including hesitation marker and filler, when describing specific functions in context. Based on Aijmer and Simon-Vandenbergen (2011), DM is probably the most frequently used term and is often employed as a broad covering term (e.g., Lewis, 2006; Jucker & Ziv, 1998). However, this term is also used narrowly to define markers as "sequentially dependent elements which bracket units of talk" (Schiffrin, 1987, quoted by Aijmer and Simon-Vandenbergen 2011). Fraser (1990, 1996, 1999) offers a similar definition.

Aijmer and Simon-Vandenbergen (2011) further elaborate on this point, emphasizing that PMs perform a meta-linguistic or meta-pragmatic role. In other words, they assist in the (inter)subjective establishment of coherence. Based on Fraser (1999), PMs encompass various functions beyond structuring discourse. *Pragmatic marker* is most commonly used as a general or umbrella

term covering forms with a wide variety of functions on both the interpersonal and textual levels. They include elements that manage the speaker-hearer relationship, such as signaling politeness, mitigating face-threatening acts, and conveying the speaker's.

To sum up, while PMs broadly manage the interpersonal and attitudinal aspects of communication, discourse markers are more focused on the textual and organizational aspects (Aijmer & Simon-Vandenbergen, 2011; Traugott, 2020).

Regarding the concept of *theticals*, Ahn and Yap (2022) define them as linguistic units–including words, phrases, clauses, or even larger chunks–that do not form syntactic constituents. Theticals encompass various subtypes, such as social exchange formulae and interjections (see below). Heine et al. (2013b) identify several key characteristics of theticals:

- i. Syntactic Independence: Theticals are syntactically independent of their surrounding environment, meaning they do not contribute to the grammatical structure of the main sentence.
- ii. Prosodic Distinctiveness: They are often prosodically set off from the rest of the utterance, which highlights their role as separate from the core grammatical content.
- iii. Non-restrictive Meaning: Theticals convey meaning in a non-restrictive manner, meaning they do not limit or specify the referent but rather provide additional, often contextual, information.
- iv. Positional Mobility: They tend to be positionally mobile, allowing them to appear in various positions within the utterance without affecting the core structure.
- v. Elliptic Structure: While the internal structure of theticals follows the principles of syntactic grammar (SG), it can be elliptic, meaning it often omits parts of the standard syntactic structure.

The concept of theticals will be discussed in more detail in a later section of this chapter, specifically in relation to Thetical Grammar. For further details on theticals, please refer to the section below.

Lastly, *interjections* are typically short, spontaneous exclamations that express a speaker's emotional reactions and attitudes, such as surprise (*Oh!*), pain (*Ouch!*), joy (*Yay!*), or hesitation (*Uh*). Based on Andrason (2022), these elements are characterized as asyntagmatic, meaning they do not occupy structural positions within clauses, and non-constructional, indicating they do not form constructions with intra- or extra-clausal elements. They generally lack syntactic structure, be it phrasal, clausal, or sentential, and do not govern, project, or co-occur with dependent constituents or complements, whether adjuncts or arguments (Ameka, 1992; Ameka, 2006; Andrason & Dlali, 2020, cited by Andrason 2022). As Andrason (2022) argues, while these

characteristics may apply to the prototypical interjections, they are not universal. Evidence suggests that in some languages, interjections may be linked to valency or argument-structure patterns (for more details see Andrason 2022).

The objective of this publication is not to provide an exhaustive review and critique of the various approaches and terminologies associated with pragmatic markers and discourse markers. Instead, I will adopt the theoretical concepts and methodologies delineated by Szabó and Bibok (2023) (refer to Section VII/3.2.1.1 above) to explore the meanings and functions of NEWs within the Discourse Grammar Framework as proposed by Heine (2013). This framework offers a comprehensive perspective that can be expanded and effectively applied to the theoretical examination of the functions of NEWs. By leveraging the insights from this framework, I will demonstrate its utility in enhancing our understanding of the multifaceted roles that NEWs play in discourse.

A comprehensive review and in-depth explanation of the Discourse Grammar Framework are extensively covered in Ahn and Yap (2022) and Heine (2013), as well as in subsequent works by Heine et al. (2021, 2017, 2013a, 2013b). These sources offer a thorough examination of the framework's theoretical underpinnings and methodological applications. In this context, I will present a succinct overview of the Discourse Grammar Framework.

Based on Ahn and Yap (2022), Discourse Grammar represents a contemporary framework designed to analyze language elements that operate outside the principles of Sentence Grammar (SG) and are grounded in Thetical Grammar (TG) (Ahn and Yap, 2022; Heine, 2013). This framework emerged from the study of what are termed *thetical expressions*, which encompass a broad array of linguistic units including words, phrases, clauses, and even larger chunks that do not form syntactic constituents (Ahn and Yap, 2022).

As already discussed above, theticals are linguistic units, including words, phrases, or larger chunks, that do not form syntactic constituents. Ahn and Yap (2022) define these elements as syntactically independent, meaning they do not contribute to the grammatical structure of the main sentence. Heine et al. (2013b) highlight that theticals are prosodically distinct, often set off from the rest of the utterance to emphasize their separate role. They convey meaning in a non-restrictive manner, offering additional contextual information rather than specifying referents. Furthermore, theticals exhibit positional mobility, appearing in various positions within an utterance without impacting the core structure. Their internal structure may also be elliptic, omitting parts of standard syntactic grammar. These features underscore the unique role of theticals in discourse, functioning independently of traditional syntactic constraints.

According to Ahn and Yap (2022), theticals include several categories: conceptual theticals, which convey conceptual information (e.g., *I think, you know, for example, if you will*); social exchange formulae and vocatives, used to maintain or enhance social interactions (e.g., *Good morning, hello, thank you, Ann! Sir! Waiter!*); imperatives, which prompt the hearer to perform an action (e.g., *Come on! Listen! Watch out!*); and interjections, reflecting the speaker's internal state or emotional response (e.g., *boy, damn, hell, ouch, um, wow*) (Heine et al., 2013a, 2013b, as cited by Ahn and Yap, 2022).

Ahn and Yap (2022) emphasize that treating theticals on par with sentence constituents allows discourse to be understood on two distinct levels: the microstructure of sentence grammar and the macrostructure of metadiscursive or thetical grammar (Heine et al., 2021, 2013a, 2013b, cited by Ahn and Yap, 2022). The latter involves how speakers or writers project themselves within their texts to engage with hearers or readers, reflecting a view of language use as a social interaction (Dafouz-Milne, 2008; Hyland, 2018, as cited by Ahn and Yap, 2022:33). This perspective highlights the role of theticals in shaping and managing the interpersonal dimensions of discourse, beyond mere syntactic structure.

After revirewing the theoretical framework outlined above, I argue that some specific pragmatical functions of NEWs should be approached within the SG-TG framework. This perspective allows us to analyze the specific functions of NEWs as metatextual elements, which contribute to discourse organization and the management of speaker stance.

In light of my analysis, which is based on a specific theoretical framework distinguishing between SG and TG, I suggest using the term thetical expression (or simply thetical) for this context. This terminology integrates smoothly and transparently with the notion of TG, ensuring both consistency and clarity. Adopting this term not only preserves theoretical coherence but also enhances the precision in categorizing the linguistic phenomena being examined.

By treating these specific functions and meanings of NEWs as theticals, we can explore their semantic-pragmatic features in greater depth, as well as their evolution over time in the SG-TG framework (see Section VIII/3 below).

My approach is informed by two practical applications of the TG framework, specifically Ahn and Yap (2022) and Khormaee et al. (2024), among others.

Ahn and Yap (2022) conduct a detailed investigation into the Korean discourse marker *com*, tracing its progression from a diminutive quantifying noun to an adverb, and then to a discourse marker through the processes of grammaticalization and cooptation. Finally, the word *com* adopts various pragmatic functions, including mitigating face-threatening acts, expressing negative emotions, and facilitating playful discourse. This way, the transition

of *com* into a thetical element underscores its pivotal role in managing speaker stance and discourse organization. This transformation illustrates how *com* evolves to fulfill metatextual functions, which involve the projection of speaker attitudes and the regulation of interpersonal dynamics within discourse. (I will discuss the term *stance* and its relation to theticals later in the current section.)

Khormaee et al. (2024) explore the evolution of the Persian discourse marker ya'ni, examining its development over eleven centuries. The authors argue that ya'ni undergoes a transition from SG-level to TG-level, acquiring new pragmatic meanings, such as textual, subjective, and intersubjective ones. This evolution highlights a shift from propositional content to procedural discourse functions, moving through a spectrum of subjectification.

The transformation of *ya'ni* parallels that of *com*, as both articles underline the transformation of specific linguistic elements into theticals, emphasizing their pragmatic roles in discourse. (For a detailed analysis of the key findings from both articles, refer to the discussion below on the semantic-pragmatic development of NEWs over time.)

