

LATVIJAS UNIVERSITĀTE

BAKALAURA DARBS

RĪGA 2018

UNIVERSITY OF LATVIA
FACULTY OF HUMANITIES
DEPARTMENT OF ENGLISH STUDIES

ABBREVIATIONS IN ARTICLES ON START-UPS
ABREVIATŪRAS RAKSTOS PAR JAUNUZŅĒMUMIEM

BACHELOR THESIS

Paula Auzāne

Matriculation card No. pa14002

Adviser: Dr. philol. Laura Karpinska

RĪGA 2018

ANOTĀCIJA

Abreviatūru veidošana ir arvien biežāk novērojams fenomens mūsdienu valodās. Šajā darbā apskatītas vairākas vārdu darināšanas metodes, bet īpaša uzmanība pievērsta abreviatūrām un to lietojumam rakstos par jaunuzņēmumiem. Pētījumā konstatēts, ka visa veida saīsinātās formas korpusā parādās aptuveni vienreiz pa katriem 50 vārdiem. Tika atklāts, ka lielākā daļa no abreviatūrām korpusā ir saīsinājumi, bet rakstos tika atrasti arī iniciāļismi, strupinājumi, teleskopējumi un akronīmi. Kā paredzēts, korpusā visbiežāk sastopamās bija abreviatūras no biznesa un uzņēmējdarbības jomas. Nākotnes pētījumi izpētes vērienu varētu paplašināt, aplūkojot abreviatūras no diahroniskas perspektīvas.

Atslēgvārdi: abreviatūras, frekvenčanalīze, jaunuzņēmumi, vārdu darināšana

ABSTRACT

The creation of abbreviations is an increasingly frequent phenomenon in modern languages. In this paper, various word-formation methods are investigated, but a special attention is paid to abbreviations and their use in articles on start-ups. It was found that shortened forms of all types show up once for approximately every 50 words in the corpus. The majority (around 3/4ths) of the abbreviations in the corpus were discovered to be contractions, but initialisms, clippings, blends and acronyms were also encountered in the articles. As expected, business- and entrepreneurship-related abbreviations dominated the corpus. Future studies could broaden the scope of the research by exploring abbreviations from a diachronic perspective.

Key words: abbreviations, frequency analysis, start-ups, word-formation

CONTENTS

INTRODUCTION.....	1
1. WORD AND WORD-FORMATION	2
1.1. <i>Word</i> and its components.....	2
1.2. Word-formation as a process of word creation	5
1.3. Types of word-formation	9
2. THE CONCEPT OF <i>ABBREVIATION</i>	14
2.1. The definitions of the term <i>abbreviation</i>	14
2.2. The importance and functions of abbreviations	16
2.3. The conventions for using abbreviations	18
2.4. Types of abbreviations	21
3. EMPIRICAL RESEARCH	25
3.1. Qualitative and quantitative research methods.....	25
3.2. The corpus.....	27
3.3. The results of the analysis	27
3.3.1. Frequency analysis	28
3.3.2. Classification of abbreviations	34
3.3.2.1 Contractions	35
3.3.2.2 Initialisms and acronyms	37
3.3.2.3 Clippings.....	39
3.3.2.3 Blends	41
3.3.1. Semantic fields.....	43
CONCLUSIONS	45
THESES.....	46
REFERENCES.....	47
Appendix 1	51
Appendix 2	58

INTRODUCTION

In his 1935 book *The Psycho-Biology of language*, American linguist George Kingsley Zipf observed a rule: ‘the magnitude of words tends, on the whole, to stand in an inverse (not necessarily proportionate) relationship to the number of occurrences’ (1935: 23). That is to say, the shorter a word is, the more frequently it tends to be used. If we believe Zipf’s findings, abbreviations should play an important role in the modern English language, and indeed: recent research points to the fact that abbreviation as a word-formation process is an increasingly frequent phenomenon in modern languages (Zerkina, 2015, Veisbergs, 2013). While this shortened form has been a point of interest for many linguists, not much research has been carried out on the topic of abbreviations in the field of entrepreneurship in particular. Therefore, the **goal** of this thesis is to investigate the abbreviations used in articles on start-ups. To reach this objective, the following **research questions** have been formulated:

1. What are the attributes characteristic to abbreviation as a word formation process and to the shortened forms resulting from it?
2. What are the most common abbreviations in the corpus, how can they be classified into types, and to what semantic fields do they belong?

To answer the questions, the following **enabling objectives** were set:

1. to analyse the available theory on abbreviations and investigate the definitions of the term *word* and the concepts of *word-formation* and *abbreviation*;
2. to determine the most frequently occurring abbreviations in the articles, to categorize the shortened forms into types and to sort them into semantic fields;
3. to draw relevant conclusions.

To reach the objective and respond to the research questions, a theoretical framework based on the previous research on abbreviations was first established. Then, abbreviations from 35 articles were analyzed using the **method** of frequency analysis to reveal such data as the most frequently used shortened form in the corpus, the types of these abbreviations and the semantic fields to which they belong.

The first two chapters are devoted to establishing the theoretical background of the study. In them, the concepts of *word*, *word-formation* and *abbreviation* are defined and explored in detail. In the third chapter, the methodology and corpus is described, and the results of the analysis are presented. Finally, a summary of the findings of both the theoretical and practical research is presented in conclusions.

1. WORD AND WORD-FORMATION

In order to gain a deeper understanding about the process of abbreviation, a thorough comprehension of the different processes of *word-formation* is first required. *Word-formation*, the principal theme of this chapter, is the creation of new, complex word-forms from existing words or word-parts. In order to explore this topic, the term *word* is first defined, and the constituent parts of a word are named. Then, the concept of *word-formation* in general is explained, followed by a subchapter which introduces, compares and describes the main word-formation processes. This chapter provides an overview of the theories of Müller (1955), Bauer (1983), Plag (2003), Crystal (2009) and more authors, defines the main terms and explains the key concepts.

1.1. *Word* and its components

Words describe the world around us. As Spender remarks,

in order to live in the world, we must name it. Names are essential for the construction of reality for without a name it is difficult to accept the existence of an object, an event, a feeling. Naming is the means whereby we attempt to order and structure the chaos and flux of existence which would otherwise be an undifferentiated mass (Spender, 1980, quoted in Cameron, 1998: 97).

As word-formation is a central topic of this thesis, it is useful to first define the term *word*. That is not an easy task. Julien refers to Bussmann who writes that even though *word* is a ‘term used intuitively in everyday language for a basic element of language, numerous linguistic attempts at defining the concept are not uniform and remain controversial’ (Bussman, 1996, quoted in Julien, 2002: 16). Oynsko and Michel write that words are ‘merely abstract labels for categorizing objects, qualities and actions in the world’ (2010: 1). Katamba defines a word as ‘the smallest meaningful linguistic unit that can be used on its own. It is a form that cannot be divided into any smaller units that can be used independently to convey meaning’ (2015: 11). Similarly, Sapir defines word as ‘one of the smallest, completely satisfying bits of isolated “meaning” into which the sentence resolves itself’ and which ‘cannot be cut into without a disturbance of meaning’ (1921: 35). According to Crystal, a word is ‘a unit of expression which has universal intuitive recognition by native speakers, in both spoken and written language’ (2009: 521).

In literature, three main meanings of the term *word* are usually discerned. In the first sense, a word is simply ‘a unit in the writing system’, that is, ‘an uninterrupted string of letters which is preceded by a blank space and followed either by a blank space or a punctuation mark’, and is called an **orthographic word** (Plag, 2003: 4). Plag mentions several drawbacks to looking at a word from a purely orthographic point of view, the principal one being that ‘a purely orthographic notion of word would have the disadvantage of implying that illiterate speakers would have no idea about what a word might be’ (ibid.: 6).

In the second, and a wider sense, a word is an abstract unit that represents ‘all the possible shapes that the word can have’ (Bauer, 1983: 11), or ‘the common factor underlying the set of forms which are plainly variants of the same unit’ (Crystal, 2009: 522). The term **lexeme** is used for this sense of the word. Matthews says that a lexeme is the ‘fundamental unit of the lexicon of the language’ (1974: 22). Bauer explains that the “‘words” *shoot, shoots, shooting* and *shot* are all subsumed under the lexeme *shoot*’ (1983: 11). Jackson and Amvela agree: ‘the different forms of the word *speak*, i.e., *speak, speaks, speaking, spoke* and *spoken* are separate words grammatically’ (2007: 59).

In the third sense, word is defined as a ‘grammatical unit whose function is to show how words work in the grammar’ (Crystal, 2009, quoted in Havránková, 2013: 11). It is then referred to as a **morphemic** or **grammatical word** (ibid.).

Words with independent meanings, which ‘may be meaningful even in isolation or in a series’, are called **lexical words** (Jackson and Amvela, 2007: 59). These are nouns, verbs, adjectives and adverbs. Jackson and Amvela note:

[the word] *bottle* has an independent meaning; and so does the series *boy, break, bottle, stone*. On the other hand, a word such as *a, with*, or a series such as *a, the, to, with* does not automatically suggest any identifiable meaning. [...] **Grammatical words** are elements like prepositions, articles, conjunctions, forms indicating number or tense, and so on (ibid.).

Zapata elaborates:

lexical (content or referential) morphemes are free morphemes that have semantic content (or meaning) and usually refer to a thing, quality, state or action. [...] Actually, lexical morphemes constitute the larger class of morphemes. They form the **open class of words** (or **content words**) in a language, i.e., a class of words likely to grow due to the incorporation of new members into it.

and

function(al) or **grammatical morphemes** are free morphemes which have little or no meaning on their own, but which show grammatical relationships in and between sentences (2007: 1).

Words can be simple, if they are ‘composed of one constituent only, like *bat*’ (Adams, 2016: 3), or they may be complex, ‘containing more than one constituent, such as *blackbird*, *fourth*’ (ibid.). Understanding the structure of words is vital for a better comprehension of the processes governing word-formation. Müller writes:

morphological considerations related to the constituents of complex lexemes and the formation rules and schemas naturally form the core of word-formation research, since a solid understanding of the composition of complex lexemes and their internal structure is required for all other levels of investigation (1955: 9).

Words consist of one or more elements called morphemes. Radford calls morpheme ‘the smallest component of a word which contributes to its meaning’ (2009: 140); metaphorically, Booij refers to morphemes as the ‘atoms of words’ (Booij, 2005, quoted in Oynsko and Michel, 2010: 4). Pandey writes that ‘morphemes or meaning units that can stand on their own are termed **free morphemes**, **roots** or **stems**. [...] Those that must be attached to other parts in order to make sense are called **fixed** or **bound morphemes** or **affixes**. They include prefixes, infixes and suffixes’ (2015: 24). Figure 1.1 shows Zapata’s classification of morphemes.

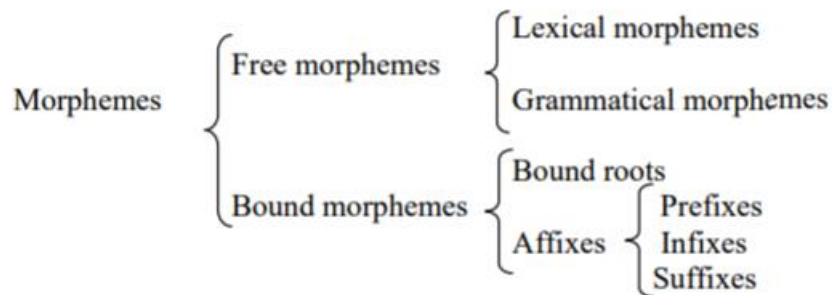


Figure 1.1 Classification of morphemes (Zapata, 2007: 2).

Havránková notes: ‘bound morphemes can only be used in combination with other morphemes to produce a word because they have no meaning on their own and therefore they normally cannot stand alone’ (2013: 12). Zapata writes:

bound roots are those bound morphemes which have lexical meaning when they are attached to other bound morphemes to form content words; e.g., *-ceive* in *receive*, *conceive*; *-tain* in *retain*, *contain*; *plac-* in *implacable*, *placate*; *cran-* in *cranberry*, etc. Notice that bound roots can be prefixed or suffixed to other affixes (2007: 1-2).

Radford explains: ‘a morpheme such as *-er/or* added to the right of a root is a suffix. One added to the left of the root, such as *re-*, is a prefix’ (2009: 140).

Havránková divides all suffixes into two groups: the purely lexical suffixes that change the meaning of the base form, and purely grammatical or inflectional suffixes ‘that indicate how the word is used in a sentence’ (2013: 13). Ballard adds that an infix is a ‘bound morpheme which is inserted within the word’ (2001: 53).

Havránková explains that infixes are used in a very restricted manner, ‘usually to express emotion or emphasis, e.g. *absogoddamlutely, unfuckinbelievable*’ (2013: 13).

An illustration of the concepts introduced above can be seen in Figure 1.2, as found in Müller’s book on word-formation (1955). In it, the word *nationalized* is broken down into its components: the free and bound lexical morphemes.

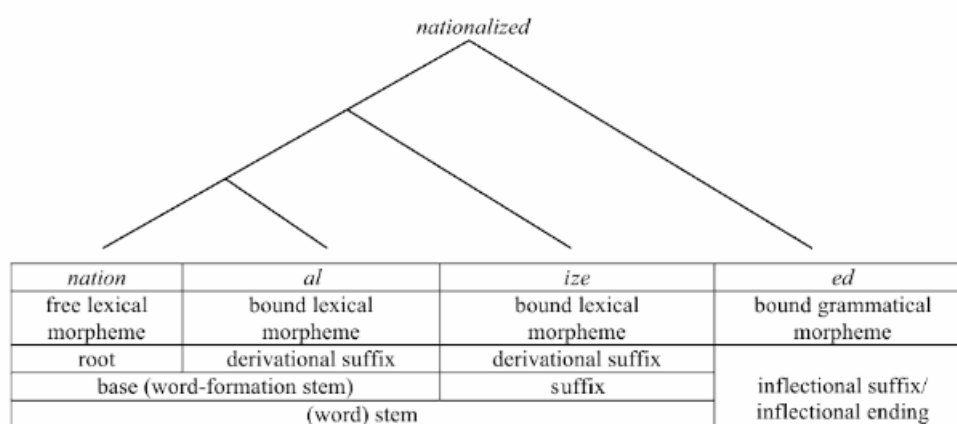


Figure 1.2 Terms used for the description of the internal structure of complex lexemes (Müller, 1955: 5).

Veisbergs points out that ‘the basic wordstock of English consists of one-morpheme [...] words where the root morpheme is both the independent word and the stem for word-formation’ (1997: 7). One-morpheme words are called monemes (Fandrych, 2004: 7).

In this subchapter, the definitions of the term *word* have been reviewed, and the elements that compose a word have been looked into. In the following subchapter, the process of word-formation will be examined in detail.

1.2. Word-formation as a process of word creation

Several scholars provide different definitions of the term *word-formation*, though, as the term itself reveals, it principally describes the process of creation of new words.

Havránková defines word-formation as ‘the creation of new words on the basis of already existing words or parts of words’ (2013: 7). Bauer provides a similar definition, stating that ‘word-formation deals with the formation of new lexemes from given bases’ (1983: 33). Later in the text, Bauer clarifies that ‘word-formation can [...] be defined as the production of complex forms. *Complex* is used by [...] scholars to mean ‘produced by derivation’ (ibid.). Plag considers word-formation to be the composition of words ‘by putting together smaller elements to form larger words with more complex meaning (morphologically complex words)’ (2003: 12). He explains how existent words can be used to produce new, complex word-forms:

there is a host of possibilities speakers of a language have at their disposal (or had so in the past, when the words were first coined) to create new words on the basis of existing ones, including the addition and subtraction of phonetic (or orthographic) material. The study of word-formation can thus be defined as the study of the ways in which new complex words are built on the basis of other words or morphemes (ibid.: 17).

Talking about the importance of word-formation from a linguistic perspective, Lipka refers to Marchand who claims that ‘word-formation is that branch of the science of language which studies the patterns on which a language forms new lexical units, i.e., words. Word-formation can only be concerned with composites which are analysable both formally and semantically’ (Marchand, 1969, quoted in Lipka, 2002: 1). Adams writes that word-formation is the ‘[permutation of] existing words and parts of words to make new combinations’ (2016: 1). Fandrych notes that ‘mainstream word-formation looks at how morphemes [...] form new transparent complex lexemes. These new [lexemes] are transparent or motivated: speakers can deduce the meanings of these new formations, provided they know the meanings of the constituents’ (2004: xi). Müller agrees: ‘word-formation research investigates the patterns and regularities underlying the formation of complex lexemes by means of existing building blocks with the aim of formulating rules and other types of generalizations’ (1955: 1). He continues: ‘competent speakers are not only able to segment complex words into their constituents, but also use the results of such analyses for their own generative potential to create new words’ (ibid.: 9). However, Müller points out that

many practitioners of word-formation research distinguish word-formation (in a narrow sense) from ways of extending the lexical resources which do not involve changes in the forms of linguistic signs, mainly metaphorical or

metonymic transfers and other forms of lexical change resulting in purely semantic extensions or shifts (ibid.: 2).

Furthermore, Müller distinguishes between word-formation and coinage, word-creation or word manufacture, ‘which does not rely on existing building blocks’, giving the examples of product and brand names such as *Kodak* or *Google* (ibid.).

Oynsko and Michel state that word-formation refers to the ‘general creative capability of the human mind to construct and label new concepts, also by combining existing mental categories’ (2010: 2). Booij believes that the process of word-formation can be best described as ‘rule-governed creativity’ (Booij, 2005, quoted in Oynsko and Michel, 2010: 3). Booij goes on to say that ‘word-formation is rule-governed, but that rules are complex and far from obvious’ (ibid.). Adams agrees that ‘word-formation is interestingly rule-bound’ (2016: 1). At the same time, Müller points out that ‘word-formation research tries to provide adequate models of the creative and dynamic aspects of word-formation’ (1955: 2).

Crystal distinguishes between, in the general sense, ‘the whole process of morphological variation in the constitution of words’ which includes the divisions of inflection and derivation, and, in a more restricted sense, the derivational processes only (2009: 523-524). It must be noted, however, that the notions of word-formation and inflection are usually strictly separated from each other. Štekauer explains that the fundamental difference between inflection and word-formation lies in the fact that only the latter, but not the former, creates new naming units (1998: 49). Inflection, on the other hand, only ‘contributes a morpheme that is required in order to ensure that the word has a form that is appropriate for the grammatical context in which it is used’ (Katamba, 2015: 53). Katamba gives an example: ‘if we have a third person subject, a present tense verb agreeing with it must take the *-s* ending; anything else is forbidden’: ‘*She runs her business very efficiently*’, as opposed to ‘*She run her business very efficiently*’ or ‘*She running her business very efficiently*’ (ibid.). Table 1.1 summarizes the differences between derivational and inflectional processes, as listed in Plag’s book *Word-Formation in English*:

Table 1.1 Derivational and inflectional processes (Plag, 2003: 16).

Derivation	Inflection
-encodes lexical meaning	-encodes grammatical categories
-is not syntactically relevant	-is syntactically relevant

-can occur inside derivation	-occurs outside all derivation
-often changes the part of speech	-does not change the part of speech
-is often semantically opaque	-is rarely semantically opaque
-is often restricted in its productivity	-is fully productive
-is not restricted to suffixation	-is always suffixational (in English)

Fandrych describes the importance of understanding and categorizing the various word-formation processes:

new words appear every day; some words are coined to name new phenomena, inventions or processes; others re-categorise and re-label familiar referents, particularly in the area of slang. But not only does the lexicon reflect the times in which we are living; beyond this, the particular patterns according to which new lexical items are formed have a story to tell in their own right: different times display different preferences for certain word-formation processes (2004: 1).

Fandrych refers to Marchand who details a five-step analysis of word-formation processes:

a) description of the morphologic form, that is, the isolation of morphemes:

steamboat < *steam* n + *boat* n

rewrite < *re-* prf + *write* v

b) description of the morphologic structure, that is, isolating the immediate constituents:

steam / *boat*

re- / *write*

c) description of the grammatical deep structure, that is of the syntactic relations prevailing in the underlying sentence:

'steam operates the boat'

d) determining the 'type of reference':

*'steam operates the **boat**'*

e) the specific meaning of the word, that is, the new total meaning which goes beyond the sum of the meanings of the constituents, must be explained at surface level' (Marchand, 1969, quoted in Fandrych, 2004: 9-10).

Marchand elaborates: 'This five-step analysis works well for word-formation processes such as compounding and affixation, and it can be extended and adapted to the analysis of zero-derivation and back-formation' (Marchand, 1969, quoted in Fandrych, 2004: 10).

To sum up the above definitions, word-formation can be said to be the creation of new, complex word-forms (lexemes) from existing words or word-parts (morphemes) via the rule-governed process of derivation and other word-forming techniques, such as the addition or subtraction of phonetic or orthographic material. In

the English language, there are several methods for the joining of morphemes to create new lexemes, and these word-formation techniques will be explored in detail in the next subchapter.

1.3. Types of word-formation

Several classifications of types of word-formation exist in literature. However, as Müller points out, ‘while most researchers agree on a set of basic types of word-formation processes, there has been considerable controversy over the precise way in which they should be modelled’ (1955: 2). This sub-chapter introduces, compares and describes these systems of classification. The process of abbreviation is only briefly described in this overview. It is dealt with in more depth in a separate sub-chapter.

Plag distinguishes between **concatenative** and **non-concatenative** methods of forming morphologically complex words (2003: 12). He explains that concatenation is the process of ‘linking together bases and affixes as in a chain’ (ibid.). Plag mentions **compounding** or the combination of two or more bases as an example of concatenation, and lists *apartment building*, *greenhouse*, *team manager* and *truck driver* as cases in point (ibid.). Havráňková refers to Adams who adds that compounds, ‘though clearly composed of two elements, have the identifying characteristics of single words’ (Adams, 1973, quoted in Havráňková, 2013: 18). On the other hand, non-concatenation is, for instance, **conversion** or **zero-suffixation**: the turning of nouns into verbs by adding nothing at all to the base. Plag gives the example of the noun *water*, which can also be used as a verb meaning *to provide water*, as in *John waters his flowers every day* (2003: 12). Havráňková writes that conversion is also given the labels **category change**, **functional shift**, **syntactic homonymy** and **zero-derivation** (2013: 15). Discussing conversion, Müller refers to Valera who says that ‘the form of the converted item does not change, while its inflectional potential, its syntactic function and its meaning do, such that the item displays inflectional, syntactic and semantic properties of a new word-class’ (Valera, 2012, quoted in Müller, 1955: 7). According to Plag, another example of non-concatenative morphology is **truncation** or **clipping**, defined as deletion of material: parts of the base word. An example of truncation is the shortening of given names, especially English Christian names: so Ron is a truncation of Aaron, and Liz is a truncation of Elizabeth (2003: 13). Plag also names several other methods of forming

words: **diminution**, when truncation and affixation occur together to form words expressing intimacy or smallness (for instance, Mandy being the diminutive form of Amanda); **blends** or ‘amalgamations of parts of different words’, such as *smog* (*smoke/fog*); **acronyms** or ‘blends based on orthography [...] which are coined by combining the initial letters of compounds or phrases into a pronounceable new word (*NATO*, *UNESCO*, etc.)’; and simple **abbreviations** like *UK* or *USA* (ibid.).

Furthermore, Plag distinguishes between simple inflection as part of the grammar and derivation as part of word- (or lexeme) formation (ibid.). However, Müller points out that ‘word-formation and inflectional morphology are not separated by a clear boundary’ (1955: 1). To give an example, Müller mentions the ‘dispute over whether the English adverb-forming suffix *-ly* as in *really* or *elegantly* should be treated as a derivational, i.e., lexical, or inflectional and thus grammatical morpheme’ (ibid.). Ljung also distinguishes between two similar kinds of word formation: one that he calls ‘regular word formation’ and which ‘concerns the process of adding inflections to words in order to create words that belong to another grammatical category, for example through adding a suffix to a noun and thereby creating an adverb or adjective’, and another that he calls ‘irregular word formation’ and which ‘creates new words and enriches the vocabulary’ (Ljung, 2003, quoted in Lundell, 2012: 5).

Štekauer and Lieber write that by word-formation they primarily mean the processes of **derivation**, **compounding** and **conversion** (2006: xvii). Müller explains: ‘derivation [...] is the process of adding an affix to a stem, or a bound lexical morpheme to a free one, in order to create a new lexeme. The main forms of derivation are prefixation or prefix-derivation, where the bound morpheme precedes the free one, and suffixation or suffix-derivation where the order is reversed’ (1955: 6). Havránková calls derivation ‘a highly productive process’ but explains that ‘inflectional affixes do not generate new naming units’ (2013: 15). Beltrán and José refer to Quirk *et al.* who classifies derivation as the ‘commonest’ of all word-formation processes (Quirk *et al.*, quoted in Beltrán and José, 2017: 6).

Müller classifies the major types of word-formation patterns into **morphemic patterns** and **non-morphemic patterns** (see Figure 1.3; 1955: 7). He explains: ‘morphemic word-formation processes make up the core of word-formation in the sense that they are to a large extent regular and predictable [...] and therefore amenable to generalizations couched in the format of rules and schemes. [...] The

same kind of hindsight predictability does not apply to the group of non-morphemic processes' (ibid.). As an interesting case, Müller points to **backformation** which 'straddles the boundary between morphemic and non-morphemic word-formation patterns'. Müller elaborates: 'in contrast to derivation by means of the addition of an affix, lexemes formed by backformation are the product of the deletion of a bound morpheme or morpheme-like element' (ibid.). Havránková points out that backformation 'is often described as a reversed process with respect to derivation since it is the opposite of the usual pattern where the base form comes first and a new word form is derived from it' (2013: 16).

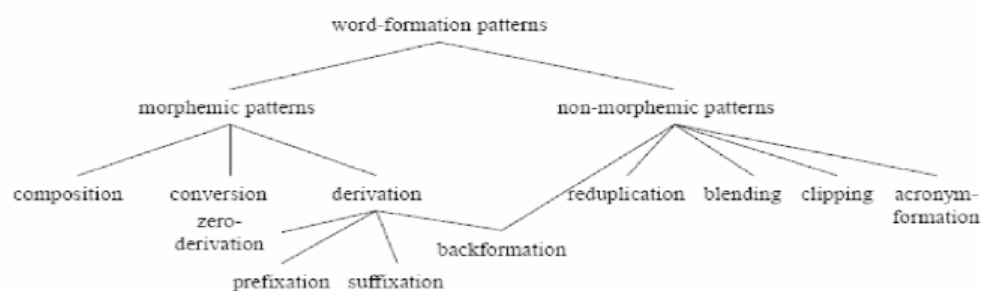


Figure 1.3 Major word-formation patterns (Müller, 1955: 6).

Müller also explains the non-morphemic patterns seen in Figure 1.3: **reduplication** 'is a word-formation process which involves the repetition of a word, word-like element or part of a word either in unchanged form, e.g., *hush-hush*, with a different vowel, e.g., *hip-hop*, or a different consonant, e.g., *boogie-woogie*' (Ostade and Frankis elaborate that reduplicative forms 'have a special character: they are "informal", "slangy" or even "babyish"' (1991: 142) and refer to Quirk and Greenbaum who write that 'most of the reduplicatives are highly informal or familiar, and many derive from the nursery' (Quirk and Greenbaum, 1973, quoted in Ostade and Frankis, 1991: 142)); **blending** 'is a cover term for a range of processes which [...] combine (at least) two lexemes [and] fuse their forms by either shortening one or both of the input lexemes or by telescoping them into each other at portions where their forms overlap'; **clipping** and **acronym-formation** [...] 'are form-shortening processes [which] both preserve the denotative meanings of the source lexemes. [...] Clipping, the deletion of initial and/or final portions of words, can be applied to single words, while acronyms, with some variation, are created by deleting everything but initial letters of two-word or longer expressions' (1955: 7). Havránková writes that 'in most cases it is either the first or the last part of the original lexeme that is kept, but

cases where only the middle part is kept are also possible' (2013: 16), and refers to Adams who notes that 'clipped words are generally used in less formal situations than their full-length equivalents'(Adams, 1973, quoted in Havránková, 2013: 16).

Discussing the non-morphematic processes in their entirety, Fandrych elaborates: 'non-morphematic word-formation processes [...] cannot be analysed in terms of morphemes. They are **shortenings** [...] and **onomatopoeia** (imitations of extralinguistic sounds such as *rattle*, sound symbolism which approximates movement and/or sounds such as *rush*, and reduplications such as *tick-tock*, *helter-skelter*, *girly-girly*)' (2004: xi). Concerning the general acceptance of non-morphematic word-formation processes, Fandrych remarks:

during the heyday of structuralism and Generative Grammar, non-morphematic word-formation processes were disregarded as they did not fit the paradigm of structural regularity that morphematic (or "grammatical" [...]) word-formation processes display (2004: 7).

Fandrych refers to Bauer who calls non-morphematic word-formation processes 'unpredictable formations' (Bauer, 1983, quoted in Fandrych, 2004: 6) and to Aronoff who classes them as 'oddities' (Aronoff, 1981, quoted in Fandrych, 2004: 6).

Bauer names **derivation** and **compounding** (or **composition**) as the main subdivisions of word-formation and explains that 'derivation is concerned with the formation of new lexemes by affixation', while compounding is the 'formation of new lexemes from two (or more) potential stems' (1983: 33). Bauer further divides derivation into **class-maintaining** and **class-changing derivation**. According to him,

class-maintaining derivation is the derivation of new lexemes which are of the same form class (part of speech) as the base from which they are formed, whereas class-changing derivation produces lexemes which belong to different form classes from their bases (ibid.).

Havránková notes that 'most prefixes preserve word class, whereas most suffixes change the word class' (2013: 15).

Bauer subdivides compounding 'according to the form class of the resultant compound: that is, into compound nouns, compound adjectives, etc.' (1983: 33).

Beltrán and José refer to Quirk *et al.* whose classification, among many other subtypes, establishes the following word-formation processes: **derivation**, **conversion**, **compounding** and **miscellaneous modes** (Quirk *et al.*, quoted in Beltrán and José, 2017: 6). Llamas and Rodríguez quote Quirk *et al.* to say that 'the use of miscellaneous modes of word-formation' is one of the main characteristics of Modern

English and that all the miscellaneous modes of word-formation ‘have a main characteristic in common: they belong to a very colloquial style of language’. However, it is noted further in the text that ‘some of [the miscellaneous modes] have already been introduced into the standard language because of their common usage’ (Quirk *et al.*, quoted in Llamas and Rodríguez, 2005: 120). Further, the miscellaneous modes are divided into five different word-formation processes: **back-formation**, **reduplicatives**, **abbreviations**, **blends** and **familiarity markers**: the latter are ‘types of abbreviation with affixation that have in common a highly informal tone and mode of referring that indicates close community what is referred to’, such as hippy or Aussie (Quirk *et al.*, quoted in Beltrán and José, 2017: 6).