Before proceeding to argue, based on the aforementioned points, that certain functions of NEWs can also be considered theticals, it is essential to address and explore a crucial concept: *stance*. Theticals are crucial in stance-taking as they provide additional layers of meaning, often reflecting the speaker's evaluative stance or commentary on the discourse itself (Ahn and Yap 2022).

Based on Kiesling, (2022), *stance*, also referred to as *stancetaking*, is a concept predominantly used in sociolinguistics and linguistic anthropology to describe how individuals position themselves in conversation, particularly regarding politeness, certainty, or emotion. *Stance*, as defined by Simaki et al. (2020), is "the way speakers position themselves in relation to their own or other people's beliefs, opinions and statements about things or ideas in ongoing communicative interaction with other speakers" (by Simaki et al. 2020: 217, quoted by Khormaee et al., 2024). Stance taking involves evaluating both tangible entities, such as apples, and abstract concepts, such as information. Additionally, it highlights the presence and role of participants within the communicative event. Consequently, stance taking is inherently an interactive phenomenon (Khormaee et al., 2024).

The examination of stance and stance-taking warrants increased attention, as this process is a fundamental function of language. By adopting a stance, speakers not only articulate their evaluations of entities but also demonstrate how their own position interacts with those previously articulated by others (Du Bois, 2007, quoted by Khormaee et al., 2024). Furthermore, the presence of evaluative language inherently makes a text interactive, as it encourages the reader or listener to engage with and accept the assumptions

presented within the text (Hunston & Thompson, 2000, quoted by Khormaee et al., 2024).

According to Khormaee et al., *ya'ni* evolves from a propositional to a thetical function, reflecting the speaker's attitude and managing speaker-hearer interactions. Similarly, Ahn and Yap demonstrate that *com* undergoes a shift from a lexical to a thetical function, expressing the speaker's stance and organizing discourse. Ahn and Yap (2022) identify several pragmatic functions of *com* that align with the concept of stance, including mitigation, politeness, and the expression of negative emotions. These functions illustrate how *com* can be employed to manage social interactions and convey the speaker's cognitive or emotional state. Specifically, *com* is used to moderate assertions, making them less direct and thus reducing potential face threats in conversation. Additionally, *com* serves to soften the imposition on the listener and to express negative emotions, reflecting the speaker's alignment with negative evaluations of the stance object. (For further discussion on the metatextual functions of theticals, see Heine et al. (2020), among others.)

Relying on the above discussed approaches, I argue that, in the analysis of NEWs, the concept of stance is critical. NEWs may function as mechanisms for stance-taking, allowing users to articulate their evaluations, position themselves relative to others, and align with the broader discourse. Specifically, a NEW may signify the speaker's stance toward the discourse object and position the speaker in relation to other participants. By articulating their stance, speakers can align with others who share similar viewpoints, thereby cultivating a sense of community or solidarity among participants.

In the remainder of this chapter, building on the theoretical foundations established thus far, we will explore the functions of NEWs as discussed in this study.

Based on their corpus analysis, Szabó and Bibok (2023) reached the following conclusions: Firstly, the functions of NEWs as intensifiers and sentiment words are closely tied to SG (see above), as they exhibit grammatical dependency and contribute to the propositional meaning of utterances (Heine, 2013). In these instances, NEWs are syntactically integrated into the argument structure (refer to Section 7.2.1.1 above). For illustration, consider the previously discussed corpus examples (37b) and (39b). Example (49a) demonstrates the sentiment function of NEWs, while (49b) illustrates their role as intensifiers.

(49)Azidei Acropolis igazi savát-borsát a. Acropolis.NOM highlight.ACC the this.year real azonban is a szokatlanul durva nem however not the unusually crushing pályák, hanema néldátlanul erős mezőny track.PL but unprecedentedly strong field the

jelentette.

mean.PST.3SG

'However, the real highlight of this year's Acropolis was not the unusually crushing tracks, but the unprecedentedly strong field of competitors.' (1999)

napokban b. Α szenvedő alanva the past.few.days.INE suffering subject.POSS also ilven durva szabálytalanságnak. voltam egy be.PST.1SG a such tough malpractice.DAT 'I have also been the subject of such rough malpractice in the past few days.' (1995)

In (49a), *durva* underscores the exceptional, unprecedented features of the tracks. It modifies the word *pályák* ('tracks'), thus being syntactically integrated into the argument structure and contributing to the propositional meaning of the utterance. In (49b), *durva* is an adjective modifying *szabálytalanság* ('malpractice'). It conveys a sense of severity and harshness, indicating that the malpractice was not merely minor or routine but significantly severe. Here, *durva* is again grammatically dependent, functioning as a modifier. Thus, it adheres to the principles of SG. Semantically, *durva* enhances the propositional meaning of the sentence by specifying the intensity of the malpractice experienced, contributing to the overall evaluative tone of the statement and emphasizing the high degree of severity of the malpractice.

In summary, these examples demonstrate that *durva* is grammatically dependent and semantically integral to the propositional content of the sentences. Therefore, *durva* in these functions is closely related to SG.

This observation extends to other functions of NEWs, such as the various meanings and functions of *durva* categorized in types 1-3 as discussed in Section VII/3.2.1.2. To illustrate, I present some previously analyzed corpus examples: (50a) pertains to the description of an uneven surface, (50b) relates to the characterization of behavior, and (50c) involves rough estimation. These examples highlight a range of possible semantic applications for *durva*.

(50)[...] listavezetőként neki kellett először a. head.of.the.list.xxx he.DAT need.PST.3SGfirst nekiveselkednie a durva murvás pálváknak tackle the tough gravel track.ALL.PL [...] [...] '[...] as the head of the list, he had to tackle the rough gravel tracks first [...]' (2006)

- h. Úi továbbá durva kapcsolásra érzéketlen 4 new and the rough change.ALL insensitive 4 váltómű fokozatú gearbox.NOM' speed 'Also new is the 4-speed gearbox, which is insensitive to crude changes' (1959)
- Az ún kisütővillás vizsgálat csak c. az the so-called discharge.fork test.NOM only the minősítésére alkalmas: akku durva qualification.POSS.SUP suitable batterv rough töltött vagy töltetlen. charged or uncharged 'The so-called discharge fork test is only for the rough qualification of the battery: charged or uncharged.' (1973)

In (50a), durva modifies murvás pályák ('gravel tracks'). It is used attributively to describe the nature of the tracks, emphasizing their rough and uneven texture. Here, durva functions as an adjective related to the SG framework, contributing to the propositional meaning by highlighting the challenging nature of the tracks that the subject had to handle. In (50b), durva is used to modify *kapcsolás* ('change') in the context of describing a gearbox. It conveys that the gearbox is insensitive to "crude" changes, implying that it can handle changes that are abrupt or imprecise. Here, durva again functions within SG by modifying a noun and specifying the type of changes, thus contributing to the propositional meaning of the utterance. In (50c), durva modifies minősítés ('qualification') in the context of a battery test. It describes the test as being suitable for a rough qualification of the battery, implying that it provides a basic or preliminary assessment rather than a detailed one. This use of durva as an adjective highlights the general and imprecise nature of the qualification process. Durva is grammatically dependent in this instance, contributing to the propositional meaning by specifying the level of detail the test provides.

In contrast to the various meanings and functions previously discussed, there exists a distinct function of NEWs that pertains not to SG but to TG. For this specific function, I propose the use of the term *thetical function*, in alignment with the principles of TG. In this case, NEW is characterized by its syntactic autonomy and positional mobility, distinguishing it from functions related to SG (As previously demonstrated (see VII/2.1), certain usages of NEWs reflect both SG and TG characteristics simultaneously. This topic will be discussed in more detail later (see below and Chapter VIII/3)). This means that they do not integrate into the grammatical framework of the main clause but rather stand alone, and also, they are allowed to appear in various positions within an utterance without altering the core grammatical structure.

Semantically, their primary role is procedural rather than conceptual; they often serve to manage or organize discourse rather than contributing to the content of the proposition itself. Unlike functions tied to SG, where NEWs contribute directly to the propositional meaning and grammatical structure of sentences, the thetical function operates within the framework of TG. For a more comprehensive examination of this function, including its theoretical underpinnings and empirical manifestations, see Ahn and Yap (2022) and Kaltenböck et al. (2011). Further elaboration on this topic can also be found in Szabó and Bibok (2023), which discusses how these functions fit into the broader framework of TG.