In this chapter, the term *word* was defined and thoroughly explored. From the aggregate of definitions provided by different authors, it can be concluded that a *word* is an abstract label used for classifying objects or abstract qualities, and it is the smallest linguistic unit of meaning that is recognized by the speakers of a given language. Furthermore, the constituent parts of a word—morphemes—were described, and the different types of morphemes were named. The concept of *word-formation* in general was also investigated. From the different definitions provided in the literature analyzed, it can be induced that *word-formation* is the creation of new, complex lexemes from existing morphemes via the rule-governed process of derivation and other word-forming techniques. Finally, various word-formation processes were named and described in detail. The two major ways of dividing the different word-formation processes are, first, to differentiate between concatenative and non-concatenative methods of forming morphologically complex words (as detailed in Plag’s book), or, second, to follow Müller’s proposed model and draw a distinction between morphemic and non-morphemic patterns. The next chapter looks at one of those processes, **abbreviation**, more closely, examining the different definitions of this term, the importance of abbreviations and conventions for using them, as well as the various types of this shortening.

2. THE CONCEPT OF *ABBREVIATION*

In the first chapter of this thesis, various word-formation processes were investigated. In order to develop the background for the empirical part of the study, this chapter provides a deeper insight into one of those processes: *abbreviation*. First, the term is defined, and then the importance and main functions of this contracted form are explained in detail. Next, the paper looks at the conventions for using this shortening. Finally, the various classification schemes of abbreviations used by different authors are contrasted and compared.

2.1. The definitions of the term *abbreviation*

As with the term *word*, linguists disagree over the exact phrasing of *abbreviation* definitions. Some consider abbreviations to be a subgroup of the larger category of initialisms, while other authors believe that it is the grouping of abbreviations that encompasses various word formation processes. Cannon writes: ‘one reason for the lack of systematic study [of abbreviations] has been the considerable overlapping and inconsistency within a general taxonomy, on which linguists may still disagree’ (1989: 105). Later, however, he states that ‘today, abbreviation often denotes any kind of shortening including contractions. It is used confusingly for both the item and the word-formation process which produces the item’ (ibid.: 106). Cannon refers to the Encyclopaedia Britannica definition, wherein an abbreviation is described as ‘a letter or group of letters, taken from a word or words, and employed to represent them for the sake of brevity’, noting that this definition is so vague that it could be alluding to ‘any shortening’ (ibid.).

In his book, Veisbergs clearly favors the view that abbreviation is a word-formation process, stating that ‘in its narrow sense [...], abbreviation is formation of new words from the initial letters of a set of other words’ (2013: 14). He adds that ‘a looser definition of abbreviation may include some of the other types of word formation [...] such as clipping or blending’ (ibid.). Furthermore, Veisbergs clarifies that ‘abbreviations can also represent parts of a single word’ and gives the examples of TV—television—and HQ—headquarters (ibid.: 15). Rice calls abbreviation ‘a process of shortening a word or phrase into appropriate letters’ (Rice, 2008, quoted in

Liukinevičiūtė, 2009: 14). Plessis provides a more elaborate definition, claiming that an abbreviation is ‘the shortening of a word by the omission or suspension of the end of the word or of certain letters from the end’ (1997: 27). Burmeister also agrees with the perspective that abbreviation is a process, rather than a result, calling it an ‘arbitrary shortening of a word or words’ (2008: 1).

Farneste (2017), Swan (1984), Plag (2003) and other authors take the opposite view and state that an abbreviation is a creation formed by the process of shortening. For instance, Farneste defines it as a ‘shortened form of a word formed from the first letter or group of letters’ (2017: 27). Larkey, Ogilvie and Price clarify that by an abbreviation they mean ‘a shortened form of a word or phrase used chiefly in writing’ (2000: 2). Adar’s book focuses more on the form than the content of an abbreviation, as he writes that it is defined as ‘a single word (or hyphenated words) where there is at least one capital character’ (2002: 3). Park describes an abbreviation as a ‘shortened form of a written word or phrase used in place of the full form’ (2001: 2), Wang and Meng— as merely ‘a short description of the original long phrase’ (2012: 3056), Chang *et al.*— as ‘a string that is a shortened form of a sequence of words’ (Chang *et al.*, 2002, quoted in Yu, Tsuruoka and Tsujii, 2003: 1). Ljung states that ‘in writing, abbreviations consist of strings of letters, which may or may not be separated by full stops’ (2003: 157) and describes both abbreviations and acronyms as ‘products of irregular word formation’ (*ibid.*: 153). Swan writes: ‘many abbreviations are made from the initial letters of the most important words in a phrase: for example BA (Bachelor of Arts), UFO (unidentified flying object)’ (1984: 1). Plag seems to agree, claiming that ‘abbreviations are most commonly formed by taking initial letters of multi-word sequences to make up a new word’ (2003: 126) and that ‘apart from words composed of initial letters, one can also find abbreviations that incorporate non-initial letters’ (*ibid.*). He adds that ‘abbreviations are similar in nature to blends, because both blends and abbreviations are amalgamations of parts of different words. Like truncation and blending, abbreviation involves loss of material (not addition of material, as with affixation)’ (*ibid.*).

To summarize, the term *abbreviation* can refer both to the word-formation process in which a shortened form is created, and to the construction resulting from the process. In the latter case, which is the basis for most of the commonly accepted definitions of *abbreviation*, the term describes a type of shortening most frequently created from a group of letters (often initial letters) taken from a word or a phrase.

2.2. The importance and functions of abbreviations

There exists a plentitude of abbreviations in the English language, and new shortened forms are created in different fields every day. Zerkina, Kostina and Pitina assert that ‘the modern world contains an abundance of information that is represented with abbreviation for pragmatic purposes’ (2015: 138). Fandrych writes: ‘to some extent, shortening has always played a role in language change’ (Fandrych, 2004: 1) and refers to Aitchison who notes that ‘words get reduced in length [...] in the course of time’ (Aitchison, 1991, quoted in Fandrych, 2004: 1).

Crystal draws the readers’ attention to the fact that “‘The Acronyms, Initialisms & Abbreviations Dictionary” published by the Gale Research Company contained over 400,000 entries in its 11th edition (1987)’ (1995: 121). Cannon estimates that ‘abbreviations account for 3.4% of new formations’ in English (Cannon, 1987, quoted in Veisbergs, 2012: 6). The reasons behind the popularity of abbreviations in the English language are obvious enough, one of them being

the desire for linguistic economy [...]. Succinctness and precision are highly valued, and abbreviations can contribute greatly to a concise style. They also help to convey a sense of social identity: to use an abbreviation is to be ‘in the know’- part of the social group to which the abbreviation belongs (Crystal, 1995: 120).

Regarding the functions of abbreviations, Veisbergs mentions that one of them is ‘to compress the text and economise space and effort’ (2013: 14). Harley also brings up the aspect of economization of space, saying: ‘people who are typing have a particular impetus to economize on frequently used phrases, or phrases inserted to maximize communicative flow rather than convey actual information’ (Harley, 2006, quoted in Lundell, 2012: 6). World Health Organization considers the purpose of abbreviations to be the saving of ‘space in figures and tables or when the same word or phrase occurs many times in an article’ (2004: 3). Collard and Royal mention that in medicine, ‘abbreviations are used to improve the speed of note keeping and to simplify patient notes’ (2015: 100). Denning, Kessler and Leber believe that ‘[abbreviations] are created because people want to ‘reduce potentially long names to something manageable’ (Denning, Kessler and Leber, 1995, quoted in Lundell, 2012: 6). Rawson points to a fascinating use of these shortened forms:

abbreviations function as euphemisms in many fields, e.g., the child’s BM, the advertiser’s BO, the hypochondriac’s Big C, and the various shortenings for

offbeat sex, such as AC/DC for those who swing both ways, bd for bondage and discipline, and S/M (1981: 9).

While abbreviations might be falsely thought to be a recent development, Crystal narrates a story that shows that these shortened forms served writers even in the 19th century:

often thought to be an exclusively modern habit, the fashion for abbreviations can be traced back over 150 years. [...] In 1839, a writer in the *New York Evening Tatler* comments on what he calls ‘the initial language...a species of spoken shorthand, which is getting into very general use among loafers and gentlemen of the fancy, besides Editors, to whom it saves much trouble in writing’. He was referring to OK (all correct), PDQ (pretty damn quick) [...] and many other forms introduced, often with humorous or satirical intent, by society people (1995: 120).

Veisbergs, however, reveals that abbreviations might be an even older phenomenon. He says that ‘this word-building pattern was common already in the classical world’ (2013: 14). Jovanovic describes the purpose of abbreviation in the Middle Ages: ‘their function was to conserve energy and/or space. [...] In the case of medieval manuscripts [...], use of abbreviations allowed additional words to be inscribed on a single page, reducing the number of animal skins needed to produce a book’ (2013: 17). Cannon goes a step further:

it is well known that [abbreviations] go back several millennia, with abbreviations even occurring in Sumerian. [...] The desire to economize is seen in numerous Hebrew examples like MILH ‘Mi Iolh Lnv Hshmilh (Who shall go up for us to heaven?)’ and Roman ones like SPQR ‘Senatus populusque Romanus’ and INRI ‘Jesus Nazareus Rex Judaeorum’. Old English borrowed from Latin what became the modern ampersand (1989: 99).

Of course, the use of abbreviations has not decreased since the ancient times, and this type of shortening still occupies a prominent position in modern English language. Kostina, Zerkina and Pesina emphasize that ‘abbreviation is an effective way of word formation process that reflects contemporary trends of globalization’ (2015: 704). Veisbergs describes abbreviations as ‘a steadily growing phenomenon’ (2013: 20) and calls attention to the fact that ‘this word-building pattern [...] has become increasingly frequent in modern languages. Abbreviations especially proliferated in the last few decades, ranging from the colloquial to highly specialised scientific and technical terms’ (2013: 14). In particular, he points to texting as a ‘new development that makes massive use of abbreviations’ (ibid.). Swan agrees: ‘text messages [...] use a large number of abbreviations to save time and space’ (2005:

148). Similarly to Veisbergs, Crystal refers to abbreviations as ‘one of the most noticeable features of present-day English linguistic life’ (1995: 120) and writes:

the fashionable use of abbreviation- a kind of society slang-comes and goes in waves, though it is never totally absent. In the present century, however, it has been eclipsed by the emergence of abbreviations in science, technology, and other special fields, such as [...] the media (ibid.).

To sum up, abbreviations have been used for centuries—perhaps millennia—to shorten words and economise space in written text. They make up around three percent of all new word creations in English, and account for several hundreds of thousands of word forms in dictionaries. The use of abbreviations has only increased with globalization and new innovations, and this type of shortened form has now become one of the most outstanding features of the English language.

2.3. The conventions for using abbreviations

The conventional use of abbreviations is regulated by both common-sense standards and several handbooks detailing the proper use of these shortenings. The two general rules, repeated by several authors, are: 1) ‘abbreviations are used correctly when the correct expanded form is also clearly stated’ (Collard and Royal, 2015: 100) and 2) ‘when in doubt about abbreviating a word, do not. You will rarely be incorrect if you spell out words unless they are specific terms of a particular job or discipline’ (Hogins, 1985: 285). Rice agrees: ‘if there is any question about which abbreviation to use, it is best to spell out the word or phrase and not use an abbreviation’ (Rice, 2008, quoted in Liukinevičiūtė, 2009: 14). World Health Organization is also in accord: ‘all abbreviations should be defined and spelt out the first time they are used, unless likely to be familiar to readers. A few abbreviations, such as e.g., i.e., etc., are so widely used that the complete words are almost never given’ (2004: 3). A handbook created by the U.S. Department of Homeland Security lays out numerous rules for the use of abbreviations in official documents:

consider the ultimate audience, which is usually unforeseen and could include historians one hundred years from now. Many [abbreviations] have short lives and may become meaningless after only a few years. Also consider audience perception. [...] Use few or no [abbreviations] in documents with international readers. A harmless English [abbreviation] might be obscene in another language. Always spell out [abbreviations] the first time they appear in a document. If the document is large, repeat the spell out at regular intervals (each

chapter or every ten pages). Try to limit use to well-known [abbreviations] [...]. Avoid unfamiliar [abbreviations] and those of only temporary significance. [...] If the entity appears only a few times in the entire document, do not abbreviate at all. There are other descriptive ways to refer to the program or organization (Burmeister, 2008: 2).

Ashley explains why it is not a good idea to use unfamiliar shortened forms: ‘abbreviations can be useful because they are quick to write and easy to read. But both parties need to know what the abbreviations stand for’ (1992: 20). Ashley elaborates: ‘some international organizations, e.g. NATO are known in all countries by the same set of initials, but many are not, e.g. EEC (European Economic Community) and UNO (United Nations Organization)’ (1992: 20). Collard and Royal paint a picture of what can happen when the full version of an abbreviation is not provided in the text: ‘abbreviations, though currently commonly used, are associated with medical errors and can be a source of irritation and misunderstanding’ (2015: 100). They continue: ‘abbreviations are often highly ambiguous and may have a wide range of meanings to different members of the clinical team. There is concern that inappropriate use of abbreviations may hinder patient care’ (ibid.).

Some authors, such as Warriner, have created whole lists delineating which collocations can be used in their contracted form, and which ones should be spelled out in full. He writes, for example: ‘the following abbreviations are acceptable in all writing: A.D. (A.D. 485); B.C. (271 B.C.); A.M. (before noon); P.M. (after noon); etc. (and so forth); i.e. (that is); e.g. (for example). Generally understood abbreviations for government agencies are acceptable: FBI, TVA, SEC, NLRB’ (1957: 614).

Regarding the orthographic styling of abbreviations (rules concerning capitalization, punctuation and so on), Veisbergs points to several conventions in the English language:

capital letters with stops (points) favoured in the US, e.g. U.S.A.; capital letters without stops (the unpointed style prevails in current English): AIDS; lower case letters with points: e.g.; acronyms without points: laser; mixed capitals and lower case: EdB (Bachelor of Education) [...]; and various hybrid forms. SI symbols are never used with periods (2013: 17).

Overall, however, there seems to be some disagreement over whether periods should be used after the letters of the abbreviations or not. Burmeister writes:

periods after each word initial of an acronym have largely been eliminated or have become optional [...]. Exceptions are because of tradition (Postscript—P.S., Bachelor of Arts—B.A., the Latin *Medicinae Doctor*—M.D.), reverence (United States—U.S.) or style (*id est*—i.e., *exempli gratia*—e.g.) (2008: 2).

Kierzek recommends to ‘use a period after an abbreviation’ (1939: 209) but not ‘after the letters standing for certain [...] governmental agencies: TVA, CCC, RFC, NRA’ (ibid.: 210). Warriner concurs: ‘generally understood abbreviations for government agencies are acceptable: FBI, TVA, SEC, NLRB. Periods are not used with abbreviations of this kind’ (1957: 614). Crystal says periods should never be used after acronyms: ‘[acronyms] never have periods separating the letters – a contrast with initialisms, where punctuation is often present (especially in older styles of English)’ (1995: 120). Swan notes a difference between the different varieties of English: ‘we usually write abbreviations without full stops in modern British English. Full stops [...] are normal in American English’ (2005: 2). Raimes lists several grammar rules concerning the use of punctuation after abbreviations: 1) ‘a period is [...] used to signal an abbreviation: Dr., Ms., etc.’; 2) ‘usually, no periods are used for abbreviations that use only capital letters: FBI, NATO, UCLA’ and 3) ‘no periods are used with abbreviated numbers: 2nd, 4th, 101st’ (1990: 318).

Other rules relate to the use of articles, capitalization, the possessive case and the plural form. Swan asserts that ‘acronyms are like proper names: they do not normally have articles (so we say NATO, not the NATO). The United Nations Organization can either be called the UN or UNO; in the second case [...] the article is dropped’ (1984: 1). Burmeister is even stricter about this rule: ‘when referring to an entity by its [abbreviation], do not put “the” in front of it’ (2008: 2). Concerning capitalization, Eastwood emphasizes: ‘we use a capital letter [...] in most abbreviations which are formed from the first letters of each word in a phrase: the BBC (British Broadcasting Corporation)’ (1994: 74). As relates to morphological changes, such as plural forms or the possessive case, Veisbergs points out that they ‘can be applied to most initialisms, e.g. NATO’s attacks, several MPs joined the row’ (2013: 18) and that ‘lower-case acronyms can naturally undergo [these] changes just like any other words [...] e.g. radar-radar’s, laser-lasers’ (ibid.). As a general rule, Burmeister mentions that ‘an apostrophe is used for possessive (the CD’s label) but not for plural (return the CDs to me)’ (2008: 2). Quirk *et al.* agree: ‘the apostrophe + s is used [to form the plural] in some nouns of unusual form, e.g. [...] abbreviations: *three PhD’s (or, increasingly, PhDs)*’ (2003: 305).

In conclusion, there exist a number of conventions—both common-sense ones, as well as strict rules laid down in handbooks—that regulate the proper use of abbreviations. The principal thing to remember when using these shortenings is that

they should be clearly understandable to the reader. If necessary, the abbreviations should be spelled out, or their full version should be provided along with the shortened form. While there are some abbreviations that are familiar to wide audiences, one should always err to the safe side in writing, as there can be negative consequences to the reader not recognizing a certain abbreviation, especially in fields that require high precision such as medicine.

2.4. Types of abbreviations

As with the various word-formation processes, different types of abbreviations are also described in literature. In this subchapter, the classifications of Veisbergs (2013), Crystal (1995), Burmeister (2008), Ljung (2003) and other authors are reviewed, and the different types of abbreviations are compared.

Veisbergs proposes a simple division and distinguishes between initialisms and acronyms:

1. '[abbreviations] are called **initialisms**, or initial abbreviations (words), when the abbreviation is pronounced separately letter by letter, e.g. [...] ISO (International Standards Organization), DOS (Disk Operating System)' (2013: 14);
2. 'the other type of abbreviation, called **acronyms**, programs or letter words, are pronounced like ordinary words, e.g. [...] NATO, NASA, GATT, UNESCO' (ibid.: 15).

Bauer provides an example that illuminates the distinction between initialisms and acronyms: 'if Value Added Tax is called /vi:ei'ti/, that is an abbreviation, but if it is called /væt/, it has become an acronym' (1988: 39). He adds: 'in [some] cases, the acronym spells something which seems to be appropriate in some metaphorical sense, as for example with WASP' (ibid.). Veisbergs brings the readers' attention to the fact that 'some acronyms lose their capital letters and become everyday common terms, e.g. laser [...], scuba' (2013: 15). Furthermore, he mentions that 'some linguists consider "syllable words" such as Benelux [...] also as acronym subtype, but they are probably more appropriately placed with compound clippings' (ibid.). He adds that 'English has also turned [some] initialisms into acronyms by respelling them as they

are pronounced: deejay (DJ, disk jockey), emcee (MC, master of ceremony), veep (VP, Vice President)' (ibid.). Crystal remarks that 'sometimes (as with radar and AIDS), the unabbreviated [acronym] may be so specialized that it is unknown to most people' (1995: 120). Katamba explains the process behind the creation of these shortenings: '[acronyms] may be reduced to their initial letters alone which together represent sounds that form perfectly acceptable syllables and hence can be pronounced as words. Words formed in this way are called acronyms' (2005: 183). He continues:

usually, to begin with, acronyms are spelt with capital letters [...] when people are conscious of their special status. But, with the passage of time, some commonly used acronyms end up being transmogrified into simple root morphemes and are treated as common or garden words. Then they tend to be spelt like any other word. This is happening to NATO (North Atlantic Treaty Organisation) which is now sometimes spelt as Nato (ibid.).

Apart from the two above-mentioned main groupings, Veisbergs also discusses **graphical abbreviations** which 'constitute a special group. These are abbreviations, not clippings, and are shortened forms of words in writing for the reason of economy of space and effort, e.g. abbr for abbreviation, Ltd for limited, NY for New York' (2013: 19). Another type of shortening he brings up 'has appeared in the form of Internet language and texting' (ibid.: 20). Veisbergs says:

It is a mix of phonographic and ideographic writing, and a mix of writing and oral speech representation. Apart from very frequent abbreviations: FML (fuck my life), LMAO (laughing my ass off), SMH (shaking my head) and a wealth of occasional abbreviations, it uses symbols, signs, emoticons and a mix of abbreviated elements, e.g. <3, X (love), 10Q (thank you), 2 (too or to)' (ibid.).

Veisbergs elaborates: '[in text messages], words are shortened, often by leaving out vowels. Letters and numbers are used instead of words (or parts of words) that sound the same. Initial letters only are used for some common expressions' (ibid.).

Crystal puts forward a more intricate system of classifying abbreviations. He begins with **initialisms**: 'items which are spoken as individual letters, such as BBC, DJ, MP, EEC, e.g., and USA, also called alphabetisms' (1995: 120). Crystal goes on to say that 'the vast majority of abbreviations fall into this category. Not all use only the first letters of the constituent words: PhD, for example, uses the first two letters of the word *philosophy*, and GHQ and TV take a letter from the middle of the word' (ibid.). The second type of abbreviation in his system are **acronyms**: 'initialisms

which are pronounced as single words, such as NATO, laser, UNESCO' (ibid.).

Crystal continues with **clippings**:

'[parts] of a word which [serve] for the whole, such as *ad* and *phone*. These examples illustrate the two chief types: the first part is kept (the commoner types, as in *demo*, *exam*, *pub*) and the last part is kept (as in *bus*, *plane*). Sometimes a middle part is kept, as in *fridge* and *flu*. There are also several clippings which retain material from more than one part of the word, such as *maths* (ibid.).

Crystal also mentions **blends**: 'words which [are] made out of the shortened forms of two other words, such as *brunch* (*breakfast+lunch*), *heliport* (*helicopter+airport*), *smog* (*smoke+fog*), and *Eurovision* (*European+television*)' (ibid.), **awkward cases**: 'abbreviations which do not fall clearly into the above four categories, [such as] forms [that] can be used either as initialisms or acronyms (*UFO*-*"U F O"* or *"you-foe"*)' (ibid.) and **facetious forms**, such as '*AAAAAA*: Association for the Alleviation of Asinine Abbreviations and Absurd Acronyms' (ibid.).

As other authors, Burmeister also distinguishes between an **acronym**, 'an abbreviation formed by combining the first letters (initials) or syllables of all or select words in a series, resulting in a new grouping of letters that can be pronounced as a word' (2008: 1) and an **initialism (alphabetism)**, 'an acronym pronounced by reciting the individual letters' (ibid.). He also touches upon **acronym-initialism hybrids** whose 'pronunciation includes a letter and acronym word (*Joint Photographic Experts Group—JPEG*), **anacronyms** 'coined to describe acronyms whose original word string has been widely forgotten, [e.g.] *Self-Contained Underwater Breathing Apparatus—scuba*' (ibid.) and **pseudo-acronyms**: 'a catchall for variations and embellishments, such as creating an acronym from other acronyms (*IT Acquisition Center—ITAC*) or mixing abbreviations and acronyms (*deoxyribonucleic acid--DNA*)' (ibid.).

An important type of abbreviation that is, however, rarely brought up in literature is a **contraction**. Turnbull refers to The Oxford English Dictionary Online, in which a contraction is defined as 'the action of contracting or shortening (a word, a syllable, etc.) by omitting or combining some elements' (2005: 18). Turnbull continues: 'a contraction is very similar to an abbreviation except that a contraction tends to use an apostrophe to indicate that some letters have been omitted from the fuller version in order to form the contracted version' (ibid.). The following examples are provided by Turnbull: 'can't for "cannot", shan't for "shall not" and it's for "it is"'

(ibid.). Butterfield agrees: ‘contractions are a type of abbreviation in which letters from the middle of the word are omitted: *Dr*= Doctor, *St*=Saint, *Ltd*= Limited’ (2013: 1).

Ljung proposes an unconventional system for classifying shortened forms: he believes that it is the larger group of initialisms that encompasses the subgroups of abbreviations and acronyms. He also includes ‘initialisms in which the two types are mixed, in particular compound initialisms in which the first element consists of one—sometimes two—letters, like e.g. e-mail’ and ‘certain initialisms that may be treated as either abbreviations or acronyms, for instance RAF (the Royal Air Force)’ in his classification scheme (2003: 157). Fandrych refers to an even broader group of contracted forms, called **shortenings**: ‘many authors group “initialisms”, “acronyms”, “clippings” and “blends” (with some variation in the terminology) together under the hyperonym “shortening” (or, sometimes “abbreviation”)’ (2004: 17).

Two main types of abbreviations—initialisms and acronyms—appeared in most authors’ classifications. The principal difference between those two groupings is that initialisms are ‘pronounced separately letter by letter’ (Veisbergs, 2013: 14), while acronyms ‘are pronounced like ordinary words’ (ibid.: 15). Other types of shortenings, such as graphical abbreviations, clippings, blends and contractions were also mentioned in this subchapter.

In the previous chapter, the concepts of *word* and *word-formation* were investigated. In this chapter, the focus was placed on a specific type of word-formation process (and the shortened form resulting from this process): *abbreviation*. In the first subchapter, it was explained that the term *abbreviation* can, as mentioned above, refer both to the method of reducing words in size by cutting off letters from a word or a phrase, and to the shortening that emerges from this process. Later, the main purpose of abbreviations was determined to be the economization of space in a written text. Further, various conventions for the use of abbreviations were discussed. It was established that the main thing to consider when creating and using abbreviations is the readers’ understanding of these shortened forms. Finally, various abbreviation classification schemes were contrasted and compared. In the next chapter, abbreviations in articles on start-ups will be analyzed.

3. EMPIRICAL RESEARCH

In this section of the thesis, the results of the empirical research are displayed. First, the qualitative and quantitative research methods used in the paper are defined to explain how the analysis of the corpus will be carried out, and then, the corpus of the study is set and described. Finally, an analysis of the shortened forms in the articles is carried out, and the findings of the frequency analysis, classification of abbreviations and their categorization into semantic fields are presented here.

3.1. Qualitative and quantitative research methods

This subchapter details the research methods used in the study. Both qualitative and quantitative research aspects are included in this paper. The qualitative research approach is linked to achieving a better understanding of the term *word*, the concept of word-formation in general, and the process of *abbreviation* (and the resulting shortened forms) in particular. This perspective mostly appears in the theoretical part of the study; however, since the literature review forms the basis for the empirical part of the study, multiple references to the theory are made throughout the chapter.

Regarding quantitative analysis, Arkaah writes:

Quantitative research is described as a systematic and objective process that investigates a research problem by using structured questions and where a larger number of [data] is involved. Quantitative research enables one to use statistical inferences in order to process data and then to generalise the findings (2012: 29).

Frequency analysis is used as the principal quantitative research tool in this part of the study. McEnery, Xiao and Tono explain that in linguistics, '*frequency* refers to the arithmetic count of the number of linguistic elements (i.e. tokens) within a corpus that belong to each classification (i.e. type)' (2006: 52). They go on to say that 'it is the most direct quantitative data a corpus can provide' (ibid.). Köhler describes frequency analysis as 'the main quantitative instrument of linguistic research in the past several decades' (2005: 751) and adds that it is 'an estimation of the ratio of representation of a certain set of features in a given class of phenomena and the corresponding *mean values*' (ibid.). In this study, the ratio of abbreviations relative to the entire corpus, and the proportion of certain abbreviation types in relation to the entire count of abbreviations in the corpus will be determined.

Arkaah refers to Lind *et al.* who define frequency analysis as ‘a grouping of data into mutually exclusive classes showing the number of observations in each’ (Lind, 2002, quoted in Arkaah, 2012: 40). Köhler continues by writing that percentage is the ‘simplest and most widespread’ analysis method of quantitative data and that this index reveals ‘the relative weight (degree of significance) of an isolated element in the system under consideration’ (2015: 751).

Thus, now that the research has proceeded beyond the literature research stage, in which the theoretical framework was established, the overall methodology for the empirical part of the study is as follows:

- 1) Close-read the articles. Partnership for Assessment of Readiness for College and Careers (PARCC) describes close-reading as an analytical process that involves ‘engaging with a text of sufficient complexity directly and examining meaning thoroughly and methodically’ (2012: 7).
- 2) Select the abbreviations. The abbreviations for the analysis are picked out from the corpus while keeping in mind the definitions of this shortened form provided in the theoretical part of the study. Online dictionaries such as the Oxford Dictionary (en.oxforddictionaries.com) were consulted in this stage of the research if difficulties in determining whether or not a set of letters is an abbreviation were encountered. In the later stages of the research, online dictionaries and company websites were also consulted to find out more about the etymology of certain abbreviations, in order to aid the classification of these shortened forms.
- 3) Carry out the qualitative and quantitative analysis of the data. In this section of the paper, the ratio of abbreviations relative to the entire corpus of the text, and the proportion of certain types of abbreviations relative to the entire count of abbreviations is calculated. Then, all the shortened forms are grouped according to their type, and an investigation of certain attributes of these abbreviation types is carried out. Later, the abbreviations are sorted into semantic fields. Finally, the relevant conclusions are drawn based on this analysis of data.

The integration of both qualitative and quantitative research methods in the study allows for a well-grounded and reliable analysis of the data.

3.2. The corpus

The corpus analysed in the empirical part of this research consists of 35 articles on the topic of start-ups. The source of all articles investigated is the online version of the American business magazine *Entrepreneur*, www.entrepreneur.com. Only the articles that were classified under the topic “start-ups” were chosen for analysis. The selection of the corpus is based on a chronological criterion: the 35 most recently published articles about start-ups on the website were picked. The chosen articles had been posted on the site in the time period between October 30, 2017 and May 11, 2018.

In order to provide an unbiased view of the use of abbreviations in the (modern) English language, all articles that corresponded to the above-mentioned criterion were incorporated in the analysis, including a single article in which no abbreviations could be found. As could be expected, most of the articles discuss various aspects of entrepreneurship, with a special focus on the foundation of new businesses. Two types of articles dominate in the corpus: interviews with successful, already established entrepreneurs, and advice given to people who have recently started or plan to start a business.