As discussed above, and based on Ahn and Yap (2022), the term theticals refers to linguistic units-such as words, phrases, clauses, or even larger chunks-that do not form syntactic constituents. These theticals include various subtypes, such as social exchange formulae and interjections. As mentioned, according to Heine et al. (2013b), theticals are characterized by several distinct properties. Firstly, they are syntactically independent from their surrounding context, meaning they do not integrate into the grammatical structure of the main clause. Secondly, they tend to be prosodically distinct from the rest of the utterance, often being set off to emphasize their separation from the core grammatical content. Thirdly, the meaning of theticals is nonrestrictive; they provide additional, often procedural information rather than specifying or limiting the referent. Additionally, theticals exhibit positional mobility, allowing them to occupy various positions within an utterance without altering the core grammatical structure. Lastly, while their internal structure follows the principles of SG, it can be elliptic, meaning it may omit parts of the standard syntactic structure.

As discussed in Section VII/1 above, NEWs can function independently (e.g., durva! 'lit. tough'; brutál! 'lit. brutal') or appear within specific collocations (e.g., nagyon durva! lit. 'it's really tough'; ez de brutál! 'lit. it's so brutal') to perform a thetical function. To clarify this distinction, we will differentiate between two types of NEWs in the context of their thetical function: those that operate without any syntactic relations and those that exhibit some degree of syntactic connection (see Section VII/3.2.1.1 above). In the automotive corpus, there were seven instances of the thetical use of durva, each of which displayed some level of syntactic relation. The examples provided in (42) are reiterated below for reference.

(51)	a.	Mentem a	honda	ás have	rommal 300-zal,	
		go.PST.1SG the	Hond	a frien	d.com 300.instr	
		jött	a	kanyar,	bevettem,	
		come.PST.3SG	the	turn.NOM	take.PST.1SG	
		jött	a	kanyar,	bevettem,	de
		come.PST.3SG	the	turn.NOM	take.PST.1SG	but

```
hirtelen
             kisodródtam.
suddenly
             drift.out.PST.1SG
- Hú. ez
             durva -
                          mondia
                                               ápolónő
                                        az
Wow that
                          say.3SG
             tough -
                                        the
                                               nurse.NOM
[...]
[...]
'I went with my friend by Honda at 300, the turn came, I
took it, the turn came, I took it, but suddenly I drifted out. -
Wow, that's rough - says the nurse [...]' (2008)
```

```
b.
      "[…] az
                   F-1
                          néhány
                                       aspektusával
      [...] the
                   F-1
                          some
                                       aspect.POSS.INSTR
      találkozva
                                             feiemben:
                         iárt
                   az
                                       a
      meeting
                   that
                          go.PST.3SG
                                       the
                                             head.POSS.INE
                          durva!"
      basszus.
                   ez
      damn
                   this
                          tough
      '[...] After reviewing some aspects of F-1 I was thinking: damn,
      this is rough!"' (2009)
```

In (51a), durva functions as an exclamatory remark in response to a narrated event, expressing the speaker's evaluative reaction to the described situation. The use of durva here highlights the dramatic nature of the experience recounted. While durva does exhibit some connection to SG due to its syntactic relationship with ez (this), its primary function in this context aligns more closely with TG. In this instance, durva does not contribute directly to the propositional content or grammatical structure of the clause but instead provides an evaluative comment on the narrated event. I argue that this evaluative function of durva serves a procedural role, managing the discourse by conveying the speaker's emotional reaction rather than modifying or specifying the content of the event itself. Therefore, despite some overlap with SG in terms of grammatical dependency, the phrase ez durva functions as a thetical unit, contributing to the overall discourse by managing and organizing the speaker's evaluative stance.

Example (51b) is similar to the previous instance in that durva is used within an exclamatory statement, *basszus*, *ez durva!* Here, *durva* expresses the speaker's reaction to the intensity or severity of the F-1 aspects under discussion, functioning as a standalone evaluative element. The inclusion of the informal interjection *basszus* ('damn') enhances the emotive quality of the response.

The examples provided demonstrate the thetical function of *durva* across different contexts. In each case, *durva* maintains its syntactic independence and positional mobility, aligning with the principles of TG. The

primary function of *durva* in these instances is procedural: it serves to manage or organize discourse rather than contribute to the propositional content of the sentence. The evaluative nature of *durva* reflects its role in conveying the speaker's reaction or emotional response to the situation described, highlighting its function within the framework of Thetical Grammar.

In the corpus, the following seven instances occur where *durva* fulfills a thetical role, though not independently but with some syntactic relation to the rest of the sentence. However, as previously argued, these instances should also be considered within the framework of TG: *Azért ez durva!* 'but it's tough'; *Ez azért durva!* 'but it's tough'; *Hú, ez durva* 'Hah, it's tough'; *basszus, ez durva!* 'damn, it's tough'; *Nagygyon durva!* 'vvvery tough'; *Kicsit durva!* 'a little bit tough'; *Na, ez durva!* 'Hah, it's tough'.

At the same time, we can identify instances where NEWs serve a thetical function without any syntactic relation to the rest of the sentence. For example, consider the following case (52), which was presented earlier in example (48):

(52) **Durva**. Még szerencse, hogy időben tough xx luck.NOM that time.INE észrevettétek [...] notice.PST.2PL [...] 'Phew. It's lucky you noticed it in time [...]' (twitter corpus)

In example (52), *durva* stands alone and is not syntactically linked to other parts of the sentence. This characteristic aligns with the definition of a thetical, which is often syntactically autonomous and not integrated into the sentence's main structure (Szabó and Bibok, 2023). Then, here *durva* fulfills a crucial pragmatic role in this context. It serves to convey the speaker's immediate emotional or evaluative response to the situation described (Ahn and Yap, 2022; Cuenca, 2000). In this instance, *durva* likely functions as an exclamatory remark that underscores the speaker's reaction to an event or realization. As a thetical element, *durva* contributes to the procedural aspect of discourse rather than to its propositional content.

Based on the above discussion, regarding the thetical functions of NEWs, and based on Szabó and Bibok (2023) and the explanation by Andrason and Dlali (2020), I will adopt a prototype-driven approach to linguistic categorization, specifically focusing on the thetical use of NEWs. As observed previously (see section 8.2 above), NEWs can fulfill various pragmatic functions, either operating independently (e.g., *durva!*; *brutál!*) or appearing within specific collocations (e.g., *nagyon durva!*; *ez de brutál!*) to perform a thetical role.

As illustrated in example (51a) in section 8.2 above, *durva* in some cases exhibits connections to SG due to its syntactic relationship with other

words within the construction. Thus, there is an overlap with SG in terms of grammatical dependency. However, as we have seen, its primary function in this context aligns more closely with TG; *durva* does not contribute directly to the propositional content or grammatical structure of the clause but instead provides an evaluative comment on the narrated event. In other words, these collocations formed with *durva* function as a thetical unit, contributing to the overall discourse by managing and organizing the speaker's evaluative stance.

In other instances, *durva* maintains its syntactic independence and positional mobility, fully aligning with the principles of TG. In these cases, the primary function of *durva* is procedural: it serves to manage or organize discourse rather than contribute to the propositional content of the sentence.

Based on these specificities, a radical view on the asyntagmatic, non-constructional, and syntax-external behavior of thetical NEWs should be replaced by a more nuanced proposal: thetical NEWs – including their prototypical representatives—may exhibit some syntactic properties to varying degrees, behaving somewhat similarly to other lexical classes traditionally viewed as syntagmatic and constructional.

In this section, I aimed to demonstrate that the application of the TG framework offers a valuable perspective for analyzing the various functions of NEWs. I contended that NEWs serve as intensifiers and sentiment words within the context of SG, as these words exhibit grammatical dependency and contribute to the propositional meaning of sentences. Simultaneously, certain specific functions of NEWs pertain to TG. In these roles, NEWs (such as durva) operate independently from the grammatical structure of the main clause, fulfilling a procedural rather than a propositional function. They manage or organize discourse, often appearing in diverse sentence positions without altering the core grammatical structure. For instance, in exclamatory statements like Hú, ez durva ('lit. Wow, that's rough') or basszus, ez durva! ('lit. damn, this is rough'), durva expresses an evaluative reaction, aligning with the TG framework. Furthermore, examples like *Durva*. Még szerencse, hogy időben észrevettétek ('Phew. It's lucky you noticed it in time') illustrate durva functioning independently, highlighting its role in conveying immediate emotional responses.

Thus, NEWs can fulfill both SG and TG functions, contributing to the overall discourse by managing evaluative and procedural elements in communication.

In the following and final subsection of this monograph, I will discuss how the theoretical framework and its conceptual system presented above can be applied to the theoretical description of the temporal semantic-pragmatic development of NEWs. Specifically, I will examine how the temporal linguistic features uncovered during the corpus analysis can be described within the chosen theoretical framework. This discussion will not only

illustrate the practical applicability of the theoretical concepts but also provide further support and validation for the approach presented in this chapter. By aligning empirical findings with theoretical constructs, the forthcoming analysis will offer a comprehensive and robust understanding of the semantic-pragmatic evolution of NEWs, reinforcing the methodology and conclusions drawn in the current section.