All the articles on the website are systemized according to how much time it takes to read them. The shortest article in the corpus, which is marked as only a one-minute read, is mere 81 words long and accompanies a video under the name “Entrepreneur Sarah Michelle Gellar Gives an Inside Look at How Foodstirs Started”. In fact, all the articles in the corpus that are indicated to be one-, two- or three-minute reads appear alongside a video or an infographic. The longest article, classified as a 22-minute read, stands at 3813 words. The total count of words in the corpus is 35075 words; thus, the average length of the articles was determined to be 1002 words, and the average time it takes to read one article, according to the scheme proposed by *Entrepreneur*, was calculated to be 5,9 minutes.

Analysing the text of the articles included in the corpus provides the necessary data for the empirical research and for the drawing of the conclusions.

3.3. The results of the analysis

In this subchapter, the results of the empirical part of the study are reported. First, frequency analysis is carried out, looking at the total number of abbreviations in the

corpus, the count of unique abbreviations and abbreviation forms, the amount of full, expanded variants in the articles and other statistics. Then, the abbreviations are classified according to their types, as discussed in the theoretical part of the study. Lastly, the lexical fields that the shortened forms belong to are investigated in order to determine the context in which they are used. The analysis is supplemented by graphs illustrating the data.

3.3.1. Frequency analysis

The first aspect analysed in this study was the frequency of abbreviations in the corpus of articles. For this reason, a frequency analysis was carried out. The total count of abbreviations across all 35 articles analysed was determined to be **707** shortened forms. An example of an abbreviation—more specifically, a contraction—in context is provided in the sentence “**You’ll** learn what it really takes to be an entrepreneur”. A sample of the abbreviations from the first ten articles in the context of the full sentences can be found in Appendix 1. The definition of an abbreviation developed in the theoretical part—that it is “a type of shortening most frequently created from a group of letters (often initial letters) taken from a word or a phrase”—was followed in the process of selection of the abbreviations. When in doubt, various online dictionaries such as en.oxforddictionaries.com were consulted.

On average, **20.2** abbreviations were found per an article, or an average of one abbreviation for every **49.6** words. Next, the instances of unique abbreviations were counted by filtering out the repeating shortened forms. In total, **134** unique *abbreviation forms* were counted; this includes all morphological and graphical variations of the abbreviations found in the corpus. For instance, the abbreviation *ad*, standing for *advertisement*, and its plural form *ads*, corresponding to *advertisements*, were counted as two separate abbreviation forms in the context of this analysis. Similarly, the abbreviations *ecommerce* and *e-commerce* were also considered as two separate forms due to the differences in their graphical representation. After removing these variations, **120** unique abbreviations remained in the corpus; this number represents **89.6%** of all unique abbreviation forms.

Finally, the research looked at the count of full forms of the abbreviations found in the corpus. This number comprises all the abbreviations that were either partly or completely expanded in the same article, whether in the same or a different sentence.

An example of a fully expanded abbreviation can be found in the article title “How to Succeed as a **Business-to-Government** (B2G) Startup”; an instance of a partly extended form is the word *federal* in the sentence “When a federal or state agency is hiring a new contractor for one of their upcoming projects, they post these opportunities on one of the dozens of government sites including FedBizOpps (for US **federal** projects) [...]”. The study identified four ways of expanding the abbreviation which prevailed in the corpus:

- 1) Provide the full form of the abbreviation in the same sentence as the shortened form. Include the expansion in the phrase as a normal part of the sentence. Example: “The reason why I say that networking is **KEY** to any tech startup is because it's what will enable you to **Keep Expanding Yourself**”.
- 2) Write the expanded form out fully in a sentence, and provide the abbreviation in parentheses. For instance: “As companies grow, **employee resource groups** (ERGs) often form to provide underrepresented minorities with a place to network and trade ideas with peers”. This approach was most commonly used if the same abbreviation was repeated later in the article.
- 3) Include the abbreviation and the expansion in the same sentence, but, this time, place the full form in parenthesis. An example of this approach is provided in the sentence “When a federal or state agency is hiring a new contractor for one of their upcoming projects, they post these opportunities on one of the dozens of government sites including [...] the NYS Contract Reporter (for **New York State**)”.
- 4) Position the abbreviation and the expanded form in different sentences. This strategy was used by those writers who had already employed either an abbreviation or its full form previously in the article. For instance, the full form *user experience* is first mentioned in the sentence “Even a few years ago, if you were a more enterprise-facing app -- say, a commercial real estate company -- you didn't really have to have a level of **user experience** that a traditional consumer-facing app might have”, and the abbreviated form *UX* is only introduced two sentences later: “If a company wants to survive in the digital marketplace, it has to have a good **UX** to retain its users or customers”.

23 full forms were found in the corpus: in **10** cases they appeared in the same sentence as the shortened form (eight times as a fully expanded form and twice as a partly expanded abbreviation), but in **13** instances: in the same article but a different sentence (12 times as a fully, once- as a partly expanded abbreviation). This discovery points to the fact that an expansion of abbreviations to their full form is rather rare in the corpus, as only in **3%** of cases an expanded version of the abbreviation was provided in the article (either in the same or a different sentence). A possible interpretation of this phenomenon is that, as readers of a business magazine, the audience of the *Entrepreneur* is regarded as being knowledgeable about the field of business and entrepreneurship and thus, about the terms that dominate in this field. Furthermore, with some lesser-known abbreviations, the meaning of the shortened form could sometimes be induced from the surrounding context. For instance, in the sentence “Pay students a cut of your earnings to take other students’ dirties to a cheap laundromat and return them clean”, the meaning of the blend *laundromat* can be correctly guessed to be a place where laundry is taken to be washed. Additionally, many of the abbreviations in the corpus were either common shortenings like U.S or CEO, or contractions which usually do not require an expansion. A point of interest is the fact that none of the contractions in any of the articles in the corpus were ever expanded, presumably because they are used so frequently in everyday language that the readers of the magazine are fully expected to understand the shortened forms without a further elaboration.

Appendix 2 shows the classification of the abbreviations from a sample of ten articles: it lists the shortened form itself, the type of abbreviation it is, its expanded variant and whether or not the full form of the abbreviation can be found in the article. A summary of the findings of the frequency analysis is provided in Table 3.1 below:

Table 3.1. The results of the frequency analysis.

Total amount of words	<i>35075</i>
All abbreviations	<i>707</i>
Unique abbreviation forms	<i>134</i>
Unique abbreviations	<i>120</i>
Full forms	<i>23</i>
...of which in the same sentence	<i>10</i>
...of which in a different sentence	<i>13</i>

Further, the number of words that constitute each unique abbreviation was determined and graphed. The results of this analysis can be seen in Figure 3.1 below.

The number of words constituting the abbreviations

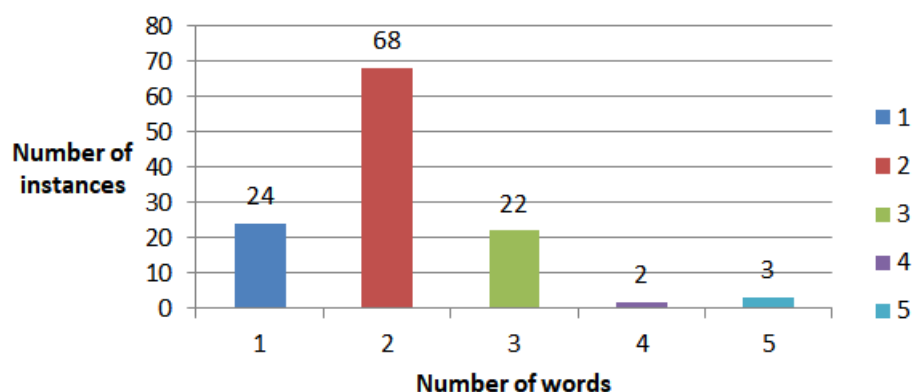


Figure 3.1 The number of words constituting the abbreviations.

As can be observed from the graph, most of the abbreviations in the corpus—**68** out of 120 or **56.7%** of the unique shortened forms—were composed of two words. Examples of two-word abbreviations found in the articles are the blend *smartphone* (smart+(tele)phone), the contraction *aren't* (are not) and the initialism *AI* (artificial intelligence). Most of these shortened forms were contractions (followed by initialisms and blends), and all of the contractions in the articles but one consisted of two words: the only exception being *can't*, the abbreviated form of the word *cannot*. The second most common type of abbreviation in the corpus was composed of one word—**24** out of 120 or **20%** of all unique shortened forms. For instance, the clipping *'stache* is an abbreviation of the word *moustache*. The vast majority—21 out of 24—of these abbreviations were clippings, which is consistent with the literature in which a clipping is defined as a type of word-formation process which can be applied to a single word. Abbreviations consisting of three words were the third most common type of shortened form found in the articles, making up **22** out of 120 or **18.3%** of all unique abbreviations in the corpus. Examples of three-word abbreviations are the blend *FedBizOpps*, standing for *federal business opportunities*, the abbreviation *SAT* which signifies *Scholastic Aptitude Test* (and can be seen either as an acronym or an initialism depending on its pronunciation: initialism if /,ɛs,eɪ'ti/, acronym if /sæt/) and the initialism *CEO*, denoting *chief executive officer*. 17 out of these three-word abbreviations were initialisms. Further, it was determined that there are two unique

abbreviations composed of four words in the corpus, and three shortened forms composed of five words. Additionally, the origin of one abbreviation—*L-SPARK*—could not be ascertained by the researcher, therefore making it impossible to determine the amount of words making up this shortened form.

During the course of the analysis, it was also discovered that there exists a positive correlation between the number of words constituting the abbreviation, and the amount of letters or characters of which the shortened form is composed. Figure 3.2 below displays the count of abbreviations that are made up of a certain number of letters or characters, while in Figure 3.3, the correlation between this number and the count of words from which the abbreviations are composed is shown.

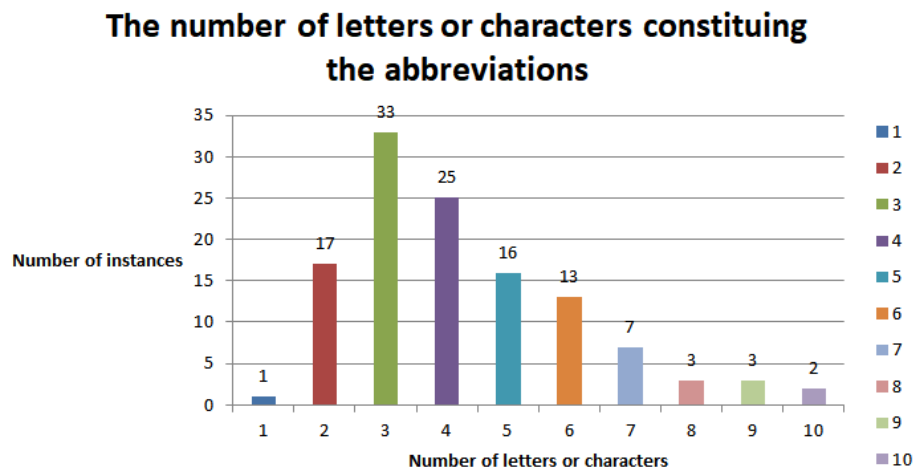


Figure 3.2 **The number of letters or characters constituting the abbreviations.**

By observing Figure 3.2, one can clearly notice that most of the abbreviations in the corpus are made up of two to six letters or characters; three-letter-or-character shortened forms were the most common in the articles. The shortest abbreviation in the corpus is the one-letter Internet abbreviation *4*, meaning *for*, while the two longest ones—*laundromat* (from laundr(y)+(aut)omat(ic)) and *workaholic* (work+a+(alco)holic)—both stand at ten letters.

Figure 3.3 shows the correlation between the number of letters or characters composing an abbreviation, and the average number of abbreviation-constituting words corresponding to this value. The upward trendline points to a positive correlation between these two numbers, meaning that the more words an abbreviation is made up of, the more letters likely constitute it. Evidently, however, the two values are not a one-to-one match. For instance, the initialism *RFID*, composed of four letters, corresponds to the full form *radio-frequency identification*, which is made up

of three words. This is because not only the initial letters of the first two words of the full form, but also the first two letters of the third word make up the abbreviation: radio-frequency **id**entification.

The correlation between the number of letters or characters and words in an abbreviation

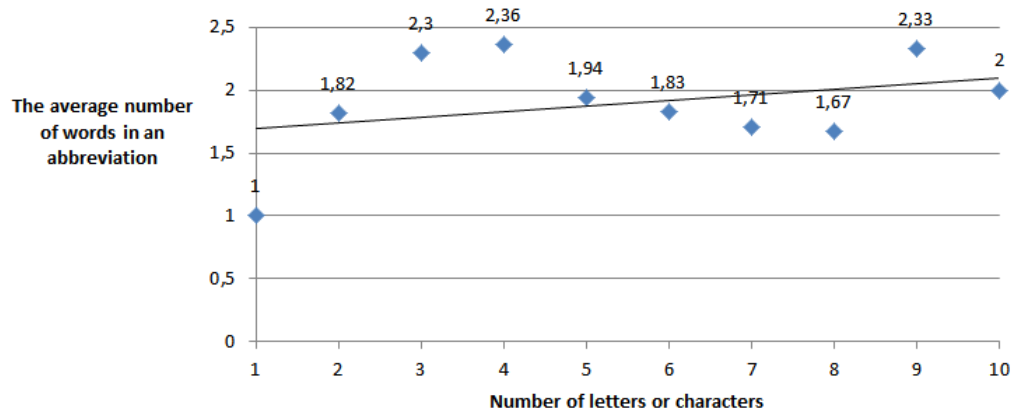


Figure 3.3 The correlation between the number of letters or characters and words in an abbreviation.

Finally, the most common abbreviations in the whole corpus were determined. These were found to be: the contraction *it's* (it is, 85 occurrences), the contraction *don't* (do not, 70 instances, or 74 including the morphological variation *don't*), the contraction *you're* (you are, encountered 62 times in the articles), the initialism *CEO* (chief executive officer, 27 instances, or 30 if the morphological variant *CEOs* is included) and the clipping *tech* (technology, 24 occurrences). Since it was later discovered that contractions dominate the corpus, it is no surprise that three out of five abbreviations in the list are exactly this shortened form. A more thorough overview of the most common abbreviation of each type can be found in the detailed analysis of the individual types below.

To sum up the results of the frequency analysis, abbreviations of all types show up once for approximately every **50** words in the corpus. Around **19%** of these shortened forms are unique, i.e., non-repeating. An expanded version of the abbreviation is provided in only **3%** of cases in the same article. The majority of the shortened forms in the corpus are composed of one, two or three words, and three-letter abbreviations are the most common. Furthermore, a positive correlation exists between the number of letters from which an abbreviation is composed, and the count of words that form the abbreviation. Contractions were found to predominate among the list of the most frequently used shortened forms.

3.3.2. Classification of abbreviations

Here, abbreviations are categorized into the types defined and described in the theoretical part of the study. Frequency analysis is also employed in this part of the research, as the prevalence of each type in relation to the whole count of abbreviations is indicated. Then, each type of abbreviation is investigated closer by analyzing features such as the most commonly appearing shortened form among each grouping and the subtypes of the main classifications. Appendix 2 shows the categorization of the abbreviations from a sample of ten articles, listing both the shortened form and its type.

The classification of abbreviations was first and foremost based on the definitions of the different types of shortenings provided in the theoretical part of the study. When ambiguous cases were encountered, online dictionaries such as <https://en.oxforddictionaries.com/> were consulted, as they often state the types of the abbreviations listed in their register. The strategy of using online dictionaries was particularly helpful in telling initialisms and acronyms apart, as they are distinguished by the way they are pronounced, and various dictionaries provide a phonetic transcription of the words in their lexicon.

Table 3.2 below provides the number and percentage (relative to the complete count of all abbreviations) of each type of shortened form found in the corpus. Furthermore, several examples of each kind of abbreviation are listed in the table. Almost 3/4ths or **73%** of all abbreviations in the corpus were determined to be contractions; a further **13.2%**- initialisms. Of those, 8.6% were compound initialisms (defined as “initialisms [...] in which the first element consists of one—sometimes two—letters” in the theoretical part of the study). Additionally, clippings, blends and acronyms were found to constitute **8.5%**, **4.1%** and **0.4%** of the abbreviations in the corpus, respectively. Furthermore, six ambiguous cases such as Internet and graphical abbreviations or acronym-initialism hybrids were also discovered in the articles.

Table 3.2 Classification of abbreviations.

Type of abbreviation	Count	Percentage	Examples
Contractions	516	73%	<i>you'll</i> (you will), <i>can't</i> (cannot), <i>that's</i> (that is)
Initialisms	93	13.2%	<i>KPIs</i> (key performance indicators), <i>RFP</i> (request for proposal), <i>CEO</i>

			(chief executive officer)
<i>...of which compound initialisms</i>	8	8.6% (1.1% of total)	<i>C-level</i> (chief level), <i>C-suite</i> (chief suite), <i>X-factor</i> (extra factor)
Clippings	60	8.5%	<i>com</i> (commercial), <i>tech</i> (technology), <i>phone</i> (telephone)
Blends	29	4.1%	<i>AdSense</i> (ad(vertisement)+sense), <i>laundromat</i> (laundr(y)+(aut)omat(ic))
Acronyms	3	0.4%	<i>OSHA</i> (Occupational Safety and Health Administration), <i>KEY</i> (Keep Expanding Yourself)
Ambiguous/other	6	0.8%	<i>SAT</i> (Scholastic Aptitude Test), <i>LED</i> (light-emitting diode), 4 (for)

Next, the present research will focus on each abbreviation type separately, looking at such attributes as the most commonly appearing shortened form among the grouping, the subtypes making up each category and other relevant data.

3.3.2.1 Contractions

As mentioned previously, contractions are the most frequently found abbreviation type in the corpus, making up around 3/4ths of the shortened forms in the articles. They are mostly created by truncating two words such as *you are* or *it is*; the only exception to this rule that appeared among the articles was the contraction *can't*, formed by abbreviating the single word *cannot*. Further, it was discovered that most of the contractions in the corpus are four- or five-letter abbreviations; common examples of four-word contractions are the shortened forms *don't* (do not) and *can't* (cannot), while the most common five-word contraction by far was the shortening *you're* (you are). Then, the rate of occurrence of certain contractions was investigated, and the top three most frequently represented contracted forms in the corpus within the context of sentences are given below:

- 1) *it's*- **85** instances in the articles:
 - “**It’s** classic supply and demand.”
 - “In a noisy world, **it’s** also important to find your niche.”

- “**It’s** all about balance and time management.”

2) *don’t*- **70** occurrences:

- “Even if you **don’t** make much money, having your own website is a brilliant addition to your resume.”

- “Just as importantly, **don’t** forget to pay taxes on the money you make.”

- “Even if things **don’t** turn out as you’d hoped, starting a low-risk business is hands-down the best experience for any budding entrepreneur.”

3) *you’re*- **62** instances:

- “If **you’re** after scale, grow into an agency and recruit other responsible students who have spare time.”

- “If **You’re** Running a Startup, Spring Is a Year-Round Season”

- “When **you’re** sitting on an amazing new idea you can't wait to share -- what should be your first step?”

Together, just the three contracted forms represent **42%** of all the contractions found in the articles. Furthermore, certain patterns emerge when observing the use of these shortenings in the context of a sentence. One can notice, for instance, that the contraction *it’s*, standing for *it is*, commonly introduces a sentence or a clause. Moreover, on many occasions the pronoun *it* in the contraction *it’s* serves as an anaphoric reference unit referring to something that was introduced earlier in the text. The contraction *don’t*, on the other hand, most often either expresses an imperative mood and is used together with a directly or implicitly stated *you* to form a wish, command or a request (“**don’t** forget to pay taxes on the money you make”), or, when in the indicative mood, is employed to negate something that is considered to be a fact (“when assessing your accomplishments, you should understand that they **don’t** need to be life-changing events to be valuable”). The contracted form *you’re* frequently appeared in conditional if- and when- sentences:

1) “If **you’re** after scale, grow into an agency and recruit other responsible students who have spare time”;

2) “If **You’re** Running a Startup, Spring Is a Year-Round Season”;

3) “When **you’re** sitting on an amazing new idea you can't wait to share -- what should be your first step?”

Table 3.3 classifies the contractions into subtypes based on the part of speech of their constituting words. As evidenced by the table, the contractions composed of a

pronoun and a verb (such as *he'd* or *he's*) are the most common in the corpus, comprising more than half of the contracted forms in the articles. They are followed in frequency by the combination of a verb and a negation word (*not*) and the composite of an adverb and a verb. Moreover, six ambiguous cases, such as *don'ts* and *let's*, were also identified in the corpus.

Table 3.3 Classification of contractions

Type	Count	Percentage	Examples
Pronoun + verb	304	58,9%	<i>he'd</i> (he had), <i>he's</i> (he is), <i>I'd</i> (I would)
Verb + negation	179	34,7%	<i>aren't</i> (are not), <i>can't</i> (cannot), <i>couldn't</i> (could not)
Adverb + verb	27	5,2%	<i>here's</i> (here is), <i>there's</i> (there is)
Other/ambiguous	6	1,2%	<i>don'ts</i> (do nots), <i>let's</i> (let us), <i>can'ts</i> (cannots)

Finally, the tense of the main verb in each contraction was determined and presented in Table 3.4. As evidenced by the results of the analysis, the verb of most of the contractions, independent of the type, was in the present tense. The verb of the contraction composed from an adverb and a verb was in particular always in the present tense. This observation can be best explained by pointing out the fact that most of the articles were written primarily in the present tense and mostly discussed current events. Furthermore, several of the articles included interviews with successful entrepreneurs, and those interviews were conducted in the present tense, thus the prevalence of this tense among the contractions.

Table 3.4 The grammatical tense of contractions

Type	Present tense	Past tense	Future tense
Pronoun + verb	88,4%	4%	7,6%
Verb + negation	74,3%	19,6%	6,1%
Adverb + verb	100%	0%	0%

3.3.2.2 Initialisms and acronyms

Initialisms and acronyms are discussed here under one heading, as there exist many similarities in their structure and formation, and the only principal difference between these two shortenings is their pronunciation. For instance, the initialism *CEO*, standing for chief executive officer, is pronounced letter-by-letter as /,si: i:'əʊ/

(British English) or /,si:.i:'oʊ/ (American English), while the acronym *OSHA*, representing Occupational Safety and Health Administration, is pronounced as one word: /'oʊʃə/. However, initialism-acronym hybrids that can be pronounced either letter-by-letter or as one word also exist in the corpus: see *SAT* (Scholastic Aptitude Test), which can be pronounced as /,ɛs,eɪ'ti/ or as /sæt/.

Initialisms, acronyms and the hybrids of those two shortened forms together constitute **14%** of the abbreviations in the corpus. The majority of initialisms and acronyms in the articles are made up of two (*NY*- New York, *VC*- venture capital) or three words (*SAT*- Scholastic Aptitude Test, *CEO*- chief executive officer); similarly, most of these shortened forms consist of two or three letters or characters (*TV* and *IT* vs. *LED* and *NYU*). Moreover, there exists a strong positive correlation between the count of words and letters or characters constituting an initialism or acronym; in **82.7%** of cases, this number is one and the same. Still, exceptions exist: for instance, in the acronym *OSHA* (Occupational Safety and Health Administration) and the initialism *CNBC* (Consumer News and Business Channel), the letter *A*, representing the comprising word *and* in the full form of these shortenings, does not appear in the abbreviations.

Next, the frequency of individual acronyms and initialisms in the articles was investigated. The top three most commonly occurring initialisms and acronyms in the corpus are given below in the context of full sentences:

1) *CEO*- **27** instances in the articles:

- “Keith Hopper, **CEO** of Danger Fort Labs, adds, “Not addressing an important enough need that customers are willing to pay for.””
- “Ben Hsieh, program manager of Nest and Jason Cole, **CEO** of Da Primus Consulting, both agree that “not finding product market fit” is a main cause of failure.”
- “Eric Mathews, founder and **CEO**, of Start Co, says a big cause of failure is “building something nobody wants”.”

2) *B2G*- **6** occurrences:

- “How to Succeed as a Business-to-Government (**B2G**) Startup”
- “Despite the obvious opportunities that exist here, launching and growing a **B2G** startup is not for the faint-hearted.”
- “For this article, I talked to founders who run successful **B2G** businesses to understand how they got their first government contract.”

3) *U.S.*- 5 instances:

- “Following the **U.S.** is India, Canada and Japan and Spain.”
- “The Bloomberg **U.S.** Startups Barometer, which measures the market conditions for **U.S.** private tech companies, hit a record high in October, an increase of 44 percent from last year.”
- “According to LinkedIn, eight of the top ten **U.S.** companies in recruiting and retaining top talent are still run by their original founders.”

The three above-mentioned initialisms together stand for **38.4%** of the whole count of acronyms and initialisms in the corpus. Once again, certain observations can be made about the use of these shortened forms in the context of the sentences: so, for instance, one notices that the initialism *CEO* is often accompanied by a company name, the name and surname of the executive and a quote from the said CEO, or that the initialism *B2G* is frequently used together with nouns like *start-up* or *business*.

Some special cases of initialisms and acronyms were also encountered in the articles. For instance, the initialism *B2G* (business-to-government) is made up not only of the initial letters of the full form, but also the number 2, phonetically representing the word *to*. Compound initialisms such as *C-level* (chief level) or *e-commerce* (electronic commerce) are formed by combining the initial letter of the first word and the entire second word of the full form. The acronym *KEY* is a coinage: the author creates it for the purpose of the article and immediately explains its meaning in the same sentence by giving its full form: “The reason why I say that networking is **KEY** to any tech startup is because it's what will enable you to Keep Expanding Yourself.” Furthermore, the origin of one shortened form in the corpus—L-SPARK—could not be determined, therefore making it impossible to classify it as an initialism, acronym or some other type.

3.3.2.3 Clippings

Clippings are the third most common abbreviation type in the corpus, constituting slightly less than ten percent of all shortened forms in the articles. They are always a truncation of a single word in the full form, and most often consist of four (*demo*, *logo*, *tech*) or three letters (*com*, *gov*, *pup*). They are quite an effective way of shortening words, as it was calculated that the average clipping in the corpus reduces

the size of the original word by six letters (sometimes, even 11 letters can be cut off: see *ad*, the shortened form of advertisement). The three most common clippings among the articles are:

1) *tech*- **24** instances in the articles:

- “**Tech** repair agency”
- “Without an engineering degree, searching for a job in the **tech** world was a big challenge, but I eventually secured a role with HP.”
- “Foley is not what comes to mind when you envision the CEO of a fast-growing **tech** company.”

2) *co*- **4** occurrences:

- “Eric Mathews, founder and CEO, of Start **Co** adds, “... action removes doubt.””
- “Eric Mathews, founder and CEO of Start **Co** says, “Perseverance is the X-factor.”

3) *demo*- **4** instances:

- “Although accelerator programs do vary, a typical program includes meetings with mentors, feedback sessions, “**demo** day” presentations, networking and social activities.”
- “During an accelerator’s “**demo** days,” many investors are invited to watch the presentations.”
- “Accelerators are now including target audience members at **demo** days so they can hear about what you are doing as you share more about your project.”

Evidently, the clipping *tech*, from technology, is the most frequently used shortening of this kind in the articles. Together, the three previously mentioned clippings make up **53.3%** of all the clippings in the corpus. Table 3.5 categorizes the clippings into subtypes depending on which part of the original word is discarded: if it is the final part that is cut off, it is grouped as a backclipping, if the beginning- as a foreclipping, if only the central part is retained- as a middle clipping. As revealed in the table, backclippings such as *ad* (advertisement) and *co* (company) make up the vast majority—more than 4/5ths—of the clippings in the articles. They are followed in count by middle clippings (*ads*- advertisements or *labs*- laboratories) and foreclippings (*stache*-moustache or *blogging*-weblogging). The middle clippings in the corpus are usually morphological variations of backclippings: for instance, the

middle clipping *ads* (advertisements) is the plural form of the backclipping *ad* (advertisement). For this reason, it is not entirely clear whether these shortened forms should be classified as middle clippings or just a subtype of backclippings.

Table 3.5 Types of clippings

	Count	Percentage	Examples
Backclippings	50	83.3%	<i>ad</i> (advertisement), <i>co</i> (company), <i>com</i> (commercial)
Middle clippings	7	11.7%	<i>ads</i> (advertisements), <i>labs</i> (laboratories), <i>pups</i> (puppies)
Foreclippings	3	5%	<i>'stache</i> (moustache), <i>blogging</i> (weblogging), <i>phone</i> (telephone)

It is also worth noting that, quite often, the omitted letter or letters in the clipping is graphically indicated by an apostrophe:

- replacing the omitted beginning part of the word: *'stache* (moustache);
- the final part: *hustlin'* (hustling) OR
- the middle part of the word: *Poppin's* (Popping's).

3.3.2.3 Blends

Blends are the least common type of abbreviation in the corpus and constitute just **4.1%** of the shortened forms in the articles. In all but one case in the corpus, they are formed by combining two words; the exception is the blend *FedBizOpps*, shortened from three words: federal business opportunities. While the average number of letters forming the blends in the corpus is seven, blends as short as four letters (*doga*: d(og)+(y)oga) and as long as ten letters (*podcasting*: (i)Pod+(broad)casting) were also encountered among the articles. Next, the frequency of individual blends in the corpus was determined, and the three most commonly occurring blends in the articles are listed below. It should be noted that *podcasting*, the third most common blend in the corpus, is just a morphological variant (present participle) of the most frequent blend, *podcast*.

1) *podcast*- **6** instances in the articles:

- “Introducing our new **podcast**, Problem Solvers with Jason Feifer, which features business owners and CEOs who went through a crippling business problem and came out the other side happy, wealthy, and growing.”

- “But there are also various relatively unsexy secondary inefficiencies in the **podcast** industry that need their own innovations and revolutions -- areas like ad sales management (the **podcast** advertising sales process has its quirks and idiosyncrasies, and sales teams are bound to a patchwork of imprecise instruments) and audience management (which is still a prehistoric art in **podcast** land).”

2) *email*- 5 occurrences:

- “If you are sending a prospective investor **email** and a current investor **email** each month, continue to send both.””

- “**Email** outreach also can serve as an efficient tool when communicating with influencers.”

- “Send an outreach **email** requesting they try your product for free.”

3) *podcasting*- 3 instances:

- “Whether you're in the early-stage of your startup or years into running a successful business, it's always important to be ahead of the curve when it comes to every aspect of business, from branding to recruiting to even **podcasting**.”

- “What will 2018 look like for **podcasting**?”