# 8.3. Semantic development of NEWs over time

In this final chapter, I will delve into the theoretical framework and conceptual apparatus presented earlier to explain the temporal semantic-pragmatic development of NEWs. The significant semantic proliferation of this linguistic phenomenon, as summarized in Section VIII/1, necessitates a comprehensive examination of their linguistic evolution over time. The primary objective of this section is to elucidate how different meanings and functions emerge and succeed one another in the semantic-pragmatic trajectory of NEWs. By synthesizing the observations derived from corpus analyses, as discussed in Sections VIII/1 and VIII/2, I aim to construct a generally applicable model for understanding the temporal dynamics of semantic-pragmatic change in NEWs. This exploration will offer insights into the intricate processes underlying the linguistic development of NEWs, thereby contributing to a deeper understanding of their role and significance in the evolution of language.

Before delving into the specifics of my approach, it is imperative to contextualize the discussion by examining various terms that might be related to the semantic-pragmatic evolution of NEWs. Several key concepts relevant to understanding their development include *delexicalization* (Dér, 2013a; Partington, 1993), *grammaticalization* (Ahn and Yap, 2022; Rostila, 2004), *late grammaticalization* (Ahn and Yap, 2022), *pragmaticalization* (Heine, 2013), *cooptation* (Ahn and Yap, 2022) and *degrammaticalization* (Dér, 2013b; Norde, 2009). This section, as a very first step, will provide a comprehensive review of these notions.

#### Delexicalization

Delexicalization refers to the phenomenon where the independent lexical content of a term diminishes, allowing the term to fulfill a specific functional role within a given context. Partington (1993) defines delexicalization as "the reduction of the independent lexical content of a word, or group of words, so that it comes to fulfill a particular function" (Partington, 1993, p. 183). This process entails a shift from a word's original lexical meaning to a more functional or procedural role.

Similarly, Shustova et al. (2017) describe this process as desemantization, where the word's original semantic content is diminished in favor of a more abstract or functional use.

### Grammaticalization, Late grammaticalization and Degrammaticalization

Grammaticalization is a process where lexical items or constructions with specific content meanings evolve into grammatical elements with abstract and schematic functions over time. According to Hopper and Traugott (2003), this process involves the development of grammatical functions from previously content-based meanings. Grammaticalization results in the transformation of lexical items into more abstract grammatical markers that fulfill novel grammatical roles within a language. This concept highlights the progression from concrete, content-rich meanings to more abstract, function-oriented uses.

Ahn and Yap (2022) applied the concept of *late grammaticalization* to elucidate a distinct developmental stage in the evolution of the Korean discourse marker *com*. According to their framework, this marker undergoes both grammaticalization and late grammaticalization. The grammaticalization phase involves erosion, characterized by a reduction in phonetic substance, whereas the late grammaticalization phase is marked by an extension of contextual usage.

In the late grammaticalization phase, *com* acquires a spectrum of subjective and intersubjective functions. These functions include facilitating polite requests, mitigating assertive statements in potentially face-threatening scenarios, conveying negative emotions such as annoyance and frustration, and signaling the speaker's playful involvement in ostensibly impolite interactions, such as banter and mock disputes. For an in-depth examination of these processes and their implications, refer to Ahn and Yap (2022).

Lastly, *degrammaticalization*, as outlined by Dér (2013b), is the reverse process of grammaticalization, where a function word becomes a content word. This process represents a shift from grammatical functions to more concrete, content-based meanings, countering the directional progression observed in grammaticalization.

## Pragmaticalization

*Pragmaticalization* is defined by Frank-Job (2006) as "the process by which a syntagma or word form, in a given context, changes its propositional meaning in favor of an essentially metacommunicative, discourse interactional meaning" (Frank-Job, 2006, p. 397). This process differs from grammaticalization in that it often leads to a shift from syntactically dependent

forms to more autonomous, interactional uses. The author further elaborates that pragmaticalization involves the transition from syntactic integration to a free, discourse-oriented status, distinguishing it from grammaticalization, which typically involves more structural syntactic integration. For more details on *pragmaticalization* and the differences from *grammaticalization* see Heine (2013).

# Cooptation

Cooptation, as described by Kaltenböck et al. (2011) and cited by Heine (2013), involves the repurposing of a linguistic unit from SG to TG. In other words, "cooptation is a cognitive-communicative operation whereby a text segment (such as a clause, a phrase, or a word) is transferred from the level of sentence grammar and deployed for use on the level of discourse organization" (Heine et al., 2020: 23, quoted by Ahn & Yap, 2022).

According to Ahn and Yap (2022), cooptation is often described as a mechanism that links micro and macrostructural levels. It involves the instantaneous use of a segment of sentence grammar – such as a clause, phrase, or word – as a thetical element. This element serves a metatextual function by emphasizing aspects of the discourse situation, including the preceding discourse, the speaker's attitudes, and the interaction between speaker and hearer (Heine et al., 2020, quoted by Ahn & Yap, 2022). As for the term thetical mentioned here, as discussed above (see Section VIII/2), it refers to units that do not form syntactic constituents but are used for metadiscourse functions, such as interjections. Cooptation reflects how elements originally functioning within sentence structures are adapted for new roles within discourse, illustrating a shift from syntactic to pragmatic usage (Heine et al., 2013b, 2013a, quoted by Ahn and Yap, 2022).

As already mentioned, my explanation and treatment of the semantic-pragmatic development of NEWs over time are fundamentally based on three key studies (Ahn and Yap, 2022; Bartolotta (2023); Khormaee et al., 2024). In my view, these studies demonstrate that linguistic phenomena similar to those I am examining can be effectively addressed and described within this theoretical framework, which justifies my choice. In the following section of this chapter, as a preliminary to my own analysis, I will first present the three aforementioned studies.

Ahn and Yap (2022) analyze the historical development of the Korean discourse marker *com* through the lens of the Discourse Grammar framework.

According to the authors' arguments, many languages exhibit pairs of homophonous expressions that differ in their grammatical functions. For example, one meaning of the Korean word *com* is integrated into the meaning

of a clause or sentence, where it modifies the meaning of an adverb. In contrast, in other instances, *com* is not semantically tied to the clause or sentence and is instead categorized as "metatextual" (Traugott, 2018, as cited in Ahn and Yap, 2022). In other words, the former usage of *com* functions within the same scope unit as the adverb it modifies, whereas the latter usage of *com* operates beyond the proposition, extending to the broader discourse context in which the sentence occurs (Heine et al., 2020, as cited in Ahn and Yap, 2022).

Heine et al. (2013a, b; 2020) provide extensive evidence and broad consensus supporting the view that DMs generally evolve from units of SG. According to Ahn and Yap (2022), the emergence of DMs is commonly attributed to the process of grammaticalization. However, considering that grammaticalization typically pertains to the development of sentence-internal grammatical markers, some scholars have argued that pragmaticalization might more aptly describe the emergence of DMs that structure text. An alternative perspective, as presented by Heine et al. (2013a, b; 2020) within the framework of Discourse Grammar, posits that the development of DMs involves both grammaticalization – which facilitates the creation of new patterns and forms for sentence construction—and cooptation—which enables the adaptation of linguistic expressions to the metatextual level of discourse processing (Ahn and Yap, 2022).

Ahn and Yap (2022) adopt the Discourse Grammar approach and apply it to their analysis of the Korean DM *com*. They explore the evolution of *com* from a clausal (or sentential) element to a DM, focusing particularly on the two mechanisms proposed by Heine et al. (2013a, b; 2020) – namely, grammaticalization and cooptation.

Their diachronic analysis traces the development of *com* through three principal stages. First, early grammaticalization, which transitions from the diminutive quantifying noun *cyekoma* ('a little [bit]') to the adverb *com* ('a little'). This is followed by cooptation, in which the coopted unit (thetical) *com* is deployed as a DM. Finally, late grammaticalization is observed, during which *com* acquires a broad spectrum of subjective and intersubjective stances.

I summarize the stages of linguistic transformation and functional evolution as follows:

Stage	Description
Early Grammaticalization	Transformation of the diminutive
	quantifying noun cyekoma ('a little
	[bit]') into the adverb com ('a
	little').

Cooptation	Due to the cooptation procedure, the		
	coopted unit (thetical) com is		
	deployed as a DM.		
Late Grammaticalization	The DM <i>com</i> takes on a wide range		
	of subjective and intersubjective		
	stances.		

Table 6. Stages of linguistic transformation and functional evolution of the Korean DM com (based on Ahn&Yap, 2022)

This approach allow the authors to elucidate how quantifying nouns can develop into speaker stance markers.