Together, these blends represent **48.2%** of all the blends in the articles. It is interesting to note that the blend *email* is written without a hyphen in all five cases in the corpus; this follows the recommendation of the English grammar style and usage guide *AP Stylebook* (Ostrow, 2011). Table 3.6 displays the types of blends identified in the corpus based on which parts of the constituting words are kept in the resulting abbreviation: part of the first word and part of the second word, part of the first word and the entire second word or the whole first word and part of the second word. Further, three ambiguous cases such as *workaholic*: work+a+(alco)holic and *FedBizOpps*: fed(eral)+“biz(ness)”+opp(ortunitie)s were also identified in the articles. It was discovered that the type of blend that is composed of truncated parts of both words is the most common one in the corpus, followed by blends formed from a part of the first word and the entire second word.

Table 3.6 Types of blends

	Count	Percentage	Examples
Part + part	14	48.3%	<i>Instagram</i> : insta(nt)+(tele)gram, <i>laundromat</i> :

			laundr(y)+(aut)omat(ic), <i>podcast</i> : (i)Pod+(broad)cast
Part + full	10	34.5%	<i>AdSense</i> : ad(vertisement)+sense, <i>email</i> : e(lectronic)+mail, <i>eBay</i> : e(cho)+bay
Full + part	2	6.9%	<i>chatbots</i> : chat+(ro)bots, <i>smartphone</i> : smart+(tele)phone
Other	3	10.3%	<i>workaholic</i> : work+a+(alco)holic, <i>FedBizOpps</i> : fed(eral)+"biz(ness)" +opp(ortunitie)s

To summarize the results of the classification of abbreviations in the corpus, the majority (approximately 3/4ths) of the shortened forms in the corpus are contractions, followed by initialisms, clippings, blends and acronyms. The most common type of contraction in the articles is one formed by a pronoun plus a verb, or a verb and a negation word (*not*). More than 4/5ths of the clippings in the corpus are backclippings: abbreviations created by removing the final part of the initial word. As for blends, the majority of these shortened forms are formed by combining two truncated words, or by merging a partly shortened word with a full word.

3.3.1. Semantic fields

For the last part of the study, the abbreviations in the corpus were sorted into semantic fields. In defining the term, Divjak refers to Apresjan who claims that semantic fields contain ‘a multitude of meanings that have at least one semantic component in common’ (Apresjan, 1995, quoted in Divjak, 2010: 155). Furthermore, Saputri quotes Brinton who writes: ‘a semantic field denotes a segment of reality symbolized by a set of related words. The words in a semantic field share a common semantic property’ (Brinton, 2000, quoted in Saputri, 2015: 16-17). In other words, the abbreviations here are classified according to their meaning.

In order to carry out the categorization of the shortened forms, all contractions were first removed from the corpus. Despite making up the majority of abbreviations in the articles, they are semantically not as significant as the other types of shortenings. Thus, a total of 191 shortened forms were investigated in this part of the research. Table 3.7 presents the findings of the analysis. It shows that, as expected, abbreviations relating to the field of business and entrepreneurship—mostly job titles and business terms such as *CEO* (chief executive officer) and *B2G* (business-to-government)—dominate in the corpus. Since the articles were all published in a

business magazine and relate to the topic of start-ups, this comes as no surprise. Perhaps more surprising is the fact that there were almost as many IT- and technology-related abbreviations in the corpus, such as *AI* (artificial intelligence) or *app* (application). However, this observation can be explained by pointing out that new technologies and innovations in the field of computer science have an increasingly large impact in the world of entrepreneurship, particularly as it concerns the establishment of new businesses. It is interesting to note that, while most of the abbreviations in the business and entrepreneurship field were initialisms, the majority of IT- and technology-related shortenings were clippings. The process of abbreviation was also often employed in the creation of company names such as *AdSense* (ad(vertisement) + sense), *CB* (chubby + brain) or *eBay* (e(cho) + bay). Finally, geographical names, terms related to media and marketing and other shortened forms were also discovered in the corpus of abbreviations.

Table 3.7 The classification of abbreviations according to semantic fields

Semantic fields	Count	Percentage	Examples
Business & entrepreneurship	70	36,6%	<i>B2G</i> (business-to-government), <i>CEO</i> (chief executive officer), <i>Co</i> (company)
IT & Technology	65	34%	<i>AI</i> (artificial intelligence), <i>app</i> (application), <i>smartphone</i> (smart+(tele)phone)
Company names	15	7,9%	<i>AdSense</i> (ad(vertisement)+sense), <i>CB</i> (chubby+brain), <i>eBay</i> (e(cho)+bay)
Geographical names	8	4,2%	<i>NY</i> (New York), <i>NYS</i> (New York state), <i>U.S.</i> (United States)
Media & marketing	7	3,7%	<i>ad</i> (advertisement), <i>CNBC</i> (Consumer News and Business Channel)
Other	26	13,6%	<i>4</i> (for), <i>'stache</i> (moustache), <i>doga</i> (d(og)+(y)oga)

A summary of the results of the frequency analysis, of the classification of abbreviations into types and of their categorization into semantic fields can be found in the conclusions chapter below.

CONCLUSIONS

The goal set in the introduction to the thesis was to investigate the abbreviations used in articles on start-ups. In order to achieve said objective, the following research questions were formulated:

1. What are the attributes characteristic to abbreviation as a word formation process and to the shortened forms resulting from it?
2. What are the most common abbreviations in the corpus, how can they be classified into types, and to what semantic fields do they belong?

In order to respond to these questions, a theoretical background based on past research was first established, and then an analysis of a corpus of 35 articles on start-ups was carried out. The main findings of the theoretical part of the research are as follows: word-formation is the formation of novel lexemes from existing words or word parts. Abbreviation in particular is one of those word-formation processes, and it produces new lexemes by reducing words in size, such as by cutting off letters from a word or a phrase. The main objective of abbreviations is the economization of space in a written text. The four principal types of abbreviations are contractions, initialisms/acronyms, clippings and blends.

These findings were then incorporated into the analysis of the corpus. It was determined that shortened forms of all types show up once for approximately every 50 words in the corpus. The full forms of the abbreviations rarely appeared in the same article. The majority (around 3/4ths) of the abbreviations in the corpus were found to be contractions, but initialisms, clippings, blends and acronyms were also encountered. As expected, business- and entrepreneurship-related abbreviations dominated the corpus, followed by shortened forms from the field of IT and technologies.

The study has revealed that abbreviations are frequently used in articles on start-ups to shorten words and economize space. However, this research has only investigated articles published since the year of 2017. As such, the conclusions of the present thesis can only reflect the use of abbreviations in modern-day English. Future studies could broaden the scope of the research by exploring abbreviations from a diachronic perspective.

THESES

1. A *word* is an abstract label used for classifying objects or abstract qualities.
2. Words consist of morphemes, ‘the smallest [components] of a word which [contribute] to its meaning’ (Radford, 2009: 140).
3. *Word-formation* is the creation of new, complex lexemes from existing morphemes.
4. The term *abbreviation* can refer both to the word-formation process in which a shortened form is created, and to the construction resulting from the process.
5. In the latter case, the term describes a type of shortening most frequently created from a group of letters (often initial letters) taken from a word or a phrase.
6. ‘The modern world contains an abundance of information that is represented with abbreviation for pragmatic purposes’ (Zerkina, Kostina and Pitina, 2015: 138).
7. The principal function of abbreviations is ‘to compress the text and economise space and effort’ (Veisbergs, 2013: 14).
8. The four main types of abbreviations are contractions, initialisms/acronyms, clippings and blends.
9. Shortened forms of all types show up once for approximately every 50 words in the corpus.
10. The majority (73%) of the abbreviations in the corpus are contractions, but initialisms, clippings, blends and acronyms are also encountered in the articles.
11. Business- and entrepreneurship-related abbreviations dominate the corpus, followed by shortened forms from the field of IT and technologies.

REFERENCES

1. Adams, V. (2016) *An Introduction to Modern English Word-Formation*. London: Routledge.
2. Adar, E. (2002) *S-RAD: A Simple and Robust Abbreviation Dictionary*. Palo Alto: HP Laboratories.
3. Arkaah, P. (2012) *A Case Study of Effectiveness of Staff Training and Development at North West Parks and Tourism Board*. Mahikeng: North-West University.
4. Ashley, A. (1992) *A Handbook of Commercial Correspondence*. Oxford: Oxford University Press.
5. Ballard, Kim. (2001) *The Framework of English: Introducing Language Structures*. Beijing: Palgrave Macmillan.
6. Bauer, L. (1983) *English Word-Formation*. Cambridge: Cambridge University Press.
7. Beltrán, R. and José, F. (2017) *Technology and Its Linguistic Function*. Jaén: University of Jaén.
8. Burmeister, J. (2008) *Acronyms (And Other Forms of Abbreviation)*. Washington, D.C.: Homeland Security.
9. Butterfield, J. (2013) *Oxford A-Z of English Usage*. Oxford: Oxford University Press.
10. Cameron, D. (1998) *The Feminist Critique of Language: A Reader*. London: Psychology Press.
11. Cannon, G. (1989) Abbreviations and Acronyms in English Word-Formation. *American Speech*, 64 (2): 99-123.
12. Collard, B. and Royal, A. (2015) *The Use of Abbreviations in Surgical Note Keeping*. Amsterdam: Elsevier.
13. Crystal, D. (1995) *The Cambridge Encyclopedia of the English Language*. Cambridge: University of Cambridge.
14. Crystal, D. (2009). *Dictionary of Linguistics and Phonetics*. Hoboken: John Wiley & Sons.
15. Divjak, D. (2010) *Structuring the Lexicon: A Clustered Model for Near-synonymy*. Berlin: Walter de Gruyter.

16. Eastwood, J. (1994) *Oxford Guide to English Grammar*. Oxford: Oxford University Press.
17. Fandrych, I. M. (2004) *Non-Morphematic Word-Formation Processes: A Multi-Level Approach to Acronyms, Blends, Clippings and Onomatopoeia*. Bloemfontein: University of the Free State.
18. Farneste, M. (2017) *Advanced English Grammar*. Riga: University of Latvia.
19. Havráňková, R. (2013) *Word-formation Processes In Journalistic Texts*. Brno: Masaryk University.
20. Hogins, J. B. (1985) *Refreshing Grammar*. New York City: Science Research Associates.
21. Jackson, H. and Amvela, E. Z. (2007) *Words, Meaning and Vocabulary: An Introduction to Modern English Lexicology*. London: Bloomsbury Publishing.
22. Jovanovic, D. (2013) *A Qualitative Study of the Use of Netspeak in English Language Classroom*. Rovaniemi: University of Lapland.
23. Julien, M. (2002) *Syntactic Heads and Word Formation*. Oxford: Oxford University Press.
24. Katamba, F. (2005) *English Words: Structure, History, Usage*. London: Psychology Press.
25. Katamba, F. (2015) *English Words: Structure, History, Usage*. London: Routledge.
26. Kierzek, J. M. (1939) *The Macmillan Handbook of English*. New York City: The Macmillan Company.
27. Köhler, R. (2005) *Quantitative Linguistics: An International Handbook*. Berlin: Walter de Gruyter.
28. Larkey, L., S. Ogilvie, P. and Price, M. A. (2000) *Acrophile: An Automated Acronym Extractor and Server*. Boston: University of Massachusetts.
29. Lipka, L. (2002) *English Lexicology: Lexical Structure, Word Semantics & Word-formation*. Berlin: Gunter Narr Verlag.
30. Liukinevičiūtė, V. (2009) *Translation problems in Package Leaflets for Human Medicine (From English to Lithuanian)*. Kaunas: Vytautas Magnus University.
31. Ljung, M. (2003). *Making Words in English*. Lund: Studentlitteratur.
32. Llamas, L. F. and Rodríguez, M. M. G. (2005) *Lexical Creativity in English: Minor Methods of Word Formation*. Valladolid: University of Valladolid.

33. Lundell, I. (2012) *'LOL', 'OMG' and Other Acronyms and Abbreviations: A Study in the Creation of Initialisms*. Stockholm: Stockholm University.
34. Matthews, P. H. (1974). *Morphology: An Introduction to the Theory of Word-Structure*. Cambridge: Cambridge University Press.
35. McEnery, T., Xiao, R. and Tono, Y. (2006) *Corpus-based Language Studies: An Advanced Resource Book*. Abingdon-on-Thames: Taylor & Francis.
36. Müller, P. O. (1955) *Word-Formation: An International Handbook of the Languages of Europe*. Berlin: Walter de Gruyter GmbH.
37. Ostade, I. T. B. and Frankis, J. (1991) *Language Usage and Description*. Amsterdam: Rodopi.
38. Ostrow, A. (2011) *AP Stylebook Finally Changes "e-mail" to "email"*. Available from <https://mashable.com/2011/03/18/ap-stylebook-email/#QlkjA.R1X8qY> [Accessed on 11 May 2018].
39. Pandey, A. (2015) *Language Building Blocks*. New York City: Teachers College Press.
40. Park, Y. (2001) *Hybrid Text Mining for Finding Abbreviations and Their Definitions*. New York: IBM Research.
41. Partnership for Assessment of Readiness for College and Careers. (2012) *English Language Arts/Literacy. Grades 3-11*. Washington, D. C.: PARCC.
42. Plag, I. (2003) *Word-Formation in English*. Cambridge: Cambridge University Press.
43. Plessis, P. J. (1997) *Translating Late Medieval Latin*. Potchefstroom: Potchefstroom University.
44. Quirk, R., Greenbaum, S., Leech, G. and Svartvik, J. (2003) *A Comprehensive Grammar of the English Language*. London: Longman.
45. Radford, A. (2009) *Linguistics: An Introduction*. Cambridge: Cambridge University Press.
46. Raimes, A. (1990) *How English Works. A Grammar Handbook with Readings*. New York City: St Martin's Press.
47. Rawson, H. (1981) *A Dictionary of Euphemisms & Other Double Talk*. Washington, D. C.: Library of Congress.
48. Sapir, E. (1921). *An Introduction to the Study of Speech*. New York City: Harcourt.

49. Saputri, I. E. (2015) *An Analysis of Semantic Field on The Global Health And Travel Magazine*. South Tangerang: Syarif Hidayatullah State Islamic University Jakarta.
50. Swan, M. (1984) *Practical English Usage*. Oxford: Oxford University Press.
51. Štekauer, P. (1998). *An Onomasiological Theory of English Word-Formation*. Amsterdam: John Benjamins.
52. Štekauer, P. and Lieber, R. (2006) *Handbook of Word-Formation*. Berlin: Springer Science & Business Media.
53. Turnbull, M. L. (2005) *An Exemplar for Writing a Simple Academic Technical Report*. Rockhampton: Central Queensland University.
54. Veisbergs, A. (1997) *English and Latvian Word-Formation. Contrastive Analysis*. Riga: University of Latvia.
55. Veisbergs, A. (2013) *English and Latvian Word Formation Compared*. Riga: The University of Latvia Press.
56. Wang, L. and Meng, N. (2012) *Constructing Chinese Abbreviation Dictionary: A Stacked Approach*. Beijing: Peking University.
57. Warriner, J. E. (1957) *English Grammar and Composition*. New York City: Harcourt.
58. World Health Organization (2004) *WHO style guide*. Geneva: World Health Organization.
59. Yu, Z., Tsuruoka, Y. and Tsujii, J. (2003) *Automatic Resolution of Ambiguous Abbreviations in Biomedical Texts using Support Vector Machines and One Sense Per Discourse Hypothesis*. Tokyo: University of Tokyo.
60. Zapata, A. A. (2007) *Types of Words and Word-Formation Processes in English*. Bogotá: University of Los Andes.
61. Zerkina, N., Kostina, N. and Pesina, S. A. (2015) *Abbreviational Worldview As Part Of Linguistic Worldview*. Amsterdam: Elsevier.
62. Zerkina, N., Kostina, N. and Pitina, S. (2015) *Abbreviation semantics*. Amsterdam: Elsevier.
63. Zipf, G. K. (1935) *The Psycho-Biology of Language*. Oxford: Houghton Mifflin.