In the procedure outlined above, as explained by Ahn and Yap (2022), grammaticalization is a gradual process through which new functional categories emerge from existing lexical or other grammatical elements. This process is intersected by cooptation, and the grammaticalization of DMs can be categorized into two distinct phases; one preceding cooptation and one following it. The former is termed 'early grammaticalization,' while the latter is referred to as 'late grammaticalization.' Early grammaticalization involves the transformation from lexical to grammatical expressions (Givon, 1991; Breban, 2015; Kranich, 2015; Breban & Kranich, 2015, as cited in Ahn & Yap, 2022). Late grammaticalization, on the other hand, pertains to the gradual grammaticalization of the coopted unit after cooptation, during which the unit evolves into a DM with a broader range of metatextual functions (Heine et al., 2020, as cited in Ahn & Yap, 2022). The interplay between cooptation and grammaticalization in the development of DMs from their original sources results in pairs of homophonous or near-homophonous linguistic terms that exhibit differing grammatical behaviors.

The study Khormee et al. (2024)'s data-based study delves into the diachronic development of the Persian DM *ya'ni* over a span of eleven centuries (4th to 14th A.H.).

This research builds on Heine's pragmaticalization framework (2013) and Traugott and Dasher's (2002) perspective on the "subjectification spectrum" (non-subjective > subjective > intersubjective meanings). Khormee et al. (2024) cite Heine (2013), who argues that the emergence of DMs is driven by pragmaticalization, with cooptation being central to this process. Heine (2013) distinguishes pragmaticalization from grammaticalization, arguing that through cooptation, a linguistic unit transitions from sentence grammar to thetical grammar, acquires new semantic functions based on the complex network of discourse situations, and can subsequently undergo grammaticalization at the thetical grammar level. Khormee et al. (2024) also cite Traugott and Dasher (2002), who contend that DMs develop diverse

meanings through grammaticalization. Specifically, they identify three types of meanings that discourse markers can assume in relation to discourse components: textual, subjective, and intersubjective. They propose a "subjectification spectrum" (non-subjective > subjective > intersubjective meanings), which delineates the sequential emergence of these meanings.

Based on their data analysis, Khormee et al. (2024) argue that *ya'ni* transitions from SG to TG through the process of cooptation, thereby acquiring new semantic functions. At the TG level, *ya'ni* undergoes progressive grammaticalization, diverging from its original propositional meaning. Consequently, *ya'ni* develops textual, subjective, and intersubjective meanings, corresponding to different components of the discourse situation, such as text organization, the speaker's attitudes, and the interaction between speaker and hearer, respectively.

Drawing on Traugott and Dasher (2002), Khormee et al. (2024) conceptualize the grammaticalization process of the examined word as a continuum. Over time, the DM *ya'ni* acquires new pragmatic meanings. During the first three centuries of the examined time period (4th, 5th, 6th), *ya'ni* was exclusively used with textual meaning. In the 7th century, the first occurrence of *ya'ni* in a subjective-intersubjective function is observed, which necessarily implies the presence of subjective meaning during this period. Finally, the first instance of an independent intersubjective meaning appears in the 8th century.

When comparing the two articles, namely Ahn and Yap (2022) and Khormee et al. (2024), several points of convergence and divergence emerge. Ahn and Yap (2022) rely on the concept of cooptation and do not explicitly employ the term pragmaticalization. They base their analysis on the framework of Discourse Grammar as outlined by Heine et al. (2013a, b; 2020). In contrast, Khormee et al. (2024) adopt the notion of pragmaticalization from Heine (2013), aligning with the foundational idea that 'the central process of pragmaticalization is cooptation.' Consequently, the core approaches of both papers are not fundamentally at odds. Additionally, both perspectives share the belief that the coopted unit continues to evolve at the TG level, acquiring new meanings through grammaticalization. However, a minor distinction lies in terminology: Ahn and Yap, who also use the term *early grammaticalization* for an earlier stage of the linguistic element's development, refer to this subsequent stage of development as 'late grammaticalization'.

Lastly, Bartolotta (2023) examines the diachronic development of the Latin word *maxime* from a degree adverb to a DM. This study analyzes the occurrences in a corpus of Latin literary texts from approximately 240 BCE to the early first century BCE.

Based on Bartolotta (2023), degree modifiers may undergo a semantic extension from content to function (Paradis, 1997; Méndez-Naya, 2003;

Athanasiadou, 2007; Bartolotta, 2022), gradually enhancing their intensifying function towards more abstract '(inter)subjective' meanings associated with new grammatical and eventually procedural roles (Traugott, 1995; 2003; 2008).

The study reveals a syntactic shift of *maxime* from an adjacent position next to the syntactic phrase it modifies—primarily when functioning as an intensifier or focalizer — to the left periphery of the sentence—primarily when functioning as a DM.

Bartolotta (2023) argues that this positional shift corresponds to a semantic-pragmatic shift from a lower (Representational) to a higher (Interpersonal) functional layer (Hengeveld & Mackenzie, 2008), indicating an increasing level of subjectification. Initially, subjectification is observed as *maxime* transitions from an intensifier/focalizer to a modal adverb with epistemic meaning, reflecting the speaker's commitment to the truth-value of the proposition and extending its scope over the entire sentence. Subsequently, further intersubjectification is evident as *maxime* assumes new illocutionary and pragmatic functions typical of DMs, such as confirmative, adversative, and concessive roles. These new functions mark the textual relationship between two discourse acts or indicate a transition to a new discourse unit at the interactional level.

The evolution of *maxime* exemplifies an intermediate stage of grammaticalization at the propositional level before adopting a pragmatic function. Thus, Bartolotta (2023) consider that pragmaticalization and grammaticalization are not rigidly separated processes. Instead, they coexist and influence each other within the "sentence-discourse continuum", allowing the same lexical element to evolve towards new grammatical and pragmatic functions.

Bartolotta's (2023) study is particularly significant for my analysis as it explores the transformation of a degree modifier into a DM, examining how the term acquires various pragmatic functions and how this process can be accounted for. It demonstrates that as the scope of the modifier expands from its role as an intensifier, there is a concurrent emergence of subjectification. Subsequently, intersubjectification is observed, leading to the development of new illocutionary and pragmatic functions typical of DMs. As for the terminology, Bartolotta (2023) employs the concepts of pragmaticalization and grammaticalization, arguing that these processes are not rigidly separated but rather coexist and influence each other within the continuum of linguistic development.

Let us now closely examine the semantic and pragmatic evolution of NEWs over time, drawing on the theoretical approaches and concepts discussed above.

As detailed in Section VII/3.2.2.2 above, the frequency of occurrences of the examined NEW in its role as an intensifier–compared to its functions as a sentiment word and discourse marker (DM) – exhibited a relatively consistent distribution across the decades. This balance is evident even in the earliest period examined (refer to Table 3 and Figure 8 above). The observation that the intensifier function of NEWs is already evident from the earliest period examined, substantiates the hypothesis that the initial stage in the semantic-pragmatic evolution of NEWs involves their development into intensifiers.

To account for the semantic development of NEWs into intensifiers, some studies interpret this process as a form of delexicalization, where NEWs shed their previous lexical content (for more details see above and Partington, 1993). Then, in line with Ahn and Yap (2022) and Khormee et al. (2024), this process can also be viewed as a grammaticalization procedure, whereby the words acquire a new grammatical function—specifically, that of an intensifier (for further details, see also Dér, 2013a, 2013b; Varga, 2019).

It is crucial to emphasize that, as observed, the initial instances of *durva* used in a positive context emerged only in the final sub-corpus analyzed. Furthermore, the neutral use of *durva* was notably underrepresented until the 1990s, with its frequency beginning to increase from that period onward (refer to Figure 9 above). This finding aligns with Lorenz's (2002) framework (see section III above), which posits that the negative semantic component associated with NEWs diminishes over time. According to Lorenz (2002), this reduction in negativity leads to a gradual "erosion" of collocational restrictions, allowing NEWs to increasingly co-occur with positive terms. This observation supports the notion that the semantic range of *durva* evolves, reflecting broader trends in the shifting use of the NEW in question and the increasing occurrences of such collocations over time.

In contrast to the intensifier function, the sentiment word function exhibits a markedly increasing trend over the years. Initially rare at the beginning of the examined period, its frequency shows a notable rise, particularly from the turn of the millennium onwards. Additionally, the thetical function emerges in the most recent period, with the first documented instance of this use of the NEW *durva* occurring only in the 2000s. Based on these observations, I propose that the sentiment word function develops subsequent to the intensifier function of NEWs, with the thetical function representing a third significant stage in the semantic-pragmatic evolution of the term.

To elucidate the developmental trajectory of NEWs, I will draw upon the aforementioned approaches, particularly emphasizing the insights of Ahn and Yap (2022).

I propose that, as a result of semantic-pragmatic evolution over time, NEWs can be categorized into three primary semantic-pragmatic function

categories from a general linguistic perspective: intensifiers, sentiment words, and theticals. This semantic-pragmatic evolution of NEWs encompasses three distinct stages: grammaticalization, degrammaticalization, and cooptation. Let us examine each phase in detail.

### I. The emergence of the intensifier function

The first step in the development of NEWs involves the emergence of their intensifier function. This process begins when NEWs, which originally possess a negative connotation (e.g., dangerous, harsh, brutish, rotten), undergo grammaticalization. This grammaticalization procedure leads to the development of the intensifier function.

In their role as intensifiers, NEWs remain grammatically dependent, similar to when they are used in their original meanings. Moreover, from a semantic perspective, they contribute to the propositional meaning of utterances, aligning with Heine's (2013) observations (see Section VIII/2). Consequently, these intensifier NEWs are related to SG.

Drawing on Heine (2013), numerous studies have indicated that grammaticalization often results in a restriction of the semantic-pragmatic scope of the unit undergoing the process. Syntactically, grammaticalization leads to decategorialization, and semantically, the meaning of the grammaticalized unit is shaped by its newer function. This transformation can also affect word order, with the grammaticalized unit becoming increasingly restricted in placement, typically adjacent to its host (for more details, see Heine, 2013).

In alignment with the above, it is important to note that NEWs functioning as intensifiers initially appear in negative contexts at the beginning of the semantic change process. Over time, the negative semantic component of NEWs diminishes, and their collocational restrictions "erode" (Lorenz, 2002; see also Section III above). This erosion allows NEWs to increasingly occur in neutral and positive collocations, thus broadening their semantic range.

### II. The emergence of the sentiment word function

As the second major phase in the semantic-pragmatic development process, negative emotive intensifiers evolve to adopt what I term the sentiment word function (see Section VIII/1 above). At this stage, these words are no longer used in their literal, physical sense but are employed metaphorically to convey evaluative judgments.

To understand this transition, we can apply the concept of degrammaticalization, a process whereby a function word evolves into a content word. As already discussed (see above), this concept builds on the

notion that degrammaticalization is the reverse of grammaticalization (Norde, 2009; Dér 2013b). While grammaticalization involves a shift from concrete, content-based meanings to more abstract grammatical functions, degrammaticalization represents a shift in the opposite direction. Specifically, a word that initially serves a grammatical function transitions to take on more substantive, content-based meanings.

In this context, negative emotive intensifiers—function words used to amplify or modify other words—undergo degrammaticalization. As a result, these intensifiers transition into sentiment words, which are used metaphorically to convey emotional responses or evaluations rather than intensifying the meaning of other lexical items. This process enriches NEWs' expressive capacity, allowing for more nuanced communicative roles.

It is important to note that, while performing this function, these words remain syntactically dependent. Structures containing these words continue to be governed by the principles of SG rather than TG, as was the case with intensifiers (Heine, 2013). For example, a NEW functioning as a sentiment word might modify a noun (53a) or a verb (53b). Below, I reiterate some previously discussed examples ((10) and (21)) to illustrate this point.

(53)több [...] már hírt is a. [...] already more news.ACC also olvastam, hogy így-úgy-amúgy read.PST.1SG that somehow megoldották aksik az solve.PST.3PL battery.PL.NOM the kapacitástöltésproblémáját, és [...]. capacity and charging.problem.ACC [...] Elég durva hírek ezek. hiszen pretty tough news.NOM.PL these.PL 5-6xoros vagy nagyobb kapacitásokat 5-6x or bigger capacity.PL.ACC írnak hihetetlen is [...]. Kb. practically write.3PL [...] unbelievable the also sztori. story.NOM

'[...] I have already read several news saying that the battery capacity and charging problem has been somehow solved [...]. These are pretty crazy news, as capacities of 5-6x or higher are also being stated [...]. The story is practically incredible.' [autonavigator.hu]

b. meg kell hogy mondjam **brutálisan** énekel PX need to tell.1sG brutally sing.2sG the guy.NOM a srác 'I have to say the guy sings amazingly' [kzpost.info]

In the example (53a), *durva* functions as a sentiment word, expressing the speaker's strong reaction to the news. It is used metaphorically to convey the extremity and incredibility of the reported battery capacities. Here, *durva* does not refer to the literal sense of 'harsh' or 'rough' but is employed to highlight the surprising and almost unbelievable nature of the news. The sentiment word function allows *durva* to modify the noun *hirek* ('news'), thereby adding an evaluative layer to the statement. In example (53b), *brutálisan* is also used as a sentiment word to describe the manner of singing. It conveys a high degree of emphasis on the quality of the singing, indicating that it is extraordinarily good. The word *brutálisan* shifts from its literal connotation of 'brutally' to a figurative expression of 'amazingly' or 'incredibly well', fitting well within the sentiment word function. From a syntactic point of view, *brutálisan* is an adverb modifying the verb *énekel* ('sing').

In both examples, *durva* and *brutálisan* function as sentiment words by moving away from their literal meanings to convey strong evaluative expressions. This aligns with the characteristics of sentiment words, where the primary function is to modify other words (or clauses, see below) to express subjective assessments and emotional responses towards the given target of the utterance or semantic content.

When it is not syntactically attached to the modified head of the construction, it has a syntactic-semantic scope over the subordinate clause (for more details, see Section V above). I repeat example (8) below.

(54) **Durva** volt, amit a hegedűs tough be.PST.3SG what the violinist művelt a hangversenyen. do.PST.3SG the concert.INE 'it was bloody good what the violinist did at the concert'

In this utterance, *durva* functions as a sentiment word again, providing an evaluative comment on the entire subordinate clause *amit a hegedűs művelt a hangversenyen* ('what the violinist did at the concert'). Here, *durva* does not retain its literal meaning of 'rough' or 'tough' but instead conveys a positive evaluation, indicating that the violinist's performance was exceptionally good. Syntactically, *durva* is positioned at the beginning of the main clause, giving it a broad syntactic-semantic scope over the entire subordinate clause. This means that *durva* modifies not just a single word but the entire situation

described in the subordinate clause, overarching evaluation of a larger semantic content.

### III. The thetical function via cooptation

As the third and final phase of the development process, I argue that NEWs, functioning as sentiment words, undergo a cooptation mechanism. Cooptation is a widespread process where "a chunk of Sentence Grammar, such as a clause, a phrase, a word, or any other unit, is deployed for use as a thetical" (Kaltenböck et al., 2011), cited by Heine et al. (2013a).

As discussed earlier (see Section VIII.2 above), and based on Ahn and Yap (2022), the term *theticals* encompasses various constituents such as social exchange formulae or interjections related to the emotional or cognitive state of the speaker or the interaction between the speaker and hearer (Heine et al., 2013b, 2013a: 396, quoted by Ahn and Yap, 2022). I propose that the cooptation process results in the thetical function of NEWs.

In this stage, the examined words become syntactically independent, and their propositional meaning shifts to a non-restrictive or metacommunicative, discourse-interactional meaning. This transformation allows them to convey a wide range of the speaker's subjective and intersubjective stances (Frank-Job, 2006, quoted by Heine, 2013). Theticals, or coopted units, are not part of the sentence meaning (Heine, 2013). Additionally, their meaning becomes procedural rather than conceptual (Ahn and Yap, 2022). Cooptation also entails an increase in scope (Heine, 2013), and coopted units tend to be freed from constraints on placement (Auer and Günthner, 2003, quoted by Heine, 2013).

I shall summarize the above-described semantic-pragmatic procedure using a schematic figure below.

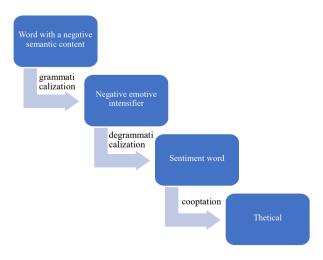


Figure 11. The semantic-pragmatic development procedure of NEWs over time – functions and developmental stages

This figure illustrates the semantic-pragmatic evolution of NEWs over time, tracing their transition from initial meanings to grammatical functions, and eventually to their roles as sentiment words and, ultimately, theticals. It depicts the key functions and developmental stages involved in this transformation:

- 1) Initial meanings: The starting point where NEWs begin with their original meanings and usages.
- 2) Grammatical function: The phase in which NEWs acquire grammatical role through a grammaticalization procedure, serving as intensifiers within utterances.
- 3) Sentiment word function: The stage where NEWs evolve into sentiment words, used metaphorically to express evaluations and subjective judgments, reflecting a shift from literal to evaluative meanings through degrammaticalization.
- 4) Thetical function: The final stage where NEWs undergo cooptation, becoming syntactically independent and serving metacommunicative functions. In this role, they manage and organize discourse, reflecting the speaker's stances and interactions rather than contributing to the propositional content of the sentence.

This figure captures the progression of NEWs through these stages, highlighting the semantic and pragmatic shifts they undergo as they transition from grammatical to evaluative and interactional roles in discourse.

In this chapter, I have utilized the Discourse Grammar Framework and the related concepts to explain the temporal semantic-pragmatic development of NEWs. Building on the significant semantic diversification of NEWs presented earlier, this section aimed to illuminate and explane how their various meanings and functions evolve over time. By synthesizing insights from corpus analyses, the goal was to develop a general model for understanding the temporal dynamics of semantic-pragmatic change in NEWs. This model provides a deeper understanding of the complex processes driving the linguistic evolution of NEWs and their significance in language development.

Based on dtheoretical underpinnings and empirical data, I propose that

NEWs undergo three primary stages of semantic-pragmatic evolution: grammaticalization to intensifiers, degrammaticalization to sentiment words, an lastly, cooptation to theticals.

We have seen that the semantic-pragmatic evolution of NEWs involves a complex interplay of grammaticalization, degrammaticalization, and cooptation, resulting in their diverse roles as intensifiers, sentiment words, and theticals.

I believe that this chapter makes a significant contribution to the accurate and comprehensive description and understanding of the historical development of NEWs, an area that has been insufficiently addressed until now. By utilizing real corpus data, this study provides a robust foundation for these insights.

Moreover, this approach has broader implications beyond the specific study of Hungarian NEWs. By analyzing these varieties in a language-independent context, this research contributes to a more general understanding of the semantic-pragmatic development of NEWs within human language as a whole. This perspective allows for the identification of universal patterns and mechanisms of language evolution that are applicable across diverse linguistic contexts.

Additionally, I argue that my detailed, data-driven study of NEWs can significantly contribute to general theories of language change, offering wideranging implications for both linguistic theory and practice. The empirical foundation provided by this research ensures that the findings are not only accurate but also reflective of actual language use, thereby filling a gap in the existing literature.

#### Recommended literature

- Ahn, M., & Yap, F. H. (2022). On the evolution of a multifunctional discourse marker: A Discourse Grammar analysis of Korean com. *Journal of Pragmatics*, 195, 31-47. https://doi.org/10.1016/j.pragma.2022.01.013
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### Summary and guiding questions, tasks

- 1) Exploring the pragmatic functions of *durva* in communication: Understand how NEWs function pragmatically in real-life communication.
  - a. Gather a variety of examples of durva from a conversational corpus or a set of recorded dialogues. Aim to include different contexts, such as casual conversations, debates, or storytelling sessions.
  - b. For each example, analyze and categorize the function of *durva*. Consider whether it is used to express surprise, criticism, admiration, or any other emotional or evaluative stance. Use the following guiding questions: What is the speaker's intention in using durva? How does the context influence its meaning? What effect may *durva* have on the listener's interpretation?
  - c. Compare your findings with the analysis presented in the automotive corpus of this study. Highlight any similarities or differences in the usage and functions of *durva*.
- 2) Investigating lexical entries of a choosen NEW in Hungarian dictionaries
  - a. Examine the lexical entries of a specific NEW (other than *durva*).
  - b. Pay attention to definitions, example sentences, and usage notes. What meanings and functions are mentioned? Are there any meanings or uses that seem missing or underexplored?
  - c. Based on real-world examples you have collected, propose improvements to the dictionary entries.
- 3) Trace the historical development of a selected NEW.
  - a. Use an etymological dictionary to research the origins and historical development of a NEW (other than *durva*).
  - b. Search for examples of this NEW in historical corpora. Aim to find texts from different periods to see how its meanings and uses have evolved. Consider using online databases, archives, or library resources.
  - c. Try to identify and discuss any notable changes in the meanings and uses of the NEW over time.
- 4) An extra task: Creative Writing: Exploring NEWs' semantiepragmatic potential

- a. Create a short story or dialogue incorporating several NEWs. Ensure that the NEWs are used in various contexts to showcase their semantic and pragmatic potential.
- b. Use the NEWs in a way that highlights their different meanings and functions.
- c. After writing your story or dialogue, annotate each instance of the NEWs. For each occurrence, explain the meaning and function of the NEWs in their specific context, and analyze how the context affects its interpretation and impact on the reader or listener.

#### IX. CONCLUDING REFLEXIONS

This monograph addresses a notable gap in both Hungarian and international linguistic literature by providing a thorough and comprehensive examination of Negative Emotive Words (NEWs), a phenomenon that transcends specific languages and reflects broader linguistic principles. Despite the proliferation of individual studies on this topic, a dedicated, monographic exploration of NEWs has been notably absent until now. This work fills that void, offering a detailed review and analysis of this intriguing linguistic category.

At the outset of this book, I laid the groundwork by discussing the fundamental linguistic characteristics of NEWs and establishing the key terminology necessary for understanding their roles and functions. The initial chapters provided an overview of the semantic evolution of NEWs and explored the psychological motivations that underpin their use. This foundation was critical for understanding the subsequent, more detailed analyses.

The central portion of the book focused on corpus-based research, offering a nuanced perspective through empirical data. By delving into previous studies that utilized corpus-linguistic methodologies, this work underscores the value of such approaches in analyzing NEWs. A significant portion of the analysis centered on the Hungarian term *durva* ('coarse, rough'), using both synchronic and diachronic perspectives to highlight the complexities and variations in its usage. This extensive corpus-based analysis illustrates the richness of NEWs and their significance within linguistic research, demonstrating how empirical data can illuminate theoretical discussions.

The final section (with its three subsections) of the book extend the discussion into theoretical realms, integrating findings from corpus analyses to explore the meanings, functions, and grammatical placement of NEWs. This theoretical exploration builds upon the empirical results, offering a detailed examination of the semantic development of NEWs and their evolution over time

By synthesizing insights from both empirical data and theoretical frameworks, this book aims to contribute to a more nuanced understanding of NEWs and their place within linguistic systems. In addition to presenting a systematic review of the existing literature and providing a thorough analysis of empirical data, this book offers valuable resources for further research. The inclusion of linguistic materials from corpus examinations in the appendices provides a practical resource for future investigations, facilitating further exploration of NEWs through authentic language examples.

The book also offers a variety of tasks and literary recommendations aimed at further exploring and understanding NEWs. These include corpus analysis tasks and lexical entry investigations, which are crucial for gaining deeper insights into the pragmatic functions and semantic roles of NEWs. The tasks involve examining NEWs within different corpora to uncover their contextual usage and pragmatic functions. Analyzing NEWs in various communicative settings helps researchers or students comprehend how these words function in real-world language use and explore the semantic-pragmatic shifts of these intriguing language elements over time. Additionally, the literary recommendations direct readers to supplementary resources that can expand their understanding and provide new perspectives on the semantic and pragmatic dimensions of NEWs.

By addressing a significant research gap and providing a comprehensive analysis of NEWs from both synchronic and diachronic perspectives, this monograph aims to make a substantial contribution to the field of linguistics. It is hoped that this work will inspire further scholarly inquiry into the complexities of NEWs, advancing our understanding of their linguistic nature and their role in human communication. This book is intended not only to enhance the academic discussion surrounding NEWs but also to serve as a foundation for future research endeavors, enriching the study of this multifaceted linguistic phenomenon.

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Appendix 1. Words modified by durva as an intensifier, sorted by their overall frequency.

HEAD	EN	count	COLLSE NT
szabálysértés	'rule violation'	39	neg
megsértés	'violation'	34	neg
szabályszegés	'rule breaking'	34	neg
hiba	'failure'	30	neg
szabálytalanság	'malpractice'	17	neg
fékezés	'braking'	16	neut
megszegés	'[rule] breaking'	12	neg
bukás	'fall'	11	neg
baleset	'accident'	11	neg
gázadás	'acceleration'	11	neut
szabálysértő	'violator'	7	neg
figyelmetlenség	'inattention'	5	neg
ütés	'hit'	4	neg
közlekedési	'traffic violation'	4	neg
szabályszegés			
beavatkozás	'intervention'	4	neut
motorfékezés	'applying engine brake'	3	neut

lökés	'push'	3	neg
szerelési hiba	'installation error'	3	neg
módon megsért	'violate sg somehow'	3	neg
gyorsítás	'speed up'	3	neut
visszaváltás	'change the gear back'	3	neut
igénybevétel	'stress'	3	neut
kigyorsítás	'acceleration'	3	neut
akadály	'barrier'	3	neg
teljesítményleadás	'power output'	3	neut
esés	'fall'	2	neg
farkitörés	'vehicle rear skid'	2	neg
gondatlanság	'negligence'	2	neg
erőszak	'impairment'	2	neg
rongálás	'vandalism'	2	neg
járdázás	'jumping onto	2	neg
. 1 1/ /1/	pavement'		
terhelésváltás	'load change'	2	neut
különbség	'difference'	2	neut
erőhatás	'force'	2	neut
rongálódás	'get damaged'	2	neg
vétség	'offense'	2	neg
vezetői hiba	'driver failure'	2	neg
szennyeződés	'contamination'	2	neg
vibráció	'vibration'	2	neg
járművezetési	'violation of driving	2	neg
szabálysértés	rules' 'swelter'	2	
strapa mulasztás			neg
	'failure'	2	neg
provokálás	'provocation'	2	neg
gumidefekt	'puncture'	1	neg
kézsérülés	'hand injury'	1	neg
korróziós nyomok	'signs of corrosion'	1	neg
korrózió	'corrosion'	1	neg
korrigálandó állapot	'condition needing correction'	1	neg
gyorshajtás	'speeding'	1	neg

kopás	'abrasion'	1	neg
kivitelezési hiba	'construction failure'	1	neg
kerékkipörgés	'wheel-spinup'	1	neg
lelki inzultus	'emotional abuse'	1	neg
javításnyom	'repair mark'	1	neg
közlekedési szabálysértés	'traffic rule offense'	1	neg
mechanikus meghibásodás	'mechanical failure'	1	neg
lemezhiba	'plate failure'	1	neg
lerakódás	'deposition'	1	neg
lábszártörés	'shin fracture'	1	neg
módon gondatlan	'negligent somehow'	1	neg
geller	'ricochet'	1	neg
félrevezetés	'misleading'	1	neg
megsértő	'breaking [law]'	1	neg
megterhelés	'burden'	1	neg
mozdonyvezetői hiba	'engine driver's fault'	1	neg
fékproblémák	'brake problems'	1	neg
módon beleszól	'interfere somehow'	1	neg
ledorongolás	'repulsing'	1	neg
javítási hiba	'repair failure'	1	neg
regresszió	'regression'	1	neg
módon megszeg	'break [rule] somehow'	1	neg
nemtörődömség	'negligence'	1	neg
ütköztetés	'collision'	1	neut
nyomatékvesztés	'torque loss'	1	neg
olajfolyás	'oil leak'	1	neg
pofozkodás	'slapping'	1	neg
fékcsikorgás	'brake screeching'	1	neg
puffanás	'dump'	1	neg
torpanás	'stop short'	1	neg
repedés	'crack'	1	neg
rongálási cselekmény	'vandalism act'	1	neg
forgalomritmus-törés	'breaking the traffic pace'	1	neg

rontás	'worsening'	1	neg
rozsdásodás	'corrosion'	1	neg
rángatás	'lugging'	1	neg
rázkódás	'shaking'	1	neg
sebességtúllépés	'speeding'	1	neg
semmibevevés	'disregard'	1	neg
foltozás	'patching'	1	neg
foglalkozási szabályszegés	'duty rule violation'	1	neg
foglalkozási kötelességszegés	'duty breaching'	1	neg
figyelmen kívül hagyás	'neglecting'	1	neg
felelőtlenség	'irresponsibility'	1	neg
szarvashiba	'blunder'	1	neg
fejfájás	'headache'	1	neg
szerződésszegés	'violation of contract'	1	neg
sértegetés	'vituperation'	1	neg
horpadás	'dent'	1	neg
terepezés	'off-road driving'	1	neut
térdsérülés	'knee injury'	1	neg
eróziós kopások	'erosive wear'	1	neg
vezetési hiba	'driver failure'	1	neg
vezetési túlzás	'extreme driving'	1	neg
erőszakosság	'fiercefulness'	1	neg
visszalépés	'step back'	1	neg
zavarás	'interfering'	1	neg
áremelés	'rise in prices'	1	neg
építési hiba	'construction fault'	1	neg
öntési hiba	'molding fault'	1	neg
bukta	'pitfall'	1	neg
összetűzés	'confrontation'	1	neg
önzés	'egoism'	1	neg
edzésbalesete	'training accident'	1	neg
tömítetlenség	'leakage'	1	neg
felengedés	'release'	1	neut

elfékezés	'malbraking'	1	neg
erőbehatás	'force impact'	1	neut
úthiba	'bump'	1	neg
eltérés	'deviation'	1	neg
erő	'power'	1	neut
balrarántás	'pulling left'	1	neut
adagolás	'dosage'	1	neut
üzemzavar	'malfunction'	1	neg
ütődés	'bump'	1	neg
harag	'anger'	1	neg
törvénysértés	'violating the law'	1	neg
csíny	'prank'	1	neg
hajtási befolyás	'driving influence'	1	neut
hajlat	'curve'	1	neut
használat	'use'	1	neut
beázás	'leak'	1	neg
kanyarodás	'turning'	1	neut
kiadás	'expenditure'	1	neut
bevágás	'unexpected pass'	1	neg
kihajtás	'driving off'	1	neut
kihívás	'challenge'	1	neut
kisütés	'discharge'	1	neut
kormánymozdulat	'steering wheel	1	neut
korrekció	movement' 'correction'	1	neut
közbeszólás	'interruption'	1	
beskatulyázás	'labelling'	1	neut
gázpedálkezelés	'pressing the gas pedal'	1	neg
behatás	'influence'	1	
méretváltozás	'size changing'	1	neg
			neut
műszaki átalakítás	'technical conversion'	1	neut
nyom	'trace'	1	neut
becsapódás	'crash'	1	neg
támaszkodás	'reliance'	1	neut
ugrató	'barrier'	1	neut

KRESZ-szabálysértés	'highway code offense'	1	neg
váltás	'shifting'	1	neut
lassítás	'slowing down'	1	neut
turbulencia	'turbulence'	1	neg
[Typographical error in which the intensifier function is revealed, but further analysis is not substantiated.]	-	1	-

Appendix 2. Words modified by durva as a sentiment word, sorted by their overall frequency.

HEAD	EN	count	COLLS ENT
pálya	'track'	6	neut
[a whole clause]	-	6	-
eset	'case'	4	neut
járás	'pace'	4	neut
körülmény	'circumstance'	3	neut
manőver	'maneuver'	2	neut
munka	'work'	2	neut
módszer	'method'	2	neut
szakasz	'phase'	2	neut
szám	'number'	2	neut
Akropolisz rali	'Acropolis race'	1	neut
szelephang	'valve noise'	1	neut
következmény	'result'	1	neut
menetteljesítmé ny	'traveling performance'	1	neut
motor	'engine' / 'motorcycle'	1	neut

műszaki rajz	'technical drawing'	1	neut
optikai kiegészítő	'optical accessory'	1	neut
Insignia OPC változata	'OPC version of Insignia'	1	neut
példa	'sample'	1	neut
sportülés	'sport seat'	1	neut
szellemi világ	'spiritual world'	1	neut
BMW X5-ös	'BMW X5'	1	neut
szólam	'voice'	1	neut
terep	'terrain'	1	neut
terepezés	'off-road driving'	1	neut
tél	'winter'	1	neut
törvény	'law'	1	neut
verseny	'race'	1	neut
veterán Volvo	'veteran Volvo'	1	neut
viszony	'relation'	1	neut
vonalvezetésű	'outlined'	1	neut
zene	'music'	1	neut
ügy	'case'	1	neut
üzemmód	'mode'	1	neut
kör	'round'	1	neut
kocsi	'car'	1	neut
kisugárzás	'radiation'	1	neut
didi	'tits'	1	neut
Budapest	'Budapest'	1	neut
Dacia	'Dacia'	1	neut
Dodge	'Dodge'	1	neut
Honda Civic Turbo	'Honda Civic Turbo'	1	neut
Insignia OPC	'Insignia OPC'	1	neut
Octavia	'Octavia'	1	neut
RS6-os	'RS6'	1	neut
VR6-os motor	'VR6 motorcycle'	1	neut
X6-os	'X6'	1	neut

afrikai	'African requirements'	1	neut
követelmények	_		
bejáratási	'running-in route'	1	neut
útvonal			
csapattaktika	'team tactic'	1	neut
csillapítás	'mitigation'	1	neut
dolog	'thing'	1	neut
tréfa	'prank'	1	neg
eredmény	'result'	1	neut
erőgép	'power-machine'	1	neut
22 B replika	'22 B replica'	1	neut
fejlemény	'outcome'	1	neut
fékrendszer	'braking system'	1	neut
féktáv	'braking distance'	1	neut
hang	'sound'	1	neut
hangnem	'tone'	1	neut
helyzet	'situation'	1	neut
hidegindítás	'start from cold'	1	neut
holnap	'tomorrow'	1	neut
idő	'weather'	1	neut
időjárási	'weather condition'	1	neut
viszony			
szupersportautó	'super sport car'	1	pos