APPENDICES

Appendix 1

The list of the abbreviations (sample from 10 articles).

1. **You'll** learn what it really takes to be an entrepreneur.
(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)
2. Students with free time and few responsibilities can take risks that parents with mortgages and full-time work **can't** take.
(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)
3. Not all single students are satisfied with a Tinder swipe when it comes to dating, so offer them a face-to-face alternative **that's** more fun.
(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)
4. If you promise to bring in a good number of customers, it **shouldn't** be difficult to get the venue for free.
(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)
5. List all the details on Facebook Events, and harness the power of Facebook **Ads** to promote the event to single students in your area.
(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)
6. **It's** classic supply and demand.
(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)
7. Amazon Marketplace and **eBay** are good places to try this.
(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)
8. After **you've** made some money, think about evolving the business into a simple **app**.
(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)

9. **Blogging.**

(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)

10. For example, you can earn commission as an affiliate for online brands such as Amazon Associates, or display Google **AdSense** banners.

(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)

11. In a noisy world, **it's** also important to find your niche.

(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)

12. Even if you **don't** make much money, having your own website is a brilliant addition to your resume.

(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)

13. **There's** very little up-front cost involved, as you can place free **ads** online and ask for cleaning products to be provided by your client.

(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)

14. The experience and income will also be great for your fellow students, but if you struggle to find someone local, try **Fiverr.com**.

(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)

15. **Tech** repair agency.

(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)

16. Unleash the skills of computer science students by marketing a service that helps people with laptop or **phone** problems.

(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)

17. Pay students a cut of your earnings to take other students' dirties to a cheap **laundromat** and return them clean.

(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)

18. **There's** the opportunity to expand the service into supplying the printed flyers too, and even venture into managing Facebook **Ad** campaigns to target local students online.

(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)

19. Place free **ads** online offering a pet-sitting or dog-walking service.

(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)

20. If **you're** after scale, grow into an agency and recruit other responsible students who have spare time.

(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)

21. Websites such as **Udemy** and Teachable enable you to create courses that reach a global audience.

(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)

22. **You'll** earn a commission for every student who enrolls and, with little ongoing work required, it can be a great passive income stream.

(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)

23. **It's** all about balance and time management.

(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)

24. Just as importantly, **don't** forget to pay taxes on the money you make.

(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)

25. Even if things **don't** turn out as **you'd** hoped, starting a low-risk business is hands-down the best experience for any budding entrepreneur.

(Available from <https://www.entrepreneur.com/article/311604> [Accessed May 11, 2018].)

26. If **You're** Running a Startup, Spring Is a Year-Round Season.

(Available from <https://www.entrepreneur.com/article/312811> [Accessed May 11, 2018].)

27. For farmers, this season is a critical time -- **it's** when they lay the groundwork for the year ahead.

(Available from <https://www.entrepreneur.com/article/312811> [Accessed May 11, 2018].)

28. According to **CB** Insights, 42 percent of failed startups list “no market need” as a reason for their collapse.

(Available from <https://www.entrepreneur.com/article/312811> [Accessed May 11, 2018].)

29. By participating in conversations with customers and potential users, startups will receive direct feedback on what works well, what **doesn't** and what can be improved.

(Available from <https://www.entrepreneur.com/article/312811> [Accessed May 11, 2018].)

30. After farmers have determined which crop has the most potential for growth, **it's** time to cultivate the right environment.

(Available from <https://www.entrepreneur.com/article/312811> [Accessed May 11, 2018].)

31. In these sessions, ideas are discussed among **C-level**, manager and entry-level employees alike.

(Available from <https://www.entrepreneur.com/article/312811> [Accessed May 11, 2018].)

32. In a growing startup, ideas and opportunities are constantly emerging but **it's** vital to remain focused on the company's vision.

(Available from <https://www.entrepreneur.com/article/312811> [Accessed May 11, 2018].)

33. **Don't** follow the shiny objects that distract from the task at hand.

(Available from <https://www.entrepreneur.com/article/312811> [Accessed May 11, 2018].)

34. When Shiftgig experienced a **C-suite** leadership change, our first priority was making sure our employees, customers and investors understood the reason for the change and the impact it would have on the business.

(Available from <https://www.entrepreneur.com/article/312811> [Accessed May 11, 2018].)

35. As Shiftgig grew, we realized the importance of altering our **KPIs** to be measurable across every department.

(Available from <https://www.entrepreneur.com/article/312811> [Accessed May 11, 2018].)

36. How to Succeed as a Business-to-Government (**B2G**) Startup.

(Available from <https://www.entrepreneur.com/article/311806> [Accessed May 11, 2018].)

37. Despite the obvious opportunities that exist here, launching and growing a **B2G** startup is not for the faint-hearted.

(Available from <https://www.entrepreneur.com/article/311806> [Accessed May 11, 2018].)

38. For this article, I talked to founders who run successful **B2G** businesses to understand how they got their first government contract.

(Available from <https://www.entrepreneur.com/article/311806> [Accessed May 11, 2018].)

39. When a federal or state agency is hiring a new contractor for one of their upcoming projects, they post these opportunities on one of the dozens of government sites including **FedBizOpps** (for US federal projects) and the **NYS Contract Reporter** (for New York State).

(Available from <https://www.entrepreneur.com/article/311806> [Accessed May 11, 2018].)

40. As a **B2G** business, you may apply for inclusion on the registries maintained on each of these government websites.

(Available from <https://www.entrepreneur.com/article/311806> [Accessed May 11, 2018].)

41. Subcontracting is extremely common in **B2G** projects.

(Available from <https://www.entrepreneur.com/article/311806> [Accessed May 11, 2018].)

42. Mehul Sanghani, one of the **B2G** entrepreneurs I talked to, said that he previously worked on an **OSHA** project as an employee of a larger consulting firm.

(Available from <https://www.entrepreneur.com/article/311806> [Accessed May 11, 2018].)

43. After he had worked with **OSHA** for a while, he was asked by the government agency if he had ever considered starting a business.

(Available from <https://www.entrepreneur.com/article/311806> [Accessed May 11, 2018].)

44. Skyler Ditchfield, who runs a **telecom** solutions company, said that he once read a news article about funds being made available for rural schools in California.

(Available from <https://www.entrepreneur.com/article/311806> [Accessed May 11, 2018].)

45. His organization then took part in close to a dozen vetting calls before a new **RFP** was raised and they were asked to bid.

(Available from <https://www.entrepreneur.com/article/311806> [Accessed May 11, 2018].)

46. When **you're** sitting on an amazing new idea you **can't** wait to share -- what should be your first step?

(Available from <https://www.entrepreneur.com/video/312072> [Accessed May 11, 2018].)

47. Being equipped with a diverse set of knowledge and facts can paralyze a decision-maker when **it's** time to pull the trigger.

(Available from <https://www.entrepreneur.com/video/312072> [Accessed May 11, 2018].)

48. Traub tells Rose that the reality that grand projects and impressive feats exist **doesn't** mean they did not start as smaller, leaner models in the beginning.

(Available from <https://www.entrepreneur.com/video/312072> [Accessed May 11, 2018].)

49. **Here's** how to keep your hands on the wheel.

(Available from <https://www.entrepreneur.com/article/310973> [Accessed May 11, 2018].)

50. **That's** just life.

(Available from <https://www.entrepreneur.com/article/310973> [Accessed May 11, 2018].)

51. **It's** always changing, and no matter how prepared you think you are, especially in business, there will always be a curveball.

(Available from <https://www.entrepreneur.com/article/310973> [Accessed May 11, 2018].)

52. Whether **you're** a seasoned entrepreneur with several businesses or an ambitious entrepreneur on your first voyage, we can all agree that the first 365 days can be the most frightening.

(Available from <https://www.entrepreneur.com/article/310973> [Accessed May 11, 2018].)

53. **Here's** what I learned.

(Available from <https://www.entrepreneur.com/article/310973> [Accessed May 11, 2018].)

54. **I'll** give you an example.

(Available from <https://www.entrepreneur.com/article/310973> [Accessed May 11, 2018].)

55. You **can't** beat yourself up over failure.

(Available from <https://www.entrepreneur.com/article/310973> [Accessed May 11, 2018].)

56. Consider that **you're** trying something new, and **it's** not like there is a clear course of action on how to become successful, reach your goals or even make yourself happy.

(Available from <https://www.entrepreneur.com/article/310973> [Accessed May 11, 2018].)

57. **I've** found that the challenge of being an entrepreneur means that you must conquer yourself through mindfulness without becoming either overly confident or ridden with ego.

(Available from <https://www.entrepreneur.com/article/310973> [Accessed May 11, 2018].)

58. When assessing your accomplishments, you should understand that they **don't** need to be life-changing events to be valuable.

(Available from <https://www.entrepreneur.com/article/310973> [Accessed May 11, 2018].)

59. **It's** easy to find yourself down when you lose a client or a deal, have a bad quarter, or miss one of your goals.

(Available from <https://www.entrepreneur.com/article/310973> [Accessed May 11, 2018].)

60. But you can reassess, recalling what **you've** been able to accomplish and overcome, to positively impact your personal perspective and your business, too.

(Available from <https://www.entrepreneur.com/article/310973> [Accessed May 11, 2018].)

61. When every entrepreneur says that **you're** going to have your ups and downs, **they're** right.

(Available from <https://www.entrepreneur.com/article/310973> [Accessed May 11, 2018].)

62. The challenge for most entrepreneurs is recognizing when **they've** reached a peak or whether they are in a valley.

(Available from <https://www.entrepreneur.com/article/310973> [Accessed May 11, 2018].)

63. When **you're** down on your luck, scraping by financially, overly stressed, suffering from depression and self-doubt -- or any one of the other screaming signs that you have fallen to a low point -- **it's** very tempting to run for the hills and go back to working full time.

(Available from <https://www.entrepreneur.com/article/310973> [Accessed May 11, 2018].)

64. **It's** not what you want.

(Available from <https://www.entrepreneur.com/article/310973> [Accessed May 11, 2018].)

65. But that **doesn't** mean the fear of failure **wasn't** looming.

(Available from <https://www.entrepreneur.com/article/310973> [Accessed May 11, 2018].)

66. The truth is, you never know **what's** going to happen and **you'd** likely be capable of living on less money than you think -- so why not take a chance and live the life you really desire?

(Available from <https://www.entrepreneur.com/article/310973> [Accessed May 11, 2018].)

Appendix 2

The classification of the abbreviations (sample from 10 articles).

Abbreviation	Type of abbreviation	Full form	Is the full form provided in the text?
You'll	Contraction	You will	No
can't	Contraction	Cannot	No

that's	Contraction	That is	No
shouldn't	Contraction	Should not	No
Ads	Clipping	Advertisements	No
It's	Contraction	It is	No
eBay	Blend	E(cho)+Bay	No
you've	Contraction	You have	No
App	Clipping	Application	No
Blogging	Clipping	Weblogging	No
AdSense	Blend	Ad(vertisement)+Sense	No
it's	Contraction	It is	No
don't	Contraction	Do not	No
There's	Contraction	There is	No
Ads	Clipping	Advertisements	No
Com	Clipping	Commercial	No
Tech	Clipping	Technology	No
Phone	Clipping	Telephone	No
laundromat	Blend	Laundr(y)+(aut)omat(ic)	No
There's	Contraction	There is	No
Ad	Clipping	Advertisement	No
Ads	Clipping	Advertisements	No
you're	Contraction	You are	No
Udemy	Blend	(Yo)u+(aca)demy	No
You'll	Contraction	You will	No
It's	Contraction	It is	No
don't	Contraction	Do not	No
don't	Contraction	Do not	No
you'd	Contraction	You had	No
You're	Contraction	You are	No
CB	Initialism	Chubby Brain	No
doesn't	Contraction	Does not	No
it's	Contraction	It is	No
C-level	Initialism	Chief level	No

	(compound)		
it's	Contraction	It is	No
C-suite	Initialism (compound)	Chief suite	No
KPIs	Initialism	Key performance indicators	No
B2G	Initialism (special case)	Business-to-government	Yes (same sentence, in parentheses)
B2G	Initialism (special case)	Business-to-government	Yes (different sentence, same article)
B2G	Initialism (special case)	Business-to-government	Yes (different sentence, same article)
FedBizOpps	Blend	Federal business opportunities	Yes (partly, same sentence, in parentheses)
NYS	Initialism	New York state	Yes (same sentence, in parentheses)
B2G	Initialism (special case)	Business-to-government	Yes (different sentence, same article)
B2G	Initialism (special case)	Business-to-government	Yes (different sentence, same article)
B2G	Initialism (special case)	Business-to-government	Yes (different sentence, same article)
OSHA	Acronym	Occupational Safety and Health Administration	No
OSHA	Acronym	Occupational Safety and Health Administration	No
Telecom	Clipping	Telecommunication	No
RFP	Initialism	Request for proposal	No
you're	Contraction	You are	No
it's	Contraction	It is	No
doesn't	Contraction	Does not	No
Here's	Contraction	Here is	No
That's	Contraction	That is	No
It's	Contraction	It is	No

you're	Contraction	You are	No
Here's	Contraction	Here is	No
I'll	Contraction	I will	No
can't	Contraction	Cannot	No
you're	Contraction	You are	No
it's	Contraction	It is	No
I've	Contraction	I have	No
don't	Contraction	Do not	No
It's	Contraction	It is	No
you've	Contraction	You have	No
you're	Contraction	You are	No
they're	Contraction	They are	No
they've	Contraction	They have	No
you're	Contraction	You are	No
it's	Contraction	It is	No
It's	Contraction	It is	No
doesn't	Contraction	Does not	No
wasn't	Contraction	Was not	No
what's	Contraction	What is	No
you'd	Contraction	You would	No

Dokumentārā lapa

Bakalaura darbs „Abbreviations in Articles on Start-ups” (Abreviatūras rakstos par jaunuzņēmumiem) izstrādāts LU Humanitāro zinātņu fakultātē.

Ar savu parakstu apliecinu, ka pētījums veikts patstāvīgi, izmantoti tikai tajā norādītie informācijas avoti un iesniegtā darba elektroniskā kopija atbilst izdrukai.

Autors: Paula Auzāne

24. 05. 2018.

Rekomendēju/nerekomendēju darbu aizstāvēšanai

Vadītāja: docents Dr. philol. Laura Karpinska

24. 05. 2018.

Recenzents:

Studiju metodiķe: Samanta Matecka

24. 05. 2018.

Darbs iesniegts Anglistikas nodaļā

24. 05. 2018.

Darbu pieņēma:

Darbs aizstāvēts bakalaura gala pārbaudījuma komisijas sēdē

2018. gada..... jūnijā, prot. Nr., vērtējums

Komisijas sekretāre: