English nominalizations ending in suffixes -hood and -ness in the framework of cognitive linguistics

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Engleske nominalizacije izvedene sufiksima *-hood* i *-ness* u okviru kognitivne lingvistike

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1. INTRODUCTION

The focus of this paper is the influence of metaphor and metonymy on English nominalizations. Nominalizations provide rich soil for research because of their complex morpho-syntactic and lexical nature. Since there are different types of nominalizations and to study them all would be too complex a task, we will base our research on nominalizations derived by the means of sufffixes *-hood* and *-ness*.

Cognitive Linguistics provides a theoretical basis for this analysis. The focus will be on the cognitive theory of metaphor and metonymy and we will try to establish the influence they have on the production of these nominalizations.

2. THE AIM OF THE STUDY

The above mentioned suffixes are very productive. They can easily be attached to adjectives, nouns and even adverbs. They are also highly polysemous and show various meanings, some more central than the others. We will try to show that these other, non-central meanings of these suffixes can be explained through various metonymic and metaphorical means. Our aim is also to determine the placement of metaphorical and metonymic operations, that is, to investigate whether they operate on the base word prior to suffixation, or on the output. The possibility for metaphor and metonymy to work simultaneously with the process of suffixation is also left open.

3. HYPOTHESES

1. Metaphorical and metonymic processes considerably influence grammatical forms and behaviour of nominalizations.
2. The polysemy of *-hood* and *-ness* formations can be explained by means of metaphors and metonymies.

4. METHODOLOGY

Every linguistic theory needs a suitable methodology adequate for its description. Due to the specificity of the subject matter, the focus of the study and the guiding assumptions, cognitive linguistics uses methods different from the ones used in previous linguistic description. Langacker (1987: 34-55) proposes methodological principles each linguist should be guided by in his analysis and these are factuality, economy, explicitness, generality and predictiveness. Factuality is a basic requirement because every theory should be in concordance with available facts. Facts are, however, problematic since they are derived from the assumptions characteristic for a certain theory. For example, a fact about syntax in contemporary linguistics is that it is a discrete component of the language, distinct from lexicon and semantics and therefore subject to its own tools of description. In cognitive grammar, on the other hand, it is a fact that syntax is an integral part of language, together with lexicon and semantics and cannot be described autonomously. Economy is another requirement that enables a great amount of data being captured with less theoretical apparatus. Simplicity in description should also be sought for. Explicitness implies precision of linguistic description and appropriateness of formal methods. Generality as a principle supposes seeking of general rules and universal principles. Regularities should be stated, but since cognitive grammar is usage-based and therefore irregular, nonobvious generalizations should also be captured. Cognitive linguistics analysis should be guided by predictiveness: analysis should be able to predict the data, that is, evidence, either supporting or disconfirming, should be apparent.

The methodology we will apply in our analysis is introspection supplemented by corpus analysis.

The main methodology used by cognitive linguists is the one of introspection. Although cognitive linguists rely a great deal on their knowledge and perception of the world (therefore this methodology has often been labeled as 'subjective', intuitive and lacking objectivity), we believe it to be fundamental in any linguistic research: “Linguistic introspection is conscious attention directed by a language user to particular aspects of language as manifest in her own cognition.” (Talmy 2007: XII).

Talmy (2007) differentiates between two levels of consciousness in which aspects of language can manifest themselves. The first one is so-called 'first-level consciousness': language patterns appear here whether through evocation or spontaneously. The 'second-level consciousness' or attention is usually volitional and targeted at a certain language aspect. Some aspects of language are more 'ready' to appear as the object of introspection than the

others and if they appear in the first-level, they differ in their amenability to occur in the second-level consciousness. Meaning is one of the most accessible categories- meaning of an expression, a word or an idiom. The grammaticality of a phrase and appropriateness of an expression in a certain context is also easily accessible. Whereas the meaning of an open-class morpheme also belongs here, the meaning of closed-class morphemes, either free or bound, belongs to the group of medium accessibility to introspection (such as are the suffixes under study here). The same is true of synonyms of a word or some different senses of a word. Their analysis requires corpus research using tools such as dictionaries. Semantic components within a morpheme's meaning are, according to Talmy, not easily accessible, just as all senses of a polysemous words, as well as certain syntactic patterns and principles. They cannot be analyzed via introspection alone, but require other methodologies, such as the ones of comparative semantics, corpus analysis or syntactic analysis.

In our research we will use corpus analysis and examples that should provide us with enough working material to support the starting assumptions. We will use the bottom-up approach, meaning we will start with the real occurrences of language and try to define what motivates them.

When using corpus-based research method, one can deal with the corpus qualitatively and quantitatively. Qualitative research concentrates on analyzing the features of the targeted language occurrences. Quantitative approaches focus on prevalence of the feature in question in the corpora, that is, its frequency. In both cases, the linguist deals with real life data, occurrences of language that are not made-up. We will start our analysis using the quantitative method, with the criterion of frequency as the factor crucial in deciding which nominalizations to include in our study. After collecting the data, the examples will be analyzed accordingly.

When it comes to extracting language patterns in corpus researches, one can choose from variety of available corpora, such as BNC (The British National Corpus), COCA (The Corpus of Contemporary American English) or ANC (American National Corpus), but such corpora are not the only ones that can be used. One can use dictionaries and simple internet searches, which was also done in our research.

The main source of examples in our study is the British National Corpus. It contains over 10 million words from a variety of genres (spoken language, fiction, magazines,

newspapers, and academic genre). It was created by Oxford University Press in the 1980s and due to its representativeness, is most widely used in cognitive linguistics. In gaining our corpora, we took the following steps:

1. We gained the frequency lists provided by BNC, that is the wordlist with the words ending in *-hood* and *-ness*. In the column 'search' we entered **hood* and got a list of a 100 most frequent words ending in *-hood*. The same was done for the suffix *-ness.*

2. After finding the one hundred most frequently used words, we started the research focusing on those nominalizations that have greater frequency, that is, that appear in the BNC more than once (for the suffix *-hood* at least). Also, we were aware of the fact that many examples will be excluded due to the lack of space or simply, after having completed the analysis, realizing that the only meaning of the nominalization is the prototypical meaning, so no important contribution to the research is added.

3. For each nominalization different senses needed to be established. For that purpose, we used definitions given in the following dictionaries and grammars: Webster's New World College Dictionary, Oxford Advanced Learner's Dictionary, Longman Dictionary of Contemporary English, Longman Grammar of Spoken and Written English, Collins COBUILD English Dictionary for Advanced Learners, Dictionary.com and The Free Dictionary.

4. We needed to provide example sentences that reflect different senses. In the cases where BNC did not come up with a satisfying solution, that is, the one needed to show a specific sense, we used other sources, corpora and dictionaries, that is the above mentioned dictionaries complemented by other online dictionaries (such as Vocabulary.com[1] and Wordnik etc.) and Internet sources. The sources are added after each example.

Having found different senses of the nominalizations and corresponding examples, we will

1. try to establish the central sense and other, less prototypical senses following the assumptions of prototype theory,

2. try to explain the motivation for those other, non-central senses through metaphorical and metonymyic processes and

1 https://www.vocabulary.com/ offers access to numerous literary works and online magazines which were used as sources for our analysis.

3. finish the analysis by trying to determine the placement of metaphorical and metonymic processes, that is, to see whether they operate before or after suffixation or simultaneously with the process of suffixation.

For each suffix we were aimed at finding the prototypical sense and in doing so we followed the criteria proposed by Tyler and Evans (2003):

1. earliest attested meaning (historically),
2. predominance in the semantic network (for the sense to be central, it is needed to be most frequently involved or related to other senses),
3. relations to other prepositions (senses that participate in contrast sets are central senses)
4. ease of predicting sense extensions (the central sense is the one from which other senses are derived and if that sense is easy to predict, it has more probability of being a central one).

Other senses that are extended form the prototypical one are given and motivation for these extensions is provided.

5. THESIS ORGANIZATION

The thesis is organized as follows: The first part of the thesis will be theoretical and will shed some light on word formation processes in general, polysemy, metaphor and metonymy. The second part, the analytical one, will try to check the assumptions of the theoretical framework and confirm the hypotheses. The theoretical part is organized in the following sections: Section 6 will give an overview of word formation as part of linguistic study in English. We will start with the history of research, differences between certain linguistic approaches and different word formation models. Section 7 will focus on word formation within cognitive linguistics framework. Section 8 will deal with specific word formation processes in English such as prefixation, suffixation, compounding and others. Section 9 deals with nominalization, word formation process of creating nouns. We will give the brief description of linguistic approaches to nominalization. Section 10 deals with polysemy in general. We claim that the suffixes in question are polysemous, so it is necessary to define polysemy and describe it from a cognitive point of view. We will also show how polysemy also appears in word formation. Section 11 deals with basic assumptions of cognitive linguistics which serves as a theoretical basis for this thesis. A brief history, influences, main figures and the most important notions of it will be presented. Then we will

define the notion of 'grammar' and how it can be interpreted from cognitive linguistics' perspective. We will describe metaphor and metonymy as cognitive processes and show what makes them so fundamental. The similarities and differences between them will be described, as well as the way they interact. Their influence on grammatical phenomena will also be discussed. In this section we will also tackle the blending theory, since it is often closely related to the theory of conceptual metaphor and metonymy. Section 12 gives the overview of suffixes *-hood* and *-ness*, their meanings (central and non-central) and descriptions available in the literature. Analytical part starts with the section 13, where we will, based on the corpus, try to see whether the suffixes display more meanings, determine them and try to establish what motivates them. Section 14 will deal with the position of metaphorical and metonymic operations. Section 15 gives an overview of metaphorical and metonymic extensions from the prototypical sense. We will conclude our investigation with the section 16.

6. WORD FORMATION IN ENGLISH

6.1. General notions

Word formation is, broadly speaking, the study of language concerned with creation of new words. If we want to define *a word,* we can say that it is a unit of sounds or written representation that bears certain meaning. Plag (2003) gives the following properties of words:

- words are entities having a part of speech specification
- words are syntactic atoms
- words (usually) have one main stress
- words (usually) are indivisible units (no intervening material possible).

Words consist of smaller units called morphemes, which will be defined below.

It has often been debated whether word formation as a discipline is an autonomous one, or if it should be studied as part of morphology, phonology and syntax on one side and semantics and pragmatics on the other. It is however agreed on that it is "an interdisciplinary phenomenon situated between lexicon and grammar" and that it is "the study and description of the processes and regularities that form new words on the basis of the existing vocabulary.*"* (Müller et al. 2015: VII).

6.2. Approaches to word-formation

Schmid (2015: 3) mentions three types of approaches in the word-formation field: word-based, root-based and morpheme-based, depending on what is taken as a basis. In the word-based approach (word-based hypothesis) words are the bases of complex lexemes. Compounds are made up of more than one word, and word plus an affix form derivatives with the help of word formation rules. In the second approach roots or stems are the starting points. Root or stem is sometimes defined as an element to which we add more material when forming new words, or an element that remains unchanged before inflectional endings are added. The morpheme-based approach views morpheme as the basis for complex words. Morpheme is the smallest meaningful unit. The term was coined by Baudouin de Courtenay in 1972 (1972: 151), who talks about "the unification of the concepts of root, affix, prefix, ending, and the like under the common term, morpheme." He defines it "as that part of a word which is endowed with psychological autonomy and is for the very same reason not further divisible." (in Carstairs-McCarthy 2005: 6).

Morphemes can be divided into bound and free. Free morphemes can occur on their own while bound ones cannot. They can also be lexical or grammatical. Lexical morphemes carry some semantic context, whereas grammatical ones convey grammatical information. Free morphemes correspond to simple lexemes (*hand*), whereas bound grammatical morphemes usually indicate number, tense or case (eat-*s*). Lexical morphemes can also be bound (affixes), in the same fashion that grammatical ones can be free (function words such as *the* or *of*). In the example of *nationalized*, *nation* is a free lexical morpheme and a root, *-al* is also a lexical morpheme, but a bound one (derivational suffix). *National* is the base for *nationalize* where *-iz*e is again a bound lexical morpheme (derivational suffix). To the base *nationalize* one can add a bound grammatical morpheme *-d*.

There are two approaches to study word-formation: onomasiological and semasiological (Štekauer 2005). The semasiological (from Greek *séma* 'sign') approach is based on a form→ meaning direction, in the sense that it investigates which meanings are associated with a certain morphological structure (word-formation pattern) in a particular language and it analyses the already existing word-stock. In this kind of approach linguists try to discover what certain word patterns have in common and therefore try to make some general remarks on that. The onomasiological (from Greek *ónoma* 'name') approach is based on a concept/meaning→form direction, that is it investigates which word-formation patterns can be used to express certain meanings, which is a meaning-oriented approach. The concept and how it is expressed is in the center of this kind of investigation. Here the speaker's ability

to coin new words is of great importance. The onomasiological research can be diachronic and synchronic, the former one dealing with change in language of time, the latter with the current language processes. It can also be empirical and theoretical and they can also be combined with already mentioned ones: “Empirical onomasiology studies the different ways of expressing (empirical aspect) a given concept in various languages (synchronic aspect) and/or the etymology of these expressions and their changes over time (diachronic aspect)”. (Štekauer 2005: 208). Both semasiological and onomasiological approaches can be included in language description.

Štekauer (2000) follows onomasiological approach and claims that each naming act is a way of responding to a demand created by a speech community. Word formation is an independent component of linguistics, contrasted with a lexical and syntactic component:

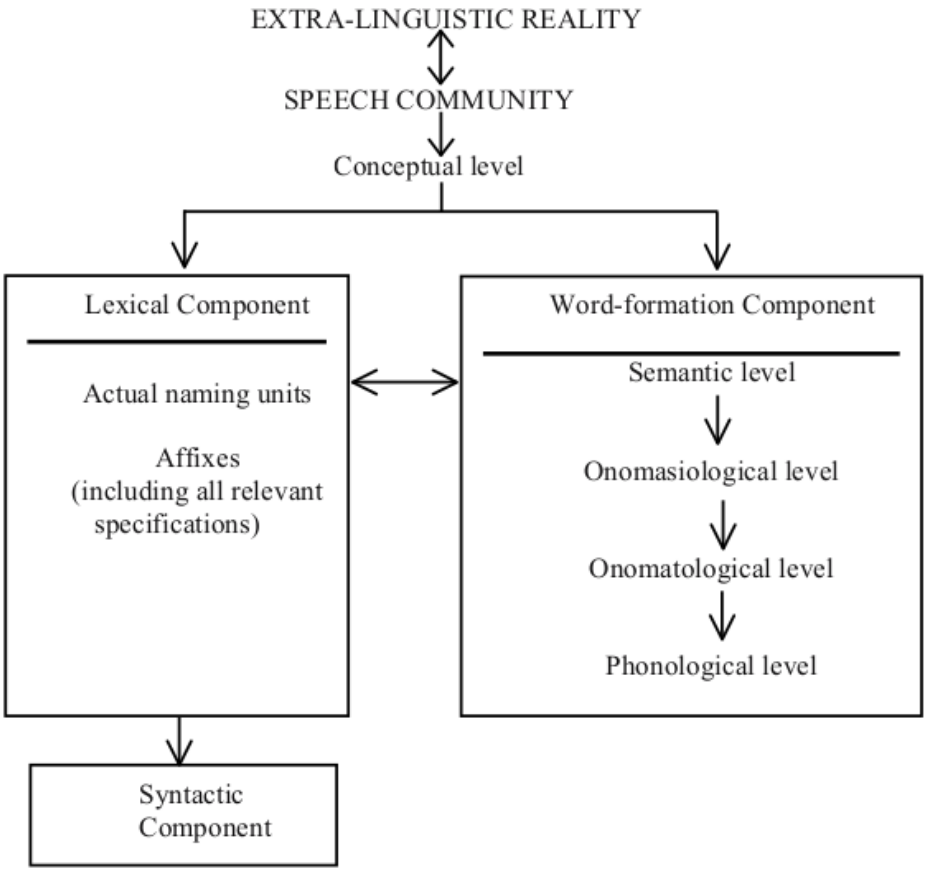

Figure 1. Word-Formation Component and its relation to other components
(Štekauer 2005: 213)

When assigning a name to the object, members of the speech community scan the lexical component and if they found the unit they need, Lexical component can serve as basis

for semantic formation (semantic change). If not, a completely new naming unit is made by the Word-formation component.

Thus Lexical and Word-formation components 'co-operate': in the Lexicon all naming units (monemes and complex words, borrowed words, clippings and acronyms) as well as affixes are stored and lexicon feeds Word-formation component with it. On the other hand, what is being coined in the Word-formation component, will later be stored in the Lexicon. This model shows that for giving names to objects, language users are of great importance. In doing so, they rely on their knowledge, cognitive abilities and experiences and imagination so it is not a purely linguistic act, but rather a cognitive phenomenon.

There are several levels in the Word-formation component:

1. on the conceptual level the object that is selected by the speech community as the one that needs to be named is analysed and conceptually categorized in the most general way (place, time, manner).
2. on the semantic level semantic features or semes are added ([+Material] [+Animate] [+Human] [Adult] [+Profession] [+Agent]).
3. on the onomasiological level one seme is selected to represent the onomasiological base denoting a class to which the object belongs (agent, object, instrument) and another one is selected to function as a mark of the base. The mark can be divided into determining constituent and the determined constituent.

The determined constituent is always the category of Action (Action proper, Process and State). Onomasiological structure is formed on this level and it represents the relationship between the base and the marks. It is "a conceptual-semantic basis for the act of naming." (Štekauer 2005: 216).

4. on the onomatological level morphemes are selected and assigned to semes.
5. on the phonological level the new naming unit is phonologically shaped according to relevant phonological rules.

All naming units that are formed in the Word-formation component are coined by productive and regular Word-Formation rules. In the onomasiological theory, word-formation can be defined as following (Štekauer 2000: 7):

Word-formation deals with productive, regular and predictable onomasiological and word-formation types producing motivated naming units in response to the naming needs of a speech community, by making use of word-formation bases of bilateral naming units and affixes stored in the Lexicon.

6.3. Historical overview of word formation

Historically looking, the interest in word-formation began to increase in the early 20th century. Adams (1973: 5) sees the reason for this in the fact that at that time de Saussure made distinction between synchrony and diachrony. Synchronic study is concentrated on the current state of language and a diachronic one is interested in the language change. De Saussure gave priority to synchrony. The correct study of the word formation could only be done by managing these two approaches. Before the midfifties and Chomsky, linguists were mostly interested in phonology and morphology. It is Chomsky who changed that course when he took more interest in syntax, but again words-formation was discussed only as a part of either a morpheme analysis or a sentence analysis.

One of the first scholars to give a comprehensive overview of English word formation was Hans Marchand in 1969. He followed semasiological approach in his description and included processes such as compounding, affixation (derivation), conversion, abbreviation, and blending. His description is important because it is a synchronic one, relying on diachronic facts about the history of language. According to Marchand word formation deals with composites only, which can be formally and semantically analyzed. He distinguishes between two types of words:

1. words formed as combinations of full linguistic signs by means of compounding, suffixation, prefixation, derivation by zero morpheme, and back derivation and
2. words not formed as combinations of full linguistic signs such as blending, clipping, rime, expressive symbolism and word manufacturing.

Both groups are similar in the way that words in them are formed by syntagmatic relation between morphemes. If a form is not analyzable into morphemes, it is called a moneme (*Monday*, *conceive*).

Any word-formation syntagma consists of a determinant (specifier or modifier) and a determinatum (head). Determinatum can stand in all positions, whereas determinant cannot. Since all word combinations need to have this determinant/ determinatum relationship, he introduced 'zero-morpheme' in the word-formation processes such as conversion (*father* as a verb is conversed from the noun *father*). Here zero-morpheme takes over the role of a suffix in the function of determinatum.

There are two ways of forming new words (Marchand 1967), namely expansion and derivation. Expansion is based on the formula AB = B (*a steamboat is a boat*) and here both determinant and determinatum belong to the same word class and determinant just modifies the determinatum. There are, however, cases where one word is used in another function, that

is transposed, and this is called transposition. In the example *stone wall*, the noun *stone* functions as an adjective. Derivation is a subgroup of transposition: a suffix transposes the base into a different category. This is true of suffixation only, prefixation would be viewed as expansion. In his later works (as given in Kastovsky 2005), Marchand emphases that word-formation analyses should include morphological, semantic and grammatical aspects. His approach is a structuralist one. Structuralism brought many important contributions to the word-formation. It is 'responsible' for the concepts such as *stem morpheme*, *derivational* and *inflectional morpheme*, *discontinuous morpheme*, and *free* and *bound morpheme*, concepts needed for analyzing the word structure.

In generative grammar, word-formation was treated as either part of syntax or phonology. It was concerned with native speaker's mental representation of grammar and how it can produce rules for formation of correct utterances. Sentence and its transformations were studied at large, so different word-formations (nominal compounds) were seen as being transformed from sentences. In 1960 Lees (1960: 156, in Lieber 2015) observed that all implicit grammatical relation of the sentence (subject, object) are retained in the derived compound explicitly:

1. *The sheep has a horn. The horn is like a prong.* →
2. *The sheep has a horn which is like a prong.* →
3. *The sheep has a horn like a prong*. →
4. ... *sheep with a horn like a prong* ... →
5. ... *sheep with a pronghorn* ... →
6. ... *pronghorn*…

However there were cases that required deletion of some material, like verb, in transformations, so ten years later Chomsky gave another account of word-formation. To him, all sentences can be transformed into gerunds (*refusing*, *criticizing*), but derived nominals (*refusal*, *criticism*) are part of the lexicon. This lexicalist approach was totally different view on word formation processes, since it treated deverbal adjectives and deadjectival nouns as part of lexicon.

In 1976 Aronoff published the first monograph on generative morphology, *Word-formation in generative grammar,* claiming that word-formation investigation should not be concentrated on morphemes, since the notion of a morpheme is rather problematic, but rather on a word itself, so he suggests word-based hypothesis: “All regular word-formation

processes are word-based. A new word is formed by applying a regular rule to a single already existing word. Both the new word and the existing one are members of major lexical categories." (Aronoff 1976: 21). The reason for this approach is the fact that some English words like *cranberry* could not be analyzed as *cran* + *berry*, since *cran* has no meaning and therefore cannot be counted as a morpheme, but rather words like these exist as such in lexicon. They are not formed by regular morphological processes, but by word-formation rules in the lexicon. To him, affixes do not belong to lexicon, they are part of rules. Meanings of complex words can be seen as the sum of meanings of their parts (*happiness*: the state of being happy). Some word formation rules can be totally productive, which is case with formation of *-ly* adverbs, and less productive, which is the case with nouns ending in *-dom*. There are also some syntactic and semantic restrictions of the rules. For example, new words are formed from major syntactic categories such as nouns, verbs or adjectives, and never from articles or prepositions. Semantically, affixes 'select' the base they attach to, which is also the case with phonology (stress). Generative research on word formation was mostly concentrated on principles and rules, since word formation must be rule-governed. Language in general is depicted "as a very rigid and inflexible system consisting of discrete elements that can be combined according to certain mechanisms." (Onysko and Michel 2010: 3).

At that time there was a strong distinction between syntax and lexicon: words are formed presyntactically in the lexicon and syntactic rules cannot affect or operate on words (this is called The Strong Lexicalist Hypothesis). There is also the Weak Lexicalist Hypothesis according to which derivational morphology belongs to the lexicon and inflectional morphology to syntax. In the nineties principles of syntax were applied to word-formation, especially in the works of Rochelle Lieber who examined phrasal compounds (a [[floor of a birdcage] taste]) and possessive case ([a friend of mine]'s book) and saw that phrasal compounds function as words and that the *'s* marking in English is not applied to words only, but to noun phrases as well. This means that the principles of morphology and syntax are actually the same. There must be some interaction between syntax and morphology, since phrasal categories can indeed serve as bases for construction of words. Lieber puts all morphological processes under syntax, which shows the significant change in the understanding of word-formation in lexicalist approaches.

In line with generative assumptions, Lipka includes cognitive operations in his study, claiming that "both semantic transfer and word-formation provide productive patterns for creating new lexical units." (1992: 120). To him, semantic transfer includes metaphor and metonymy, which have long been neglected since they belong to extralinguistic phenomena.

Word formation and semantic transfer are similar in being characterized by productivity, degrees of acceptability and the possibility of institutionalization.

6.4. Models in word formation

Sometimes the focus of the study of the word formation can be formal properties, which is the case with generative grammar. On the other hand, some linguistic approaches are more focused on the functional properties in word-formation, as cognitive grammar and construction grammar. Based on the focus of the study, Schmid (2015: 11) posits four theoretical models:

-rule-based models

-schema-based models

-exemplar-based model and

-exemplar-cum-schema-based models.

Generative approaches are given as an example of the rule-based model due to the fact that they are aimed at finding general rules that could be applied in word-formation, as well as type-specific rules that could be applied to new phenomena. They are more focused on the structure than on the functional aspects and in them there is a clear distinction between grammar and lexicon.

Schema-based models also try to reach generalizations about word-formation patterns, but not in the form of rules. Schemas are responsible for productivity and creativity in language. Schemas are pairings of meaning and form. In schema-based approaches, the more holistic view is applied, since "linguistic knowledge emerges from the experience of concrete usage-events in social situations and is subject to the frequencies of occurrence of certain elements." (Schmid 2015: 12). Cognitive approaches belong here.

In exemplar-based models linguistic knowledge is not formed in schemas, but in more complex representations of individual exemplars connected by similarity: new words are created in analogy to already exiting examples stored in our memory.

Exemplar-cum-schema-based models try to connect the last two models by acknowledging both schemas and exemplar-based knowledge. Thus new lexemes can be formed on the basis of schemas, but also by means of formations that appear due to similarities between stored exemplars.

7. COGNITIVE APPROACHES TO WORD FORMATION

What differentiates cognitive approaches from the previously mentioned approaches to word formation is the notion of language and "how language is encapsulated in the mind" (Onysko and Michel 2010: 5). Language is non-autonoumous, embodied, usage based and symbolic and this also applies to word formation. One of the premises in cognitive linguistics is that language is a unification of sound and meaning. "A language enables speakers to represent their thoughts and intentions by making available to them an inventory of symbolic associations between units of form (phonological structures) and units of meaning (semantic structures)." (Taylor 2015: 145). In a cognitive approach to word formation

> a word can be described as a symbolic label of mental categories referring to (in)animate objects, to states, actions, conditions and qualities as they are perceived by and conventionally construed in the human mind in interaction with the social and natural environment. According to this definition, words can also label complex mental categories. (Onysko and Michel 2010: 2).

Words are symbolic units which are bipolar, that is, they consist of a semantic pole (its meaning) and a phonological pole (its sound). Grammatical units (constructions and morphemes) are therefore symbolic and basic grammatical categories such as nouns, verbs, adjectives and adverbs are "maximally schematic at both the semantic and the phonological poles" (Langacker 2006: 46). For example, a noun is represented by the schema [[THING]/[X]], or a concept ANIMAL is a schema with different elaborations, such as MAMMAL or INSECT. What is needed for the description of languages are only these three types of units. Language, that is both grammar and lexicon which form a continuum, is comprised of and describable by these three types of units. This assumption is in a clear opposition to the generative grammar view of autonomy of linguistic levels such as syntax, morphology and lexicon. In many linguistic descriptions language consists of grammar, producing rules, and lexicon, providing grammar with elements to use. This is known as a 'building block' model (Lakoff and Johnson 1980: 202-203, Langacker 1987: 452-457) of language: elements of lexicon are stored in our memory and they act as bricks, whereas grammar is what builds larger constructions of these bricks. In cognitive linguistics, however, both grammar (syntax, morphology and phonology) and lexicon are all comprised of symbolic elements with different levels of symbolic complexity and phonological and semantic schematicity. For example, traditionally 'grammatical' elements, such as prepositions (*of*) are also meaningful.

Langacker (1999: 74) claims that the meaning of *'of '* is to profile a relationship between two entities, so it cannot be marked as 'empty' (*a man of integrity*).

Therefore we can talk about three types of constructions: phonological, semantic and symbolic. A phonological form ['b□:d] is a construction which can be decomposed into ['b] [□:] and [d]. A semantic construction [BLACK BIRD] can be analyzed as [BLACK] and [BIRD]. The expression *black bird* is a symbolic construction made by unification of phonological structure [blæk 'b□:d] and semantic structure [BLACK BIRD]. Here the notion of symbol is adopted from Ferdinand de Saussure (1966) and his description of a language as a symbolic system of signs: linguistic expression (sign) is a mapping between a concept (signified) and an acoustic signal (signifier), which corresponds to semantic pole and phonological pole. To Langacker, grammar is a "structured inventory of conventional linguistic units." (1987: 57). A unit is a structure that a speaker uses automatically and it is always accessed as a whole. It becomes entrenched or established due to the frequency of use: if speakers are exposed to the units repeatedly, the units will become more entrenched and conventionalized. Conventionality or a characteristic of a unit to be shared by the whole community is a matter of degree: some units are more conventional than the others, which means, shared by the greater number of speakers. When forming new words, speaker relies on these entrenched units. Sometimes these well-entrenched units can block the potentially new structures. For example, the verb *to steal* does not have the corresponding noun *a stealer* since it is blocked by the already existing and well entrenched *a thief*. When semantic and phonological pole are united, we get a symbolic unit. A morpheme is therefore the simplex symbolic unit and when combined with other morphemes, it produces larger structures. It is simplex because it does not contain other, smaller subparts.

7.1. On motivation

Whether the production of these larger structures is motivated or not is also of interest to cognitive linguistics. Motivation in language is something that already Saussure talked about. His name is often connected to the term 'arbitrariness of a linguistic sign', which means that there is not direct connection between the sign and the signifier. That is in the direct opposition to the notion of motivation, which implies notions such as "non-arbitrary relationships between form and meaning (as opposed to arbitrary relationships), iconicity (as one type of motivation), and explanation ('making sense' through motivation."). (Radden and

Panther 2004: 2). Radden and Panther however claim that Saussure was aware of the limitations this implication has: "motivation, in his view, is a cognitive principle that makes language meaningful to its speakers and is necessary as a counterbalance to arbitrariness." (2004: 1). In traditional word formation theory compositionality principle is applied:

Simple linguistic items (signs, morphemes) are in principle arbitrary/unmotivated with regard to the relationship between form and meaning (with the exception of onomatopoeia), while complex linguistic constructions (at whichever level) are in principle relatively motivated, because they can be interpreted semantically on the basis of the knowledge of the meanings of their constituents and some general underlying pattern. (Kastovsky 2005: 101).

This was taken from Marchand who viewed morpheme as a combination of meaning and form. Ullmann (1962, in Lipka 1992) distinguishes between three types of motivation: phonetic, morphological and semantic. The phonetic one is onomatopoeia, which can be primary and secondary. A primary one is the case when the word imitates the sound (*crack* or *plop*); a secondary one appears when the referent is nonacoustic and the sounds imitate dimensions such as size, weight, color or speed. Morphological motivation concerns word formation and the semantic one includes figures of speech such as metaphor and metonymy.

In 1987 Lakoff claimed that the meanings of compounds are not always the sum of meanings of the parts, that is, the meaning of the compound cannot always be predicted from its parts. Here he introduces the term ICM (Idealized Cognitive Model) as a mental representation of the world based on our knowledge and experience. Each part of a compound somehow fits into its ICM. In cognitive linguistics, motivation is influenced by cognition. Radden and Panther (2004: 4) define motivation as follows: "A linguistic sign (target) is motivated to the extent that some of its properties are shaped by a linguistic or non-linguistic source and language-independent factors."

What is meant by target is the form and/or a concept of a linguistic sign, whereas source is something linguistic or non-linguistic. Cognitive motivation is often exemplified in compound sentences where we see temporal sequence of events:

She came into the house and locked the door.

Here the cognitive principle of iconicity places events that happened earlier in the first part of the sentence. The source for the example of *bedroom* is a linguistic one (from Panther and Radden 2011), namely *bed* and *room*, although this is not enough to conclude that a

bedroom is a room where people sleep. More non-linguistic factors, such as our knowledge of the world, need to be included here. We can say that in the case of *bedroom*, its meaning is not predictable from its parts, but it is motivated. Non-linguistic factors are language independent, and they involve general cognitive faculties, such as "inferential abilities, or metaphoric and metonymic mappings, that are not restricted to language." (Radden and Panther 2004: 10). The example for this is *a screwdriver,* coded differently across languages.[2] All these names evoke the same ICM as their meaning: most of them have the screw in it, namely the object the screwdriver operates on, because it is the salient element of the whole frame and metonymycally stands for the whole object. Most of them also include the type of action that is completed by it and suffix *-er* designating an instrument.

Langacker's view (1987) on compositionality is the same: compositionality can only be partial since the meanings of components do not totally describe the meaning of the whole, but rather only motivate the whole.

Going back to units, it is important to emphasize that linguistic units are not randomly organized, but rather related to each other in three ways (Langacker 1987: 73-75): symbolization, categorization and composition. Symbolization is a correspondence between a semantic and phonological pole. A lexical item *cat* is represented as [[CAT]/[kæt]], where [CAT] is semantic pole and [kæt] a phonological pole. The symbolic relation is marked by '/'. Categorization is the next relationship by which units can be connected. Langacker (1987: 370-373) talks about categorization by prototype and categorization by schema. Categorization by schema is also known as elaboration, that is a relation between a schema and its instances. Elaboration is represented as A→B, where "B is fully compatible with A's specifications but is characterized with greater precision and detail." (Langacker 2013: 17). Schema is a general category containing more specific instances, as in CIRCULAR ENTITY →CIRCULAR ARENA. This is called full schematicity since all the features of A are preserved in B.

Categorization by prototype is known as extension and is represented as A ---> B. This means that B is connected to A "on the basis of an association or perceived similarity." (Langacker 2013: 18). A is a prototype and B is an extension from it (CIRCULAR ARENA ---> RECTANGULAR ARENA). Categorizing units form a schematic network and define a schematic

2 The expressions for 'screwdriver' are: French *tournevis*, Korean *nasadolige* (both 'turn- screw'), Polish *śrubokręt* ('screw-turn'), Dutch *schroevendraaier* ('screw-turn-er'), Japanese *nejimawashi* (screw-turn-NOM), German *Schraubenzieher*, Danish *skruetrækker*, Hungarian *csavarhúzó* (all of them 'screw-pull-er'), Spanish *destornillador* ('de/out-screw-er'), Italian *cacciavite* ('stick-in/take-out-screw'), Swedish *skruvmejsel*, Finnish*ruuvimeisseli, ruuvitaltta* (all of them 'screw-chisel'), Chinese *luósīdāo* ('screw-knife'), Brazilian Portuguese *chave de fenda* ('key of cut). (Panther and Radden 2011: 12).

plane of relationships. Units can also stand in the relationship of composition or integration. Two or more semantic, phonological or symbolic structures form structures of greater size. The symbolic units [[CAT]/[kæt]] and [[PL]/[z]] (plural morpheme) are joined in the plural cats, [[CAT]/[kæt]]-[[PL]/[z]]. It is marked by a dash or a line. This kind of integration is a syntagmatic one (syntagmatic plane).

In cognitive linguistics, all aspects of word formation are meaningful and the distinction between lexical and grammatical units is not acknowledged. All word formation 'items' can be seen as "encoding extensions, based on category judgments, from a profiled linguistic unit." (Ungerer 2007: 652). The constructional schema is the base for all the processes of word formation and different instantations are extracted from it. Deverbal nouns in English are formed by the schema [[x]v er]N. Plural noun suffix in English denoting 'a group of replicate things' is represented by the schema [NOUN-s]. As Tuggy (2005: 235) puts it, "A schema is a pattern, a rough outline, a coarse-grained, less-fully-specified version of a concept which the elaborations render, each in a different way, in finer, more elaborate detail." When speakers repeat this pairing of a schema with its elaborations often enough, it becomes entrenched in their mind or 'mental grammar' and conventionalized by usage. We can say that schemas differ in degree of entrenchment: the symbolic units that are more frequently encountered are more likely to become entrenched. They also differ in degree of specificity. Semantic and phonetic units participating in word formation can be either autonomous or dependent, so that suffixes are phonologically dependent and prefixes are autonomous. They can be schematic or contentful. Suffixes and prefixes are schematic and express general notions for their bases (process, agent) which are more contentful.

8. WORD FORMATION PROCESSES IN ENGLISH

We will now give a brief overview of processes for word formation in English according to Plag (2003). These are:

-derivation

- -affixation
  - -prefixation
  - -suffixation
  - - infixation
- -non-affixation

-conversion

-truncation

-blending

- abbreviation

-compounding

8.1. Affixation

In the process of affixation an affix (a bound morpheme) is added to the base. If it precedes the base it is called prefixation (*reorganize*, *premodify*, *postmodern*). It can also follow the base, in which case we talk about suffixes (*employee*, *selectivity*, *adventurousness*). It can sometimes appear within another morpheme, such as *bloody* in *abso-bloody-lutely*, where *bloody* interrupts the morpheme *absolute*. Affixes can be of native or non-native origin (Latin, French, Greek), they can be very or moderately productive, they can attach to native and non-native bases.

Prefixes can be subdivided into negative, locational, temporal and quantifying (Plag 2003, Lieber 2005, Adams 2014). Negative prefixes are *a-* (*asymmetrical*), *anti-* (*anti-war*), *un-* (*uncertain*), *in-* (*inability*), *non-* (*nonviolent*), *de-* (*decontaminate*), *dis-* (*dislocate*), *mis-* (*mispronounce*). They usually express notions such as 'wrong', 'evil', 'badly' or 'lack of'. The suffix *un-* can also have reversative function (*undo*). Locational prefixes are *over-* (*overcoat*), *under-* (*underarm*), *out-* (*outrun*), *back-* (*backstroke*), *down-* (*downcast*), *up-* (*upgrade*), *off-* (*offshoot*), *fore-* (*foresee*), *inter-* (*intermission*), *intra-* (*intramuscular*), *sub-* (*submarin*e), *supra-* (*supracouncil*), *trans-* (*transpolar*), *circum-* (*circumnavigate*). Apart from their locative usage, they usually show different senses such as excess (*overcharge*) or exclusion (*outparty*). Temporal suffixes usually mean 'before', 'after' or 'new': *pre-* (*preschool*), *post-* (*postmodern*), *ex-* (*ex-president*), *retro-* (*retroact*), *neo-* (*neoclassical*). Quantitative prefixes quantify over their base words meaning: *uni-* (*unilateral*), *bi-* (*bilateral*), *multi-* (*multipurpose*), *micro-* (*microwave*), *macro-* (*macrobiotic*), *poly-* (*polysyllabic*), *semi-* (*semifinal*), *hyper-* (*hyperactive*).

Suffixes attach to nouns, verbs and adjectives and are often class-changing, so nominal suffixes are used to form nouns from adjectives or verbs (*coverage*), verbal ones are used to form verbs *(activate*), and so on. Nominal suffixes can produce abstract nouns or personal nouns. Suffixes which are used to produce abstract nouns denoting actions, results of actions,

properties or qualities are *-al* (*refusal*), *-age* (*leakage*), *-ance*/ *-ence* (*absorbance*), *-ation* (*specialization*), *-ment* (*entertainment*), *-ure* (*exposure*), *-cy*/ *-ce* (*intimacy*), *-dom* (*kingdom*), *-ery* (*bakery*), *-ful* (*bootful*), *-hood* (*childhood*), *-ness* (*happiness*), *-ing* (*building*), *-ism* (*conservatism*), *-ity* (*curiosity*), *-ment* (*involvement*) and *-ship* (*membership*). They can have other meanings as well, such as collectivity (*brotherhood*), theory (*Marxism*) or area (*neighbourhood*).

Personal noun suffixes are *-ant* (*applicant*), *-ee* (*employee*), *-eer* (*mountaineer*), *-er* (*teacher*), *-ess* (*princess*), *-an* (*historian*), *-ist* (*fantasist*) and *-ite* (*Stalinite*). Many of them again exhibit polysemy, so *-ant*/ *-ent* can denote agent (*servant*), instrument (*irritant*), experiencer (*dependent*) or patient (*insurant*). (Lieber 2005: 404).

Verb-forming suffixes are *-ize* (*legalize*), *-ate* (*activate*), *-en* (*shorten*) and *-ify* (*personify*). They are usually attached to nouns and adjectives.

Adjectives can be formed from nouns by means of the following suffixes: *-able* (*fashionable*), *-al* (*cultural*), *-ary (legendary*), *-ed* (*empty-headed*) *-esque* (*picturesque*), *-ful* (*beautiful*), *-ic* (*heroic*), *-ish* (*childish*), *-ive* (*instinctive*), *-less* (*homeless*), *-ly* (*friendly*), *-ous* (*famous*), *-some* (*awesome*), and *-y* (*sandy*). Verbs can also be used to form adjectives. Suffixes that participate here are *-able* (*washable*), *-ive* (*decorative*), *-ory* (*contradictory*), *-ful* (*resentful*) and *-ing* (*boring*).

Adverbial suffixes are *-ly* (*hardly*) and *-wise* (*clockwise*).

8.2. Non-affixation

Conversion is a process that changes word class without adding affixes to the base and is often called zero-derivation.

Nouns can be converted from verbs:

to walk to take a walk

to hug to give a hug

Nouns can be converted into verbs:

the hammer to hammer

the skin to skin

Adjectives can become verbs:

open to open

empty to empty

Adjectives can become nouns:

poor	the poor
rich	the rich

It is sometimes difficult to determine the directionality of conversion, i.e. whether a verb is converted from a noun or vice versa. Plag suggests (2003: 106) four criteria for this:
1. historical background - the history of language can often show which category came first.
2. semantic complexity - the converted word is semantically more complex than the word from which it is derived.
3. inflectional behaviour of converted verbs - if there is irregularly inflected verb form (as in the verb *drink- drank)* nouns are derived from verbs (*a drink*).
4. the frequency of occurrence - base words are used more frequently than the derived words.

In truncation (*Liz* from *Elisabeth*, *lab* from *laboratory*) there is a lack of phonological or orthographic material in the derived word. Names are usually truncated to express familiarity or closeness with the person involved. Clipping is a sub-group of truncation and includes shortening of words (*phone* from *telephone*).

In blending two or more words are combined into one, with prior deletion of material from source word(s), such as *science+ fiction = sci-fi*, *breakfast + lunch = brunch*. Blending is usually found in the language of science and technology. Plag (2003: 155-156) divides blends into two subgoups. In the first group are shortened compounds, such as *motel* (*motor* + *hotel*). The first element modifies the second (a motel is a kind of hotel). The second group includes cases such as *Spanglish* (*Spanish* + *English*, the combination of the two). So the first element does not describe the whole blend, but rather shares the meanings of both elements.

A process similar to blending is the one of abbreviation, that is taking initial letters of multi-word sequences to make up a new word such *DC* for District of Columbia, or non-initial letters as in *kHz* for kilohertz. They are sometimes pronounced as individual letters (FBA), in which case the form is called initialism, and sometimes as a regular word (NATO, UNESCO), called acronym. They need not be spelled in capital letters (e.g.).

In the non-affixation group Schmid (2015) adds reduplication, in which a word, a word-like element or a part of a word are repeated. Sometimes the repeated words are the

same (*hush-hush*), sometimes a vowel is changed (*hip-hop*) and sometimes a consonant (*boogie-woogie*).

8.3. Compounding

In compounding two or more words are combined to produce new units, such as *pickpocket* (verb + noun), *afterbirth* (preposition + noun) or *stone-deaf* (noun + adjective). Lieber (2005: 375) distinguishes between synthetic compounds and root compounds. Synthetic compounds are often called verbal or deverbal compounds because the second part is derived from a verb (*truck driver, waste disposal*). Root or primary compounds are the ones in which the second part is not deverbal *(dog bowl, blackboard*). Since they are complex in nature, they have a unit which is the most important and it is called the head. The head determines semantic and syntactic properties of the whole compound. For example, if the head is a noun, the whole compound is a noun (*shop assistant*). If the head is of a feminine gender, so the whole compound is (*head waitress*) and if the compound appears in plural, it is the head that is pluralized (*refugee camps*). This is called right-headedness. The first part is called the modifier since it modifies the referent of the head (*a tree house is a house built on a tree*). The above-mentioned compounds are endocentric or hyponyms of their second stem (*a refugee camp is a kind of a camp for refugees*). There are also cases of copulative compounds in which stems have the equal status (*producer-director*). In exocentric compounds like *redhead* the head does not determine the properties of the compound, it is simply a metonymy for a person with red hair. These types of 'creative compounds' were long neglected in linguistic descriptions because of their nature as being exceptional and unanalyzable, but cognitive research have shown "that such constructions are not only used relatively frequently in language but can in fact be analyzed remarkably well within a cognitive linguistic framework, with the help of blending, constructional schemas and construal." (Benczes 2010: 219). Benczes continues to notice that the difference between endocentric compounds and metaphor-metonymy based compounds lies in the amount of creativity, since the latter ones are created by employing a more associative and creative word process. These compounds are often called bahuvrihi compounds and Barcelona (2011b: 152) gives the following definition: "Bahuvrihi compounds jointly denote a type of entity via one of the characteristic properties of that entity." In these types of compounds metonymy CHARACTERISTIC PROPERTY FOR CATEGORY is involved, as in *fathead.* They are called 'possessive' compounds since the entity

in question possesses the denoted property (either physical or mental) and can be paraphrased as such: *He has got a fat head*. Barcelona further notices that they typically denote people with body parts as bases (*paleface*), but can also denote animals (*redbreast*), plants (*longleaf*) and inanimates (*greenback*). The example of a *fathead* also contains metaphor-metonymy interaction: the head metonymically stands for the brain, that is, for intelligence of the whole person. Fatness is metonymically connected to slow functioning, and so is stupidity. Stupidity and fatness are therefore metaphorically linked since one belongs to abstract and the other to a concrete domain, namely via STUPIDITY IS FATNESS metaphor (a metonymy-based one).

What distinguishes compounds from phrases is their inseparability: it is not possible to add a modifier between the parts of a compound: *truck fast driver.

Lieber (2005: 378) lists following patterns of root compounds:

N N file cabinet, towel rack, catfood, steelmill
N A sky blue, leaf green, stone cold, rock hard
A A icy cold, red hot, green-blue, wide awake
A N hard hat, bluebird, blackboard, poorhouse
A V dry farm, wet sand, double coat, sweet talk
N V handmake, babysit, spoonfeed, machine wash
V N drawbridge, cutpurse, pickpocket, pull toy
V V stir-fry, blow-dry, jump shoot, jump start
with noun + noun combination being the most productive.

Synthetic compounds, on the other hand, can be formed in two ways: compounding can take place inside derivation so the suffix is attached to already existing compound as in [[book sell] -er] or derivation appears inside compounding as in [book [sell-er].

Szymanek (2005) and Adams (2014) add another process of word-formation called back-formation, exemplified by *air-condition* (from *air-conditioning*) and *brain-wash* (from *brain-washing*). They are usually formed form action nominalizations by dropping the suffix -*ing*.

What is of interest for this study are nominalizations, that is, nouns derived from other nouns, adjectives and adverbs by adding suffixes -*hood* and -*ness*. We will show that they are highly polysemous and the notion of polysemy will be dealt with later in the thesis.

9. ON NOMINALIZATION

Nominalizations have long been the topics of various linguistic studies. The interest in describing them began to increase along with the interest for word formation. It had different statuses in different linguistic approaches and we will give a brief account on nominalizations ranging from transformational-generative linguistics, cognitive grammar, systemic-functional approaches and cognitive-functional approach.

In transformational-generative linguistics, nominalizations were explained as result of transformations and were not treated as a part of lexicon. Lees gives an extensive description in his book *The Grammar of English nominalizations* from 1960 where he states that noun phrases are derived from verbs by applying transformations. Scalise and Guevara (2005: 150) sum up the reasons for this kind of analysis:

1. Nominal compounds are transformed from sentences in which the grammatical relations, such as subject or object, are implicit in the elements of the compound, are expressed explicitly.

2. In the cases where the meaning of a compound is ambiguous, it is possible to show that this ambiguity can be explained by different underlying sentences corresponding to the different meanings. For instance, the ambiguity of a compound such as *snake poison* can be explained in 'grammatical' terms by deriving this different meanings from (at least) three different sentences

1. *X extracts poison from the snake.*
2. *The snake has the poison.*
3. *The poison is for the snake.*

3. Transformations can explain different grammatical relations in the 'similar ' (N + N compounds) such as *windmill* and *flour mill*: they are derived from different deep structures:

1. *Wind powers the mill.*
2. *The mill grinds the flour.*

As already noted above, this theory requires a great deal of deletion. In the example *a car thief* it is necessary to delete the verb *steal*, assuming the underlying sentence is *The thief steals the car*.

Chomsky (1970) takes lexicalist position and claims that only gerundive nominals can be derived by transformations, whereas derived nominals are part of the lexicon:

1. *John criticized the book*.

2. *John's criticizing the book*. (gerundive nominal)

3. *John's criticism of the book*. (derived nominal)

He claims that all sentences can be transformed into the corresponding gerundive nominals and they receive properties of the verb, but cannot have the internal structure of a noun phrase. They are also semantically regular. On the other hand, derived nominals are formed in a number of ways without having possibility of predicting their suffix and they have the internal structure of the noun phrase (determiners, plurals).

A special investigation into nominalizations was made by Langacker (1987, 1991). Before giving a brief account on nominalizations in his view, it is important to note that linguistic expressions in cognitive linguistics are divided into nominal predications and relational predications. Nouns are nominal predications and they designate things, whereas relational predications are divided into temporal and atemporal relations. Verbs designate temporal relation (a process). Atemporal relations (states) are static and symbolised by adjectives, adverbs, prepositions, infinitives and participles.

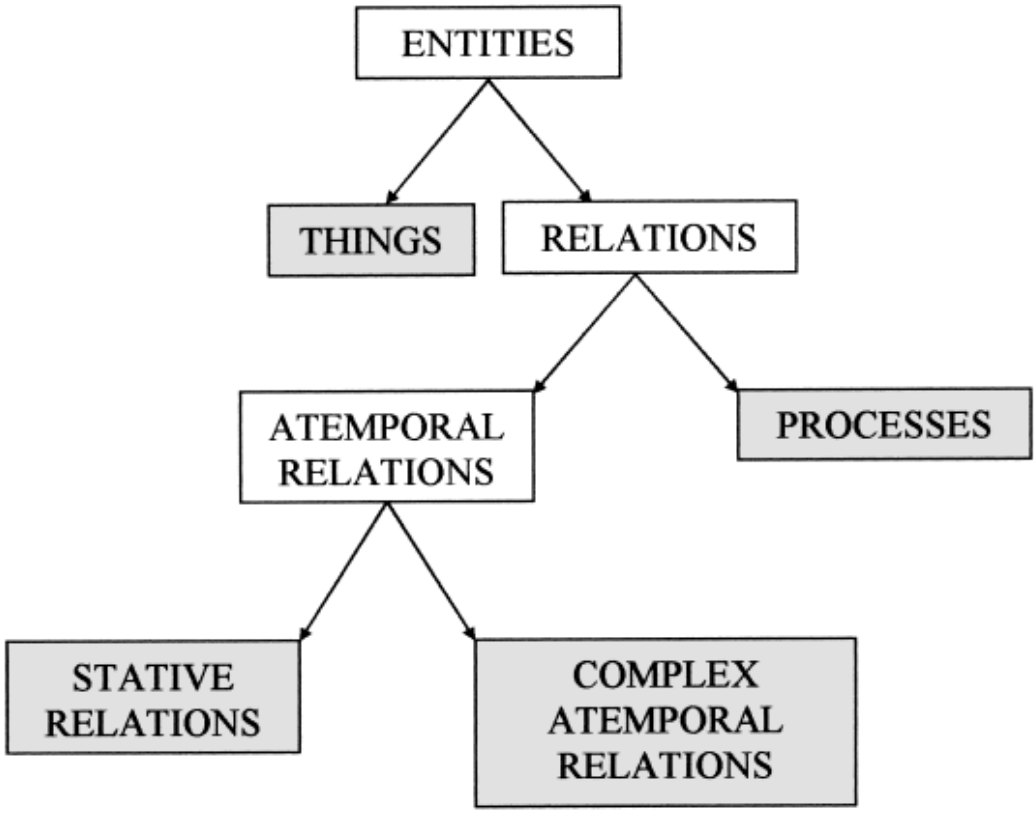

Figure 2. Word classes in cognitive grammar (Langacker 1987: 249)

Nominal predications profile a region in some domain and are conceptually autonomous, relational ones always profile relations between those entities upon which they are conceptually dependent. “One of the basic conceptual distinctions between predicates (prototypically verbs) and arguments or modifiers (nouns and adjectives), according to Langacker, is the mode of scanning of the scene.” (Croft and Cruise 2004: 53). Examples taken from Dirven and Radden exemplify this (2007: 26):

a) *The couple next door **have adopted** a baby.*
b) *Another couple down the road want to **adopt** a baby, too.*
c) ***Adopting** a baby can be a joyful experience.*
d) *Older couples cannot apply for the **adoption** of a baby*.

In the example a) we can scan the whole process of adopting a baby in successive phases and this is called sequential scanning. According to Langacker, in a language all finite verbs forms are viewed sequentially.

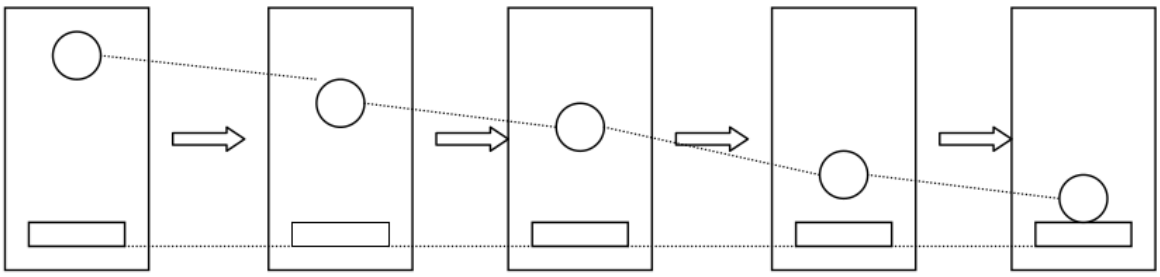

Figure 3. Sequential scanning (Langacker 1987: 144)

Examples b, c, and d involve summary scanning: all phases of a situation are activated simultaneously and situations are seen as timeless.

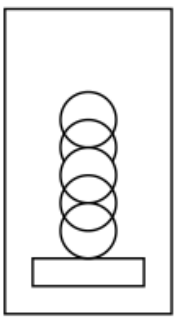

Figure 4. Summary scanning (Langacker 1987: 144)

So when the verb (adopt) becomes nominalized (adoption) our mode of scanning changes. To him, nominalizations are conceptual reifications built with the help of morphemes that are meaningful. “The conceptual impact of reification is in giving relational concepts the kind of stable existence that we typically associate with things.” (Radden and Dirven 2007: 79). They give conceptual difference between a thing, a relation, a situation and a reified thing in the following figure:

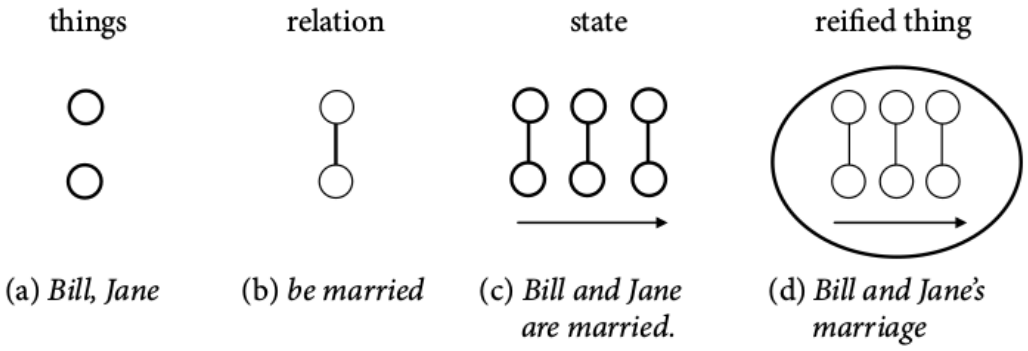

Figure 5. Things, relation, situation (state) and reified thing (Radden and Dirven 2007: 80)

Langacker also states that in cognitive grammar it is irrelevant whether we should investigate nominalizations as part of lexicon or as part of grammar since such boundaries are arbitrary. He (1991) analysed nominalizations from three aspects:

-kinds

-periphrasis and

-predictability.

Kinds of nominalizations that are included in his study are:

a) *Alternate profiling* is the simplest type that shifts the profile of a verb to some nominal entity that is part of its inherent structure, such as the trajector [3] (*dancer, cook...*), the landmark (*draftee, choice...*), an instrument (*walker, probe...*), a product (*painting, mark...*) and setting or location (*diner, lounge...*).

b) In *episodic nominalizations* a single episode of the process is profiled by a perfective verb; take *a walk*, make *a throw*, do *an imitation*, have *an argument*... All these expressions can appear as verbs: *to walk, to throw, to imitate, to argue*, but with verbs there is sequential scanning of events, while a nominalization gives a summary scanning of the same event.

3 Trajector and landmark are Langacker's terms used in relational predications for an initiator or a mover of an action (trajector) and other salient participants (landmark).

Episodic nominalizations are count nouns since they profile a region containing the states of a perfective, inherently bounded, process. However, perfective verbs can create mass nouns as well. In the example

Walking is very good for your health.

no determiner is necessary for the noun walking, it cannot be pluralised and can be used with quantifiers typically used with mass nouns (*a lot of complaining*). Langacker also argues that -*ing* nominalizations such as *walking* and *complaining* are regarded as an 'abstract substances' because of their "qualitative uniformity, each consisting of representative internal states extracted from the same type of process." (1991: 27). Nouns naming emotive sensations (*fear, anger, hope*) and color sensation (*yellow*) can also be analyzed this way:

There certainly is a lot of yellow in this painting.
I've noticed a lot of fear and anxiety around here.

Here the focus is not on the qualitative domain, but rather on the distribution of the substance in time and space or across participants involved.

c) *Action* or *type nominalizations* are exemplified in

Zelda's signing of the contract.

Here the preposition 'of' occurs between the nominalized verb and the object, they can have adjectives as modifiers (*Zelda's reluctant signing of the contract.*), but cannot be used with an auxiliary verb. They can also be used with definite article (*the signing of the contract*). They apply to a verb stem (e.g. sign) and the derived noun can act as any other noun as a nominal head. Their focus is on the event as a physical activity.

d) *Factive* or *gerundive nominalization* is used without the preposition 'of':

Zelda's signing the contract.

They appear with adverbs, rather than adjectives (*Zelda's reluctantly signing the contract*), with non-modal auxiliaries, but not with the definite article. Unlike action nominalizations, they have an internal structure of a clause and apply to more complex stems such as *sign the contract*, *reluctantly sign the contract* or *have signed the contract*. Not only the verb, but the whole structure is nominalized.

Langacker proposes an analysis which he bases on functional properties of the nominalized structure. He first argues that, based on the semantic function, nominals and finite clauses show parallels, that is the relationship between a simple noun and a full nominal is analogous to the one between the verb stem and a finite clause. Just as the simple noun specifies a type, verb stem specifies a process type. Full nominal designates a grounded instance of that type, which in turn is expressed by finite clause for the verb stem. There are at least three levels of organization of a finite clause: verb stem, finite clause as a whole and an intermediate level which profiles an ungrounded instance. Each level indicates a process and can be nominalized. Action nominalization is derived from the process type (when only verb stem is nominalized), factive nominalization from the ungrounded instance of the type (it is semantically and structurally between a simple verb stem and a finite clause) and a that-clause nominal from the grounded type. This last is a complex noun that can function as a subject or an object of another clause:

That Zelda signed the contract is simple false.

As far as the periphrasis goes, he compared a finite clause to the corresponding action nominalization, turning down previously established accounts made by generative grammarians, and these are ones of syntactic transformations. In the example

Zelda's signing of the contract.

morphemes *'s* and *of* have a special meaning and their function is periphrastic: in the process of nominalization, subject and object of the verb can no longer be specified as such, but are specified indirectly as complements of the relational predications *'s* and *of*.

Productivity and regularity of nominalizations were long thought to belong to the area of lexicon, but the distinction between syntax and lexicon is meaningless in cognitive grammar.

Systematic-functional approach to nominalizations in English was carried out by Halliday (1994: 343-353). According to Halliday (1994: 352), nominalization is "the single most powerful resource for creating grammatical metaphor." Grammatical metaphor here implies that processes (verbs) and properties (adjectives) are metaphorically seen as nouns. A nominalized structure like the *cast's brilliant acting* is a metaphorical way of expressing the clause *The cast acted brilliantly*. (Halliday and Matthiessen 1999: 229).

Grammatical metaphor can thus create "the expansion of the meaning potential" (Halliday and Mathiessen 2014: 699). Nominalization is a clause that is rankshifted to a phrase level. When mentioning the term 'grammatical metaphor' it is important to note that this term differs form the term 'metaphor' as used in Cognitive Linguistics' theory of metaphor and metonymy. The examples

John must have left.
I think John has already left.

are considered grammatical metaphor in systematic-functional approach because "the modal meaning is realized outside the clause." (Taverniers 2004: 9). In cognitive linguistics, metaphors need to have correspondences between a target and a source domain and therefore, the above sentences would not be treated as metaphors.

In functional grammar, where grammar is not seen as a set of rules for the production of grammatically correct sentences, but rather as a set of strategies used to produce coherent communication, nominalization can be either a syntactic or a lexical process. A syntactic one "is the process via which a prototypical verbal clause, either a complete one (including the subject) or a verb phrase (excluding the subject), is converted into a noun phrase." (Givón 1993: 287). A lexical one, one the other hand, is "a process whereby a verb or adjective is converted into a noun." (Givón 1993: 287).

In the process of nominalization, it is necessary to adjust clause elements from the finite clause to the non-finite or less finite one. The adjustments are:
-verb becomes the head noun of the nominalization,
-verb no longer has its inflections such as tense-aspect-modality, but rather acquires determiners and modifiers like nouns do,
-case marking of the subject and direct object is modified toward genitive case and
-adverbs of the finite clause are converted into adjectives.

Givón discusses the finiteness scale for nominal forms of English verbs. At the top of the scale is the finite verb form (*She knew him*), followed by the perfect participle and progressive participle (*Having known him*, *Knowing him*). After that infinitives follow: *to* infinitive (*To know him*) and *-ing* infinitive (*Her knowing him*). Lexical nominalizations are at the bottom of the scale (*Her knowledge of him*).

Heyvaert (2003a) is a discussion of nominalizations from a cognitive-functional point of view. She focuses on deverbal *-er* nominalization, *that*-clauses and *-ing* clauses and claims that nominalization processes are functional in nature: they adopt not only external nominal functions, but internal as well. For example, *a teacher* (as an example of *-er* nominalization) corresponds to the external argument of the verb *teach* (a person who teaches). This is not the case with nominalizations such as *a stroller* (a small chair on wheels used to push babies) or *a walker* (a device that helps babies learn to walk), since they do not profile the agent (external argument of the verb), but rather some kind of a participant (instruments in the given cases) or a location connected to the base verb. To her "Each nominalization should be viewed as the metaphorical counterpart of not one congruent agnate, but of a network of agnate structures, clausal and other." (2003b: 67). The term *'agnate'* refers to constructions with the same content, but of different lexical realizations. For example, nominalizations

Sam's washing of the windows.

and

Sam's washing the windows.

are said to agnate with the same full clause *Sam washed the windows.,* but their grammatico-semantic features differ. The analysis of nominalizations should be focused on the way they integrate both nominal and clausal categories.

Comrie and Thomson (2007) categorize nominalization into two groups:

1. name of the activity or state designated by the verb or adjective. These nominalizations retain properties of their bases. The examples are create →creation, quiet →quietness. They can denote the fact, the act, the quality or occurrence of the verb or an adjective.

2. name of an argument. They can be further divided into agentive (sing →singer), instrumental (mow →mower), manner (walk →walking), locative (examples from other

languages), objective (to drink → drink) and reason nouns (examples from other languages). They retain only morphological and semantic relations to their bases.

They also claim that English, in comparison to other languages, does show some degree of predictability of nominalization processes. For example, any polysyllabic verb that ends in *-ate* will form nominalization with the suffix *-ion* (create → creation) and any adjective ending in *-able* or *-ible* will take *-ity* to form nouns (respectable →respectability). But still there is a great deal of irregularity in processes of creating new nouns.

Dixon (2005: 6) in his *Semantic Approach to English Grammar* emphases that the importance of investigating meaning:

As language is used, meaning is both the beginning and the end point. A speaker has some message in mind, and then chooses words with suitable meanings and puts them together in appropriate grammatical constructions; all these have established phonetic forms, which motivate how one speaks. A listener will receive the sound waves, decode them, and-if the act of communication is successful-understand the speaker's message.

He investigated the relationship between nominalizations and possession as in

John laughed noisily. *John's noisy laugh*.

since possession can denote anything from ownership, kin relation, inalienable part or an attribute of a possessor to merely something associated with the possessor.

The focus of his study are deverbal nominalizations (2005: 322-323) and they can describe:

1. a unit of activity, as *shout* in *Mary's loud shout frightened the sheep*.
2. an activity, as *shouting* in *Mary's loud shouting wakened me up*.
3. a state, as *dislike* in *John's active dislike of porridge puzzled Aunt Maud*.
4. a property, as *resemblance* in *Mary's close resemblance to her grandmother was commented on*.
5. a result, as *arrangement* in *The arrangement of flowers adorned the coffee table*.
6. an object, as *converts* (those who are converted), *payment* (that which is paid).
7. the locus of an activity, as *trap, entry*.
8. a volitional agent, as *killer, organizer*.

9. an instrument or material used in the activity, as *mower* (machine used to mow with), *swimmers* (garment to wear when swimming).

It is evident from these few analyses of nominalizations that their description as either a lexical or syntactic phenomena depends mostly on the concept of language that one adopts.

10. POLYSEMY

Polysemy is a property of words to have more than one meaning and it is phenomenon that has been of interest to many linguists and psychologists. The term *polysemy* has been introduced to modern linguistics by Michel Bréal (1924 [1897]) who used the term 'polysémie' to describe single word forms with several different meanings (in Nerlich and Clarke 2003: 4). For Bréal, words can change their meanings through use, but the new meanings do not automatically delete the old ones: both meanings are parallel in usage, so polysemy is the result of the semantic innovation. He observed that, synchronically, polysemy is not an issue, since different contexts determine different meanings. We are able to understand a polysemous word because words are always used in a certain context that eliminates all the other meanings not relevant at a certain point.

It is also necessary to distinguish between homonymy and polysemy, the former being the property of words to have unrelated meanings, as in *bank of a river* or *a bank* as *financial institution*. These two meanings are not connected and are stored in our memory as two separated lexemes. In polysemy, however, different meanings of the same word forms are related and the problem of relatedness has been a main concern of many linguistic studies. There is usually a prototypical or salient meaning and other meanings that are the manifestation of the central meaning and are conceptually connected with it, such as *nose* ('facial organ', 'sense of smell' and 'attribute of a wine'). Dictionaries also make this distinction by giving homonymous senses separate main headings, that is, they are treated as separate words that have the same spelling. Related senses of a polysemic word are given under the same heading and are treated as different meanings of the same word. Lipka (1992) mentions three criteria usually employed in linguistic researches:

1. etymology
2. formal identity or distinctness and
3. close semantic relatedness.

Lipka does not consider etymology as a valid criterion in a synchronic study since speakers do not own this kind of knowledge and because many words that have the same origin are different today. The criterion of formal identity includes words with meanings that are not related, as in *a bat* (an animal or a stick used in baseball). Close semantic relatedness includes cases of 1) semantic inclusion or hyponymy and 2) semantic transfer, that is, metaphor and metonymy. Terms like lexical units and lexemes also need to be understood here and Lipka uses Cruse's definitions (1986: 76-77): a lexeme is a family of lexical units whereas a lexical unit is the union of a lexical form and a single sense. Thus a lexeme *fox* is a polysemous one with following lexical units as meanings: a wild animal, a person as crafty as a fox and fur of fox.

Tuggy (2006: 168) uses the terms ambiguity and vagueness to explain distinct meanings on the one hand and united subcases of a more general meaning on the other. He uses the example of *a bank* for ambiguity and *an aunt* for vagueness: an aunt can be both mother's and father's sister, but the common meaning is a parent's sister. Vagueness exists as ‘indeterminacy of meaning', where the same lexical item can express different senses in describing different things, but also in describing the same thing. The adjective *good* is used here to as an example of being able to express different senses for different things (as in *a good knife*/*football player*/ *weather*) but also different senses for describing the same thing (e.g. good in *a good job* could explain that someone's salary is good, that the job is interesting, or provides one with respectable position in society.) There are also examples of vagueness due to 'lack of specification': the terms such as *teacher*, *cousin*, *neighbor*, are vague or unspecified when it comes to their gender. (Kempson 1977: 125).

Tuggy mentions several tests discussed in literature to distinguish between vagueness and ambiguity:

1. a 'logical' test proposed by Quine in 1960 (2013), according to which an item is ambiguous if it can be both true and false at the same time (X and not X). The sentence *I have an aunt* can be true for someone whose father has a sister, but at the same time whose mother hasn't got one.
2. a 'definitional' test (adopted from Aristoteles) decides on ambiguity of a lexical item if it has more meanings in its definition.
3. a 'linguistic test' is based on the formula “X does/did Z and so does/did Y”. If Z as done by X and Z as done by Y can be given “crossed” readings without the semantic oddness known as zeugma, the meaning of Z is taken to be vague; if zeugma results, Z is ambiguous. When

we say *I have an aunt* [father's sister] and *so does Bill* [have an aunt (mother's sister)] and if it indicates that the meanings are taken to be the same, then *aunt* is vague.

He agrees with Geeraerts (1993) in claiming that these three tests do not always succeed in giving a true criterion for distinguishing ambiguity from vagueness, but rather that boundaries between these categories are often blurred. To Tuggy polysemy is somewhere in between and to decide whether the senses of a word are related or not, it is necessary to take context and diachronic change into consideration.

Similar tests are also mentioned in Lipka (1992) and taken from Kastovsky (1982, in Lipka 1992): words are homonyms if 1) their meaning belong to different lexical fields, 2) they belong to different word formation families and 3) their coordination is impossible. This again goes to show that the boundaries between polysemy and homonymy are not as firm as it has long been considered and that we should treat them as "two end-points of a scale with a continuum in between." (Lipka 1992: 139).

Weinreich (1964) makes a distinction between contrastive and complementary ambiguity. A contrastive ambiguity is traditionally known as homonymy, whereas complementary one is what has been called polysemy. What has been problematic in linguistic theory is the notion of relatedness between meanings and how this relatedness can be explained.

Polysemy itself has been neglected among the generative-transformational linguistics since the focus was mainly on syntax, but it has become a widely discussed phenomenon in cognitive linguistics where it has gained the status of not only linguistic, but cognitive phenomenon, too. Cognitive linguists are particularly interested in why and how polysemy occurs and what cognitive mechanisms are responsible for it. Words in cognitive linguistics are seen as conceptual categories that resemble non-linguistic categories in many ways. They are a category with a prototype and other members. Different cognitive operations we use every day are also responsible for the multiple meanings of words.

In recent years there have been many successful attempts to show that polysemy of the words is metonymyically and metaphorically motivated. So in order to understand polysemy, it is important to understand how metonymy and metaphor work.

10.1. Polysemy in cognitive linguistics

In cognitive linguistics, the word itself with its network of polysemous senses came to be regarded as a category in which the senses of the word (i.e. the members of the category) are related to each other by means of general cognitive principles such as metaphor, metonymy, generalization, specialization, and image-schema transformations. (Nerlich and Clarke 2003: 5).

The development of cognitive linguistics brought many interesting investigations into polysemy. Brugman and Lakoff studied the prepositional polysemy of *over* (1988; first discussed by Brugman alone) the central meaning of which is *above*. Here are only some of the examples:

a. *The bird flew **over** the house*. ('above and across')
b. *The painting is **over** the couch.* ('above')
c. *The truck ran **over** the rabbit.* ('across')
d. *Sarah lives **over** the hill.* ('on the other side')
e. *Mary nailed a board **over** the hole in the ceiling*. ('covering')
f. *I will read the papers **over** the weekend.* ('temporal')
g. *John has a strange power **over** Mary*. ('control')

They claim that different senses of *over* (covering, repetition, control) are all related and organized around a central sense or a prototypical sense and thus form a radial category. They also show typicality effects: some are closer to the central meaning which means they are more similar to it and some are on the periphery. Those that are peripheral are arrived at by the means of cognitive principles for meaning extension, namely metaphor and metonymy. For example, the control sense is explained by metaphor CONTROL IS UP, LACK OF CONTROL IS DOWN.

The central claim of their investigation is that radial categories are stored as such in the long-term semantic memory of speakers and that different senses of a polysemous words are conventionalized, rather than generated from the central sense. The approach that the full range of senses is stored in our memory is termed *full-specification approach* (Evans and Green 2006: 333). This this kind of systematic polysemy is persuasive in language. What has been criticized about this approach is the inability to distinguish which senses are part of the word's meaning and which of them are arrived at 'on-line', that is a result of the context. Thus polysemy can be defined as a semantic network of a single lexical item that has multiple related senses.

Tyler and Evans (2003) accept the view that many senses of over constitute a motivated semantic network that is organized around a central sense or a *protoscene,* but they also try to establish whether a particular sense of a word can be accounted as a distinct sense, but also to establish the central sense, since semanticists have not always agreed about the central senses of categories. They also investigate prepositional polysemy on the example of *over*. The term they use is *principled polysemy approach* to lexical semantics, the goal of which is to establish which meanings are stored in the memory and which are construed 'on-line', that is in a given situation. The reason why prepositions are often studied in cognitive linguistics researches is that they are clear examples of embodiment: meaning is grounded in our bodily experience. Since prepositions express spatial relations they are also often used to express abstract senses. In determining whether a particular sense of a preposition counts as a distinct, they propose two criteria (summarized by Evans and Green 2006: 343):

A sense is distinct if (i) it involves non-spatial meaning and/or a spatial configuration between the trajector (TR) and the landmark (LM) which is distinct from that found in the word's protoscene (i.e. the primary sense of the word, represented in terms of an idealized spatio-functional configuration); and (ii) there are instances of the sense that are context-independent, that is, which cannot be inferred from another sense and the context in which it occurs.

In the examples

The hummingbird is hovering over the flower.
The helicopter is hovering over the city.

over designated a spatial relation in which a trajector (TR (the hummingbird or the helicopter)) is higher than the landmark (LM (the flower or the city) so it is not polysemous according to the first criterion since it does not express any other non-spatial relations. In the example

Joan nailed a board over the hole in the ceiling.

there is a non-spatial aspect and that is the one of 'covering' or 'obscuring' since the TR (the board) obscures the LM (the ceiling). This could be a case of polysemy based on the first criterion. When it comes to the second criterion of context-dependency, they claim that the obscuring sense of *over* cannot be derived from the context, that is, our knowledge of *over* having the above sense does not allow us to infer the covering sense. In the last example the

spatial relationship between the TR and the LM is one that would normally be expressed by *below* (*The board is below the hole in the ceiling.*) and therefore the 'covering' meaning must be stored as a conventional sense, which means it is an instance of polysemy.

Tyler and Evans (2003: 45-50) also suggest criteria for establishing the central sense of prepositions and these are:

1. earliest attested meaning (to them, the central sense of over is ABOVE, which is historically attested),
2. predominance in the semantic network (for the sense to be central, it is needed to be most frequently involved or related to other senses),
3. relations to other prepositions (senses that participate in contrast sets are central senses, such as ABOVE, OVER, UNDER and BELOW),
4. ease of predicting sense extensions (the central sense is the one from which other senses are derived and if that sense is easy to predict, it has more probability of being a central one).

Based on these criteria, they identify the ABOVE sense (a spatial relation in which the TR is higher than but within potential contact of the LM) as central or proto-scene and they add 14 more senses that are based on the protoscene. They are contextually specified and depend on our experience and knowledge of the world. They are created 'on-line' at the moment of speaking and listening.

We have stated above that polysemy can be explained through metaphor and metonymy, and this is not only the case with prepositions. For example, Booij (2005) uses the simple example of the noun *head* as a polysemous noun with systematically related meanings derived by means of metaphor (*head* as *a leader*- head governs the body in the literal sense just as it can govern the organization or a country in the metaphorical sense) and metonymy (head stands for the person, as in *dinner at 20 dollars a head*).

In this chapter we have tried to show that polysemy is a phenomenon present in all areas of language production. Our next focus will be the polysemy found among English suffixes.

10.2. Polysemy of (English) suffixes

We have already stated that in cognitive linguistics the boundaries between grammar and lexicon are pretty unstable and blurred, which leads to the conclusion that word-formation cannot be studied from either grammatical or lexical point of view alone. Phenomena of

word-formation are, as Brdar and Brdar-Szabó put it, “in grammar with one foot, but in lexicon with the other.” (2013: 42). Many word-formation processes exhibit polysemy, which can be explained through various cognitive processes. The focus here is the polysemy in derivation, more precisely, suffixation and how it can be explained.

English suffixes are highly polysemous and exhibit different senses. We will start with a brief overview of the polysemy of the word *sleeper* to show how many different meanings this suffix can create when combined with the base *sleep*:

1. a person who sleeps in a particular way (usually used with adjectives): *I'm a very light sleeper and I can hardly get any sleep at all*. (CCED)
2. a person who is asleep: *Only the snores of the sleepers broke the silence of the house.* (OED)
3. a sleeping car: *Luxury for first class travellers: a sleeping car attendant delivers hot water bottles on the London-to-Inverness Express, January 1935*. (BNC)
4. a train with beds for its passengers: *The overnight sleeper to Edinburgh, popular with honeymoon couples, was a sedate and leisurely way to travel.* (BNC)
5. a tie supporting a railroad track: *What is the usual length of a standard gauge wooden sleeper?* (BNC)
6. an unexpected achiever of success (as a book, a film, a horse in a race etc): *The winner was a true sleeper- no one expected him to get it.* (VCB)
7. a piece of furniture that can be opened up into a bed: *The comfortable Couch Sleeper is a product that has a very playful character, but also refers to the human need of warmness and feeling of security.* (http://www.annelorenz.com/index.php?/produkte/dress-2/)
8. a spy: *If its group in the Maghreb has sleeper cells in France, now is the time they may be activated.* (DCT)
9. a kind of pajamas for infants and young children that enclose the feet: *We have a lot more sleepers than "outfits" and I'm trying to figure out if the sleepers are more like baby pajamas or if they end up wearing them all day*. (http://boards.hellobee.com)
10. a bed for babies and small children, usually portable: *Designed to be easily portable for on-the-go convenience, you can also use the sleeper in the crib to help ease baby's transition from your bed when hes ready to leave your nest.* (https://www.toysrus.com)

Suffixes have been discussed from the generative point of view, as well as from the cognitive and functionalist one. When dealing with affix polysemy, it is necessary to approach

two problems, as Brdar and Brdar-Szabó (2014) put it. One of them is the 'basicness' of affixes, if we assume that there is a concrete meaning from which other meanings are derived at or extended from. The second problem is the motivation of these extensions and how they can be explained. That is exactly what we are going to try establish here and hope to come to a conclusion in favor of metaphor and metonymy.

One of the most frequently described suffixes in literature is the suffix *-er*. Lieber and Booij (2004) have summarized the following meanings of *-er* nominalizations:

a) subject oriented

base	theta-role of subject	derived noun
write	agent	writer
open	instrument	opener
hear	experiencer	hearer
please	stimulus	pleaser

b) object-oriented

base	thematic role	derived noun
fry	patient/ theme	fryer
dine	location	diner
stroll	means	stroller

The base can also be non-verbal:

base	base category	derived noun
London	noun	Londoner
five	measure	fiver
first grade	phrase	first grader

These different meanings of the given suffix are usually given in other descriptions, where the authors try to explain the motivation for polysemy.

Lieber (2005) mentions two studies of this suffix, namely the one from 1992 made by Rappaport Hovav and Levin and a similar one made by Booij in 1986 (analysis of Dutch facts). She claims that the mentioned authors explain the behaviour of this suffix by the argument structure of the verb: the suffix takes on the thematic role an external argument can carry. “-er nominals are only derived from verbs that have external arguments, and they

always refer to the external argument." (Levin and Rappaport 1988: 1068). This means that *-er* nominals can also denote instruments, but only if the instrument can occupy the position of the external argument of the verb (*Doug opened the can with the new gadget / The new gadget opened the can / the opener*). Some *-er* forms are derived from middle constructions, namely the patient roles (*sinker- This ship sinks easily.*).

Booij (2005: 221) uses the term 'the domain shift' to explain the polysemy: "one may go from one semantic domain to another, related one, and thus derive new interpretations". Domain shifts can be either metaphorical (where the notion of AGENT is transferred into immaterial things that can perform a particular task since they are perceived of as agents, as in *mower*) or metonymic (where the domain of person is shifted into domain of location, as in *diner*). He further claims that these domain shifts appear cross-linguistically, due to the fact that these domain shift chains are cognitive in nature. He gives here the example of the Dutch sender (*zender*) with three meanings: a personal agent, a radio or a TV channel and a transmitter. It is possible to activate an agentive reading, if the established one is the instrumental meaning (as in *opener*, 2005: 222).

Ryder (1999) also describes this suffix, but her account is a semantic one. She follows the assumptions of cognitive grammar and proposes an event schema that is provided by the base: "An event schema is a cognitive knowledge structure made up of components with specified relations to each other." (Ryder 1999: 277). In an event schema, not only verbs, but nouns and other parts of speech can be participants in an event. She suggest that *-er* suffixes most likely produce agent nouns, less likely instruments and agents, due to pragmatic constraints: salience ("the degree to which something is noticeable in comparison with its surroundings") and its identifiability (*"*the extent to which a participant is readily identifiable by mention of the event alone") (1999: 285), therefore agents are more salient than patients, patients are more salient than instruments etc.

There are also restrictions on the base concepts of *-er* derivatives (in Ungerer 2007: 663):

1. Bases must have few, preferably only a single event schema (a condition most easily met by action verbs).
2. Event schemas must be capable of being applied to durative and habitual actions.
3. Events schemas must be specific (e.g., supported by verbs describing specific actions or nouns and adjectives providing a specific context).

4. Event schemas must be highly entrenched.

Barker's 1998 study of *-ee* nominals is also semantically oriented. Syntactically looking, nouns ending in *-ee* can denote the direct object associated with the verb (*employee*), the indirect object (*addressee*), the object of a governed preposition (*laughee*), the subject (*escapee*), a referent with no argument relation to the verb (*amputee*), and in a small group the base can be even nominal (*festschriftee*). Barker gives semantic unification of these meanings with three semantic restrictions: 1) the referent of the *-ee* noun must be sentient, 2) the referent must have participated in an event of the type corresponding to the base, and 3) the referent must lack volitional control over the event.

Lieber (2004) investigated the polysemy of suffixes *-er, -ee, -ant*/ *-ent* and *-ist*. She wanted to test why *-er* and *-ant*/ *-ist* suffixes most frequently denote either agents (*writer*, *servant*) or instruments (*opener*, *irritant*) and almost never patient or process. Her hypothesis (following Booij and Lieber 2004) is that suffixes always carry certain unitary meanings since many of the derivatives do not necessarily have verbal base to be used as an explanation for the meaning of the suffix (*Londoner*). In order to properly explain the meaning of suffixes, she uses the notion of 'skeleton' of semantic features for each suffix:

...affixes, like simplex lexical items, can have skeletons, and the semantic part of derivation involves adding the affixal skeleton as an outer layer to the skeleton of the base, thereby subordinating that skeleton. Affixal skeletons will consist of functions and arguments, just as simplex lexical skeletons do, and indeed of exactly the same atomic material that makes up simplex lexical skeletons. I assume, in other words, that affixes have actual semantic content. (Lieber 2004: 36).

She makes a list of basic semantic categories for derivational affixes:

Basic categories for derivational affixes:

[+dynamic]	creating SIMPLE ACTIVITIES
[−dynamic]	creating STATES
[+dynamic, +IEPS][4]	creating UNACCUSATIVES/INCHOATIVES
[+dynamic, −IEPS]	creating MANNER OF MOTION
bipartite	creating CAUSATIVES

4 +/-IEPS stands for 'Inferable Eventual Position or State' designating PLACE or STATE.

[+material] creating simple, concrete SUBSTANCES/THINGS/ESSENCES
[−material] creating simple, abstract SUBSTANCES/THINGS/ESSENCES
[+material, dynamic] creating concrete processual SUBSTANCES/THINGS/ESSENCES
[−material, dynamic] creating abstract processual SUBSTANCES/THINGS/ESSENCES

Lieber further claims that the suffixes in question all contribute to their basis the same way: they all produce dynamic, material, concrete processual nouns. It is not sufficient to claim that they produce instruments or agents or patient, but having the difference of their bases in mind, they all add certain semantic contents that instruments, agents or patients have in common. This affixal skeleton is, of course, applicable to other suffixes, as well. The suffixes we investigate, *-hood* and *-ness,* produce abstract [-material] nouns. She also mentions meaning extension found in the *-ery* and *-age* nouns. These nouns typically denote collectives (*jewelry*, *baggage*), place (*brewery*, *orphanage*) but nouns in *-ery* can also denote behaviour characteristic of (*snobbery*), meaning that this affix can produce both concrete and abstract nouns at the same time. Moreover, she claims that these affixes have central meaning, the one of 'collectivity' whereas the 'place meaning' is a result of paradigmatic extension. This is a phenomenon that appears under pragmatic pressure, when there is no existing affix available in language to express what is intended. If that is the case, speakers usually use an explanation of the word or apply semantically closest productive affix. Paradigmatic extension was first proposed in Booij and Lieber (2004) to explain cases such as *loaner* or *keeper* since there is no affix in English to capture the meaning *'thing which one Xes'*.

Lieber (2004: 149) emphasises the collective reading of *-ery* and *-age* and adding them to the bases like *jewel* or *peasant* they change the quantificational class of these nouns. Nouns meaning 'behaviour' or 'condition' (*snobbery*, *brigandage*)

are formed on a particular type of nominal base – names for types of people, often derogatory ones – and if we assume further that those base nouns come to be construed metonymically. In other words, the "behaviour" reading is a natural sense extension from the "collective" reading.

Here the base *snob* metonymically stands for the type of behaviour typical of snobs and adding *-ery* to the base adds the collective meaning of 'all the things that snobs do'. She notices that the sense extension commonly goes from the place meaning to collective meaning (Lieber 2004, 2005), where names of places usually stand for collectivity of people living there (in *Seattle voted Democratic* the place name *Seattle* means all the people in Seattle who

voted) but that this extension can go in opposite direction: *a piggery* is a place where a collectivity of pigs is gathered. This is the extension from collective meaning to place meaning.

In dealing with semantic change in word-formation, Rainer (2005b) investigates *-itis* suffix, claiming that the literal use of the suffix is found in the language of medicine, such as *appendicitis* (inflammation of appendix) where it designates a disease connected to N. There is, however, a figurative use of the suffix in *telephonitis,* meaning excessive fondness for telephoning, where fondness is a kind of a figurative disease. This is enabled by the use of a metaphor EXCESSIVE TENDENCY IS A DISEASE that is applied on the whole pattern: base + suffix (2005b: 432). The word formation process that is influenced by metaphor and metonymy is labeled 'approximation' by Rainer (2005b: 431): “a process of word formation where the relation between a pattern of word formation and a neologism formed according to it is not one to one, but mediated by metaphor and metonymy”. He distinguishes between approximation at the base level and approximation at the pattern level, which depends on whether metaphors and metonymies operate on the base only or on the whole pattern. Approximation at the pattern level was exemplified by *-itis* formations and for approximation at the base level he gives Spanish examples for metonymies on the base (*tabaquera*, 'tobacco tin', the base designated the thing contained in it), but for metaphors as well. Suffix *-uno* was used in Spanish to form adjectives from animal nouns (*caballuno*, 'horse like', from *caballo* '*horse*'), but can also be found with human nouns in derogatory sense (*frailuno*, 'monkish', from *fraile* 'monk') via HUMANS ARE ANIMALS metaphor.

The investigation into English suffixes in cognitive linguistics was also made by Panther and Thornburg (2003, 2004), who investigated *-er* nominalizations, Heyvaert (2003a) who included the same suffix into her study from the functionalist view, Imamović (2006a, 2006b, 2011), who studied *-ion* nominalizations, Radden (2005), who described the suffix *-able* and many more.

Panther and Thornburg claim that the polysemy of the suffix *-er* can be explained through personification and reification metaphor and many metonymic mappings. Following prototype theory, sufffix *-er* has a central sense of “a human Agent who performs an action or engages in an activity to the degree that doing so defines a primary occupation” (2003: 285) such as *a teacher*, *a baker*, *a manager*. They need not have verbal base, as in *hatter* or *Wall*

Streeter, the base of which has to be metonymically interpreted via PARTICIPANT FOR ACTION /ACTIVITY metonymy:

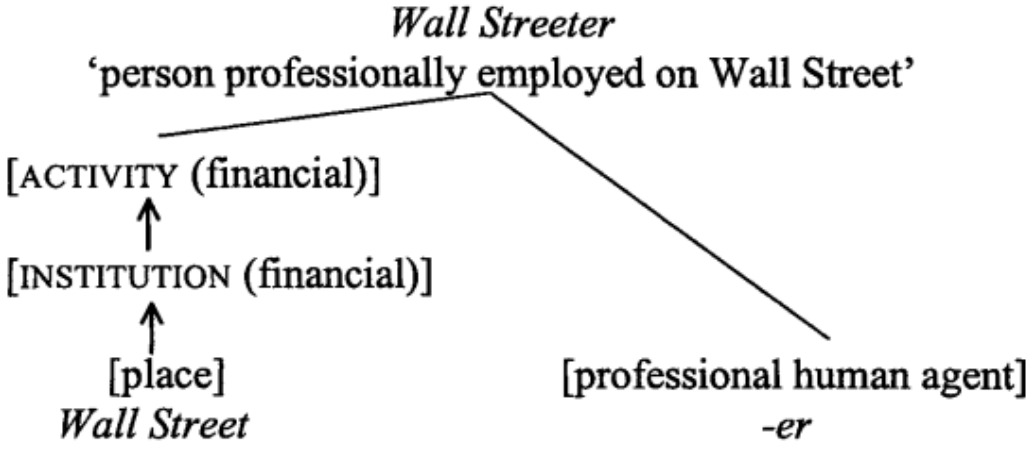

Figure 6. Metonymic extension of the base in Wall Streeter (Panther and Thornburg 2003: 288)

Personification metaphor NON-HUMANS ARE HUMANS is found in the examples containing animals and plants (*retriever*, *late bloomer*) and innanimate objects (*skyscraper*). EVENTS ARE OBJECTS metaphors help us view events as Agents (*thriller*) or Causers (*laughter*). All this shows that suffixes are able to "metaphorically and metonymically extend their meanings". (Panther and Thornburg 2003: 315).

Heyvaert (2003a) points out that *-er* nominalizations started as agentive nouns, but can no longer be studied as such, since there is an increase in number of those that are non-agentive (e.g. *bestseller*) and now profile subjects (*The book sells well.*).

Imamović claims that the central meaning of *-ion* nominalization is the action of V + ing, other senses are metonymically and metaphorically derived and can denote people (*administration*), physical objects (*declaration*), countries (*confederation*), events (*justification*), settings (*reception*) and others. She concludes her study by claiming that "the polysemy of nominalizations is not arbitrary, but largely motivated by metaphorical and metonymic processes." (Imamović 2006b: 239).

Radden (2005) claims that the central meaning of the suffix *-able* is 'can be VERB-ed' as in a *movable* piano (a piano that can be moved). Movability is thus an inherent property. There are extensions from this prototypical sense in the example of *drinkable* water, which is water that is safe for humans to drink. The inherent property (of an object) is extended to more specialized meaning of 'inherent property (of an object) for humans' via GENERIC FOR SPECIFIC metonymy. Other metonymies that operate on this suffix are EFFECT FOR CAUSE in the *lovable* child (a certain, inherent property of a child makes people love it), *remarkable* woman (an inherent property makes people react in a certain way towards the woman) and *considerable* (an inherent property makes it worth considering it), EXPRESSION OF EVALUATION FOR EVALUATION (also in *remarkable*), OUTSTANDING PROPERTY FOR LARGE AMOUNT (in *considerable* meaning 'a large amount') and SCALE FOR UPPER END OF THE SCALE (*sizable* meaning 'fairly large').

Polysemy of English agent nouns was already investigated by Dressler (1986) within the framework of Natural Morphology. It is a theory in which the main function of word formation is to enrich the lexicon. Inflectional morphology, on the other hand, has the role of fulfilling syntactic functions. Together they need to motivate derived words. To Dressler, agent nouns are motivated if they are coined by means of word formation. They are also polysemous, expressing of course agent, but also instrument, locative, source, animal and plant names, impersonal agents and recipients, and "the conceptual basis of this polysemy seems to lie in metonymy." (1986: 526).

Semantic extension based on conceptual contiguity from an agentive to instrumental or locative uses of *-er*, as the previously mentioned investigations show, is strongly opposed by Rainer (2011, 2014) in the study of the usages of Latin *-tor* in Romance languages such as French, Spanish and Italian, and Luschützky and Rainer (2013), who concentrated on instrument and place nouns. The authors want to challenge the above mentioned studies in arguing against meaning extensions. Rainer claims that "the main factors involved were again borrowing, phonological merger, ellipsis and, above all, the concretization of action nouns. No evidence for a direct sense extension from agent to instrument or instrument to place has been found." (2014: 352).

Janda's 2011 article *Metonymy in word formation* aims at giving a cognitive description of word classes. She focuses on semantic relationships between the source word

as a vehicle and a derived word as a target with a suffix bearing "the context for the metonymy". (2011: 388). For example, Russian *parkoviště* 'parking-lot' is derived from *parkovat* 'park' via ACTION FOR LOCATION metonymy.

Metonymy in word-formation was also studied by Brdar and Brdar-Szabó (2013, 2014) who are very critical of Janda's claims about metonymy in word formation, claiming that it leads to metonymy being "theoretically and descriptively useless: if every contiguous or associative relationship in grammar is a priori metonymic, it is trivial to qualify anything as metonymic as it does not add anything to our knowledge, i.e. our understanding of language." (2014: 323). The authors are interested in the placement of metonymic shift, that it, whether it precedes or follows word-formation, since it does not arise in the course of derivation. As an evidence of metonymic shift that operates on the output of word-formation process, the authors give the examples where Croatian suffixes such as *-ina*, *-etina* and *-evina*/*-ovina*, denoting 'meat of X' are, produce nouns that serve as metonymies:

... da, naručio sam ***puretinu****,... i uživao u svakom zalogaju...*
...yes, I ordered ***turkey****... and loved every single bite...*

Here, *puretina* as 'the turkey meat' metonymically stands for the dish prepared by this same kind of meat.

Not only sufffixations, but compounds can also include metonymic shift. Thus the compound *blood-pressure* can mean 'the pressure on the walls of blood vessels', but also 'the process of measuring one' as well as 'readings of blood pressure' (which can therefore be pluralized).

Sometimes metonymy operates on the base of a word-formation process, as the previously mentioned example of *-er* suffixation in *Wall Streeter* and compound nouns with camp (concentration camp)[5] show, to name just a few examples, but also on the element that precedes the base, as in English intensifying compound adjectives such as *steaming mad*, *chilling cold* or *dripping wet*. All these *-ing* elements somehow show symptoms or qualities of the base, or to be precise, they are connected by EFFECT FOR CAUSE metonymy. Brdar and Brdar-Szabó (2013: 53-54) address another issue here, and that is the fact that many of these -

5 The base *camp* already has the meaning 'quarters for the accommodation of detained or interned persons', so the meaning of the whole compound 'concentration camp' is not metonymically derived in the course of compounding.

ing adjectives already denote within themselves what is denoted by the base, so that *-ing* adjective *raving* denotes the same as the combination *raving mad,* the result of which is a kind of a reduplication. Authors suggest two metonymies here: the first one operates on the modifying adjective before composition and another one creates intensifying effect, namely THE WHOLE SCALE FOR THE UPPER END OF THE SCALE, a metonymy commonly found in reduplications.

In studying the polysemy of Brazilian Portugese agent nouns, Basilio (2009) emphasizes the importance of ICMs in giving 'metonymic' explanations for polysemy. It is insufficient to describe the formation NOUN (X) + SUFFIX as merely someone or something characterized by X, but in order to have something that serves as a reference point to something else, we need to have a context. Thus the word *pintor* 'painter' can have two ICMs: one of house maintenance and the other of artistic work.

Metaphor and metonymy are therefore cognitive processes that can be used to explain polysemy. As Croft puts it, “Metaphor and metonymy are two types of extensions of word meaning; they represent different uses of a particular word.” (2006: 277).

Lakoff and Johnson state that “the conceptual metaphor explains the systematicity of the polysemy, and correspondingly, the systematic polysemy provides evidence for the existence of the metaphor. ” (2003: 247).

Metaphor and metonymy allow us to give the existing language units new meanings in two ways: “...there is a meaningful difference between metaphor and metonymy as two ways of construing new concepts from old concepts, being based on similarity, ...being based on contiguity” (Bartsch 2003: 73). We will deal with the notions of similaritiy and contiguity later in the paper.

To conclude, affixes in general are very similar to 'regular' lexical items since they can exhibit polysemy. Each affix has a central meaning, and other meanings are arrived at by the means of metaphor and metonymy.

11. COGNITIVE LINGUISTICS IN GENERAL

Cognitive Linguistics as the study of language originates from the 1970s due to the dissatisfaction with the formal approaches to language. Language was long described as autonomous ability, totally independent from other abilities and determined by a set of innate rules or 'universal grammar'. One of major objections to this is that language is not an autonomous cognitive faculty, but rather connected with our other abilities, both cognitive and non-cognitive ones, and therefore has to be studied as such. This means that

the representation of linguistic knowledge is essentially the same as the representation of other conceptual structures, and that the processes in which that knowledge is used are not fundamentally different from cognitive abilities that human beings use outside the domain of language. (Croft and Cruse 2004: 2).

The structure of language is tightly connected to how we conceptualize the world, that is, it is determined by our basic cognitive processes. This is true for grammar as well. The formulation G*rammar is conceptualization* was coined by one of the most prominent figures in Cognitive Linguistics, Ronald Langacker and means that grammatical structures of language are directly associated with the way people conceptualize the world.

Another important proposition is that language reflects our experience as human beings. Human beings, or speakers, are at the center of communication and it is our perception that determines the choice of certain utterances. We can 'frame' situations in different ways, according to our viewpoint:

a. *Timmy is in front of the tree.*

b. *Timmy is behind the tree.*

The differences between these sentences lie in the position of the speaker: how he perceives the reality is of the importance for the correct interpretation of the sentence. On this example it is evident that conceptual structure is embodied: the nature of conceptual organization is the outcome of our bodily functioning and experience.

Cognitive linguistics also stresses that knowledge of a language emerges from language use, that is, we learn a language just as we learn anything else. This is a direct opposition to Chomskyan view of language learning where children are equipped with certain rules that help them learn a language properly. Grammar is described as usage-based:

language acquisition is connected with language use and there is no clear division between competence and performance. When a child learns a language, it does not simply activate the rules from Universal Grammar, but rather relies on already established and used constructions. Usage-based models of grammar will be approached later in the thesis.

In their study cognitive linguists apply two commitments: the 'Generalization Commitment' and the 'Cognitive Commitment' (Lakoff 1990). The 'Generalization Commitment' is a commitment of cognitive linguists to search for general principles that are responsible for all aspects of human language. It is the task of the linguists to search for these general principles in all areas of linguistic description: phonology, semantics, pragmatics, morphology and syntax. In cognitive approaches to languages these aspects of language are not distinct, since they all share the same cognitive principles.

The 'Cognitive Commitment' represents the view that language and linguistic organization should reflect general cognitive principles found not only in language, but general ones found in other cognitive sciences. All human beings share some common cognitive abilities used to construe meaning. We will turn to them a bit later.

Cognitive Linguistics is, however, not a unitary language theory, but rather comprised of many approaches that complement one another and each of these has something specific as its focus. There are 12 general streams in the CL enterprise (Geeraerts 2006: 2) and these are Cognitive Grammar, grammatical construal, radial network, prototype theory, schematic network, conceptual metaphor, image schema, metonymy, mental spaces, frame semantics, construction grammar, and usage-based linguistics. They are all, however, led by the three general principles mentioned above. What all these approaches have in common is their study of not just the language, but of the human mind, too, since language reflects cognitive processes. They are all interested in how human mind conceptualizes the reality, that is, how it construes the meaning.

Meaning is the focus in all these approaches and it is embodied and encyclopedic - we arrive at constructing and understanding it through our interaction with the world and by applying what we already know about the world around us. Lakoff (1987: 12) explains conceptual embodiment as

The idea that the properties of certain categories are a consequence of the nature of human biological capacities and of the experience of functioning in a physical and social environment. It is contrasted with the idea that concepts exist independent of the bodily nature of any thinking beings and independent of their experience.

Our construal of reality is closely connected with our bodily functioning. When saying that meaning is embodied, it means that it reflects our experiences as human beings, or as Rohrer (2007: 27) puts it: "Human physical, cognitive, and social embodiment ground our conceptual and linguistic systems." It also means that meaning is encyclopedic, since we humans are not merely biological beings, but also have social and cultural identity, which we apply to meaning construction. In constructing and decoding the meaning we apply what we already know about the world around us. That is why meaning in non-autonomous, but rather rooted in our experience.

Our knowledge of the world is not just 'out-there' but rather organized in certain domains and frames, which are based on our experience and rooted in our culture. The organization of our knowledge is guided by some general cognitive processes, which shows that language is a cognitive ability. Croft and Cruse (2004: 46) have made a list of construal operations used for construing meaning. These are attention/ salience, judgement/ comparison, perspective/ situatedness and constitution/ gestalt. Attention and salience are connected to human ability to focus on some parts that are relevant in a given situation and to ignore the ones that are not so important. In language this is called *profiling* (Langacker 1987: 183-189). Every concept, semantic structure or predication has a profile and a base. The profile of a predication is the concept it designates. The base (or scope of predication) is the whole cognitive scenario evoked by a term. Judgment and comparison are processes through which we bring certain things together to compare them. To Langacker (1987: 101) "Fundamental to cognitive processing and the structuring of experience is our ability to compare events and register any contrast or discrepancy between them." Croft and Cruse include categorization, metaphor and figure/ ground here since these are the processes where we compare new experiences to already present ones. Categorization and metaphor will be dealt with later since they are of a greater importance to this thesis. Perspective and situatedness enable speaker to place himself in a given speech situation based on viewpoint, deixis and subjectivity. In communication, we as human beings are always in a particular location and based on our position, we judge the situation. As speakers, we use elements that are dependent on us spatially (*here*, *there*) and temporally (*today*, *tomorrow*). Subjectivity refers to how one construes a scene that includes himself/ herself. Constitution and gestalt "represent the conceptualization of the very structure of the entities in a scene." (Croft and Cruse 2006: 63). Gestalt psychologists were the first to notice that there are certain principles that enable us to view bounded objects in an unbounded mass of sensations. They include image schemas (representations of embodied experience) such as containers or surfaces.

Cognitive linguists try to show that all these 'psychological' phenomena are reflected in language as well.

We will now briefly outline basic assumptions shared by the previously mentioned approaches in Cognitive Linguistics, with the special focus on the Theory of conceptual metaphor and metonymy and Cognitive Grammar since they are of the great importance for this work.

11.1. Prototype theory

We classify concepts into categories according to their similarities or purposes. Cognitive linguistics states that, unlike in the Aristotelian view, these categories are not clearly bounded, but rather they have blurry edges: some members of the category share commonalities with members of the different category, their meanings overlap, there are degrees of membership, some members are better representatives of the category than others. Categories have their internal structure with a central member or a prototype and extensions from the prototype or radial categories. The origins of prototype theory can be found in the works of Wittgenstein (1958), who was one of the first to challenge what is known about categories until then. In his research he asked his subjects to give the necessary conditions for the category GAME and concluded that neither suggestion (having rules, has winners and losers, involves some kid of a physical activity) can be said to be exclusive or necessary, that means not all features can be found in all games. He proposed the notion of family resemblance: members of a family belong to one because they have some similarities they share, but not all members of the family share all the properties. Prototype theory was further developed by Eleonor Rosch and her associates and it later influenced many other cognitive scientists. It is important because it has brought new insights into how humans structure the world. Most concepts are structured in terms of 'prototypes'. For some concepts to belong to a certain category there are some conditions that have to be fulfilled. Let us take the example usually given in cognitive linguistics theory: a robin is a member of the category BIRD because it satisfies a large number of the features needed to belong to this category, e.g. ‘has wings’, ‘flies’, ‘nests in trees’, ‘sings’, etc. (and hence is a typical instance of the category or a 'better' example of it). A *peacock* is a less typical instance of this category, but having enough features, still belongs to it. So category membership is a matter of degree. Rosch and her coworkers have seen that categories can occur at different levels of inclusiveness (as discussed in Croft and Cruse 2004: 83):

animal- **dog**- retriever

furniture- **chair**- rocking chair.

What is in bold is a basic or generic level and this level has a special status and importance. Two further levels are superordinate level (*animal*, *furniture*) and subordinate level *(retriever*, *rocking chair*). Their researches have shown that the basic level:

-is the most inclusive level at which there are characteristic patterns of behavioural interaction. For example, if one was asked to mime how they behave with an animal or what they do with furniture, it would not be as simple as to mime how they behave with a dog, a cat (you can pet them, feed them...), or a chair (you can sit on it, move it).

-is the most inclusive level for which a clear visual image can be formed (a single mental image can represent the whole category). It is easier to image a dog than an animal.

-is the level used for everyday reference, as in answers to the questions: What is this?

-is the level that is first named and understood by children and it is the first level to enter the lexicon of a language. Names of basic level categories are morphologically simple. Most of our knowledge is organized at this level around part-whole division.

Prototype theory was further developed in Lakoff's works (1980, 1987). He uses the term 'a radial category' for a conceptual category in which the range of concepts is organized relative to a central or prototypical concept: more prototypical senses are closer to the center, while less prototypical are further form the prototype. Members of linguistic categories show prototype effects or asymmetries within categories on all levels of linguistic description: phonological, morphological, syntactic and semantic. Words and their meanings are therefore conceptual categories and they are organized in the same way as other, non-linguistic categories.

To Lakoff, categorization is "a matter of both human experience and imagination- of perception, motor activity, and culture on the one hand, and of metaphor, metonymy, and mental imagery on the other." (Lakoff 1987: 8) and language makes use of categorization mechanisms. Categorization is the way we perceive the world around us and "There is nothing more basic than categorization to our thought, perception, action, and speech." (Lakoff 1987: 5). Categorization is what makes us human because we use it for all our activities: we categorize both concrete and abstract things (relationships, actions, events and emotions) and we do it automatically and unconsciously. Lakoff states that categories relate to idealized cognitive models or ICMs. They are mental representations of the world. "They are 'idealized' because they abstract across a range of experiences rather than representing

specific instances of a given experience." (Evans and Green 2006: 270). ICMs provide us with background knowledge we use when decoding the meaning, we use it for understanding and reasoning.

Each ICM structures a mental space, "a small conceptual packet constructed as we think and talk, for purposes of local understanding and action." (Fauconnier and Turner 2002: 40). "A mental space is a medium for conceptualization and thought. Thus any fixed or ongoing state of affairs as we conceptualize it is represented by a mental space." (Lakoff 1987: 281). They include our immediate reality, past or future situations, hypothetical situations and fictional situations.

ICMs are conceptualizations of experience that often does not match the reality. The most cited example in cognitive linguistics literature is the one of '*a bachelor'*. When defining the word 'bachelor' we use an ICM in which there is a society with marriage and marriable age. A bachelor is an unmarried adult man. This works in most cases, but there are some cases in which we simply cannot describe a bachelor as an unmarried adult male, e.g. Is a Pope a bachelor? He is male, adult and unmarried but nobody thinks of him as one. Or an adult man that lives with his girlfriend or boyfriend? The answer again is no. The thing is that the concept of BACHELOR can be profiled against a frame (explained below) that cannot fit all real-life situations. The ICMs for ADULT, UNMARRIED and MALE need to include much more information than is usually associated with those labels, such as living arrangements, relationships to parents, occupational activity, a life history sequence and sexual orientation.

Lakoff describes the ICM for 'mother' as having a cluster of several different ICMs or a cluster of models (Lakoff 1987: 74–76):

BIRTH MODEL: the person giving birth is the mother

GENETIC MODEL: the female who contributed the genetic material is the mother

NURTURANCE MODEL: the female adult who nurtures and raises a child is the mother of that child

MARITAL MODEL: the wife of the father is the mother

GENEALOGICAL MODEL: the closest female ancestor is the mother.

Mother is a concept based on a more complex model or the combination of different models.

Prototypically all models are applied, but not always: *a stepmother* fits a nurturance and marital model, but not the others; *a birth mother* fits only the birth model; *an unwed mother* fits all of them except a marital model. Fillmore's example is 'breakfast' (in Croft and Cruse 2004: 31), the frame of which is a cycle of meals. A breakfast is a meal eaten early in

the day, after waking up and usually has a unique content. We are all familiar with the cases where you can eat early in the morning after a sleepless night or being in a restaurant that serves breakfast all day. So ICMs are connected to prototype effects in a way that they enable us to see a member of a category as a better or not so good example of it. If we go back to the example of *mother* we know that there are many woman who have decided (or it happened spontaneously) not to pursue a career or give up on one to stay at home and take care of the kids, house, family. These housewife-mothers are still considered (at least in our culture) as better examples of mothers than working mothers, which yields stereotypes. Social stereotypes may change over time and are usually conscious. This protoype effects are not due to the clustering of models, but are based on metonymy: a subcategory a housewife-mother stands for the whole category. So 'mother' can have two kinds of models:

-a cluster model

-a stereotypical or metonymic model in which the house-wife mother stands for the category as a whole with regard to social expectations. The category 'mother' is a radial category or structure because it is organized in a such a way to have a central case and variations or extensions.

Apart from housewife-mother stereotypes, there are other metonymic models that can create protoype effects and these are typical examples, ideals, paragons, generators, submodels and salient examples (Lakoff 1987: 86-90). Typical examples are common examples of the category, as in *Robins and sparows are typical birds.* Based on them we make inferences about non-typical examples. Ideals are comprised of good qualities, so we can have *successful, good and strong* marriages as ideals. Paragons are usages of personal names to stand for certain qualities (*another Babe Ruth*). Generators appear within a generative category as its central members. This category has one generator plus some general rules (natural numbers). Members of submodels serve as reference points in reasoning, especially when it comes to sizes and distances. Salient examples emerge when we use something familiar and close to us to make inferences about more general or not so familiar instances.

There are four types of different ICMs (Ruiz de Mendoza 1997: 281): propositional (sets of predicate-argument relationships or 'frames'), metaphoric (mappings or sets of correspondences across conceptual domains), metonymic (mappings within a single domain) and image-schematic (abstract spatial concepts). Lakoff (1987) describes five of them (propositional, image-schematic, metaphoric, metonymic and symbolic). The notion of propositional ICM is something that Fillmore terms 'a frame'. Charles Fillmore is the father of frame semantics, an approach we will describe in the next section.

11.2. Frame semantics

By the term '**frame'** I have in mind any system of concepts related in such a way that to understand any one of them you have to understand the whole structure in which it fits; when one of the things in such a structure is introduced into a text, or into a conversation, all of the others are automatically made available. (Fillmore 2006: 373).

It is represented at the conceptual level and stored in our long term memory. According to Fillmore, the meaning associated with a particular word cannot be understood unless the associated frames are taken into account. He claims that frames always appear in a certain motivating context and explains it by the example of *weekend*. This word means what it means if we have a seven-day cycle in mind, with working days from Monday to Friday. Fillmore bases his theory in Gestalt psychology and adopts the terms figure and ground to differentiate between the concept and the background frame. The specific meaning of a lexical item is represented by the figure and complex knowledge structure that helps us understand it is designated by the ground. Figure/ ground distinction correlates with profile/ base. So in order to understand a concept, we need to understand it against a certain frame. Frame semantics describes, like other cognitive approaches to language, meaning as encyclopedic since we cannot understand concept without understanding their underlying knowledge structures. Langacker uses the term 'domain' to describe this knowledge structures and that is the topic of the next section.

11.3. Theory of domains and image-schemas

*"*Domains are necessarily cognitive entities: mental experiences, representational spaces, concepts, or conceptual complexes." (Langacker 1987: 147). Langacker also bases his theory of domains on the assumption that meaning is encyclopedic and that it cannot be understood without taking into account the encyclopedic knowledge associated with it. For example, in order to understand the 'sunny' in *It is sunny*, one needs to place this word in the domain of TEMPERATURE. Langacker distinguishes between basic domains and abstract domains. Basic domains are rooted in directly embodied human experience. These are SPACE, MATERIAL, TIME, FORCE, COLOR, HARDNESS, LOUDNESS, HUNGER, PAIN, etc. Nonbasic domains are abstract domains, that is "any concept or conceptual complex that functions as a domain for the definition of a higher-order concept "(Langacker 1987: 150), is called an abstract

domain. Abstract domains are the ones, according to Lakoff and Turner (1989: 94) that lack 'images', like death, thought, living etc.

Image schemas are presented by Lakoff (1987), Lakoff and Turner (1989) and Johnson (1990). They are representations of specific, embodied experiences. They are schematic since they represent schematic patterns that arise from our everyday bodily experience. They are also inherently meaningful because they derive from our interaction with the world, that is, our sensory-perceptual experience. Some of the most important ones are BALANCE, VERTICALITY, CENTER/ PERIPHERY, RESISTANCE, LINKAGE AND CONTAINER. For example, our daily experience with containers helps us use expressions with *in* or *out*, such as *to be in love*, *to get in trouble* or *get out of* one. We are normally not aware of them since they are created early in life, before the emergence of language.

One concept can be profiled in several different domains, the combination of which is called *domain matrix*. Domains are any sorts of conceptualizations needed to characterize semantic structures or predications in Langacker's terms. Domains also defer in the degree of dimensionality. Time and temperature have one dimension, space contains two and three dimensions. Domains can also be bounded or unbounded with respect to their dimensions. TEMPERATURE is bounded since we can perceive only one range of it; TIME on the other hand is unbounded, and so is SPACE. Further division of domains is into configurational and locational. TEMPERATURE, for example, is a locational domain since they it occupies a location on a one-dimensional scale. Configurational domain is for example SPACE. "All of the above cognitive semantic structures – encyclopedic definitions, central vs. peripheral knowledge, profile and base, basic and abstract domains – are necessary for the definition of a single meaning of a word." (Langacker 1987: 164, fn. 12, in Croft 2006: 277).

11.4. Cognitive approaches to grammar

What differs cognitive linguistics from previously established approaches to language is the way it treats grammar. Grammar is to cognitive linguists also part of human cognition and "it reflects and presents generalizations about phenomena in the world as its speakers experience them." (Radden and Dirven 2007: XI). The grammar of a language does not only imply all the grammatical rules needed to convey the message correctly, it also includes the lexical categories. According to the founder of the cognitive studies of grammar, Ronald Langacker,

lexicon, morphology, and syntax form a continuum of symbolic units, divided only arbitrarily into separate components; it is ultimately as pointless to analyze grammatical units without reference to their semantic value as to write a dictionary which omits the meanings of its lexical items. (2006: 29).

There is no distinction between syntax and lexicon, since grammatical units are inherently meaningful and therefore lexicon and grammar form a continuum.

In cognitive grammar, meaning is associated with conceptualization, that is, our ability to construe the same situation in alternate ways (Langacker 2009: 6). Langacker uses the term 'focal adjustment' (1987) because the speaker adjusts the focus on a particular aspect of a scene and thus uses certain expressions to construe it. These are similar to construal operations mentioned above, with some differences. He distinguishes three parameters to describe focal adjustments and these are (1) selection; (2) perspective; and (3) abstraction.

Selection is speaker's ability to choose some aspects of a scene and ignore the others. In order to understand what a word profiles or designates, one must understand its base, that is all the background knowledge associated with it. For example, the expression *elbow* is profiled within the larger structure ARM, which is its base. The base represents the full scope of predication, from which a certain structure within the base is selected. Scope of predication is that what is of the importance in the base to identify the profile. For example, to understand the concept 'niece' one needs to have in mind kinship system, but not all of it. In the examples

a. *I live **close** to school.*
b. *Easter is **close**.*
c. *Me and my brother are very **close**.*

different domains are activated, namely those of space, time and emotion. Within the same domain, expressions can defer in scale. Langacker (1987: 118) exemplifies this in the following sentences that are of the domain of SPACE:

a. *The two galaxies are very **close** to one another.*
b. *San Jose is **close** to Berkeley*.
c. *The sulphur and oxygen atoms are quite **close** to one another in this type of molecule.*

The expression *close* can mean different distances: from the one between galaxies or the distance between the subparts of a single molecule.

Perspective is the position from which a situation is viewed. Here Langacker (1987: 120) distinguishes between figure/ ground alignment, viewpoint, deixis and subjectivity/ objectivity. To Langacker, and in cognitive linguistics in general, figure/ ground organization is one of the most prevalent ones in language, so that grammatical functions subject and object are also results of perspective. The specific meaning of a lexical item is represented by the figure and complex knowledge structure that helps us understand it is designated by the ground. Langacker uses the terms trajector (TR), which corresponds to the figure and landmark (LM), corresponding to the ground: a trajector is primary focal participant, the one that stands out, or the subject; a landmark is a secondary focal participant or other salient entities. Trajector is typically capable of motion (but need not be) and landmark is usually the entity trajector moves across. Sometimes expressions have the same conceptual base and designate the same relation, as in *before* and *after* (temporal relation).

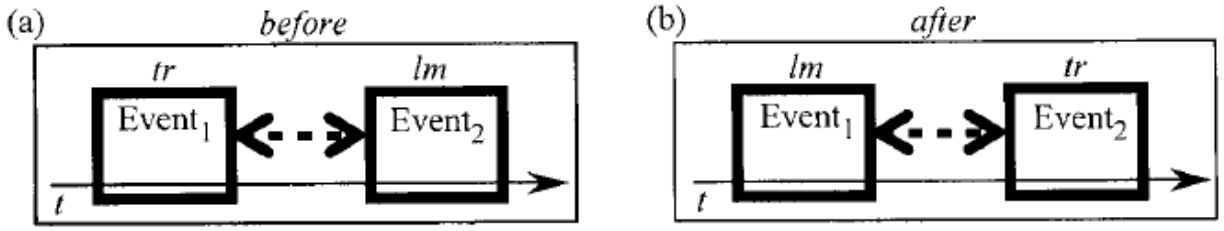

Figure 7. The same relationship with the semantic contrast (Langacker 2008: 72)

They defer in the fact that event 1 can be seen either as trajector or landmark, that is if it happens before or after the second event:

1. *The other guests all left before we arrived.*
2. *We arrived after the other guests all left.*

Under viewpoint Langacker mentions vantage point and orientation. Vantage point is a position from which a situation is viewed illustrated by

Come up into the attic!
Go up into the attic!

which means speaker has different locations. Orientation is defined by humans' upright position and therefore relates to vertical dimension. Deixis is the usage of certain elements to put the speaker into certain space and time dimensions (*here*, *there*, *now*, *tomorrow*). Vantage point is closely related to subjectivity or objectivity and that is connected to how a speaker views a scene that includes himself/ herself:

Don't lie to your mother! [said by mother to a child]

means that the speaker views the scene more objectively than in

Don't lie to me!

Abstraction, as Langacker sees it, is connected to schematicity or 'level of specificity' found in both lexical and grammatical structures. “By specificity (or conversely, schematicity) I mean the level of precision and detail at which a situation is characterized.” (Langacker 2009: 6). According to the context, the same predication can be expressed with less or more details. Human ability to generalize or extract schemas is one of the most fundamental. Schemas are always connected to their elaborations, which provide more information than contained in the schema.

Along with the symbolic thesis of the language, there is another important assumption of cognitive linguistics and that is the usage-based model of language. The knowledge of a language (or mental grammar) is usage-based: the knowledge of a language emerges from language use. A speaker can choose from different constructions to say what he intends. This usage-based approach links language competence and performance. Usage-based also means that language acquisition is enabled by the actual language use, not Universal Grammar. Since units of language are shared by a community of people, they are conventionalized. Some units are more entrenched than the others, that is, used more frequently and by the greater amount of speakers and the most entrenched linguistic units shape the language system.

Cognitive grammar belongs to the construction models of grammar because of its emphasis of the symbolic character of a linguistic sign and the emphasis on constructions. Construction grammars (lower case) branch into several directions, each of them retaining the common assumption of construction as pairing of a meaning and sound. These are Cognitive

Grammar, Construction Grammar and Radical Construction Grammar (in capitals). Langacker (2005: 102) sums up the basic ideas behind all three frameworks as follows:

(i) Constructions (rather than 'rules') are the primary objects of description.
(ii) The frameworks are non-derivational ('monostratal').
(iii) Lexicon and grammar are not distinct components, but form a continuum of constructions.
(iv) Constructions are form-meaning pairings ('assemblies of symbolic structures').
(v) Information structure is recognized as one facet of constructional meanings.
(vi) Constructions are linked in networks of inheritance ('categorization').
(vii) Regularities (rules, patterns) take the form of constructions that are schematic relative to instantiating expressions.
(viii) Apart from degree of specificity/schematicity, expressions and the patterns they instantiate have the same basic character.
(ix) Linguistic knowledge comprises vast numbers of constructions, a large proportion of which are 'idiosyncratic' in relation to 'normal', productive grammatical patterns.
(x) A framework that accommodates idiosyncratic constructions will easily accommodate 'regular' patterns as a special case (but not conversely).
(xi) Well- formedness is a matter of simultaneous constraint satisfaction.
(xii) Composition is effected by 'unification" ("integration').

Monostratal models of grammar involve only one level of syntactic representation in which words are not combined into phrases and sentences with the help of rules, as it is the case with transformational grammars, where a speaker's knowledge of grammar is organized into separately divided modules: phonological, semantic and syntactic. All these components are connected by linking rules:

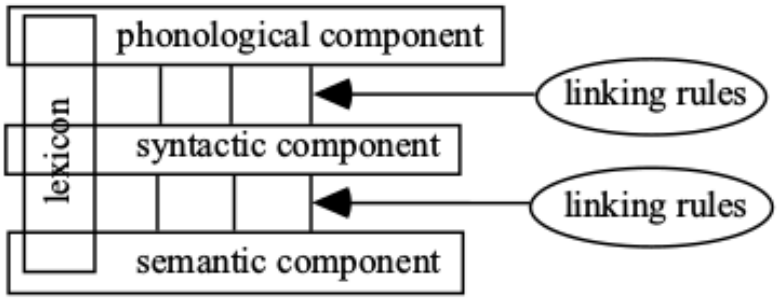

Figure 8. Organization of grammatical knowledge in the sorts of syntactic theories prevalent from the 1960s to the 1980s (Croft and Cruise 2004: 227)

In constructional approaches syntactic patterns are represented as constructions that contain not only 'grammatical' information, but also also information about morphology, semantics and pragmatics. This means that grammatical constructions can be meaningful regardless of the words they are made up of:

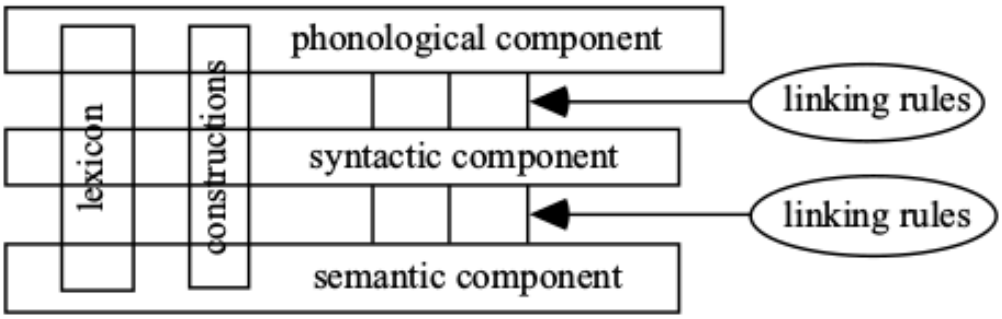

Figure 9. Organization of grammatical knowledge in construction grammars (Croft and Cruise 2004: 247)

Evans and Green (2006) put cognitive grammar and constructional approaches to grammar under the broader notion, namely *Inventory based approaches to grammar*. They classify it separately due to many differences between them, one of the most important being the emphasis of cognitive grammar on cognitive mechanisms and construal factors that are at play in grammar.

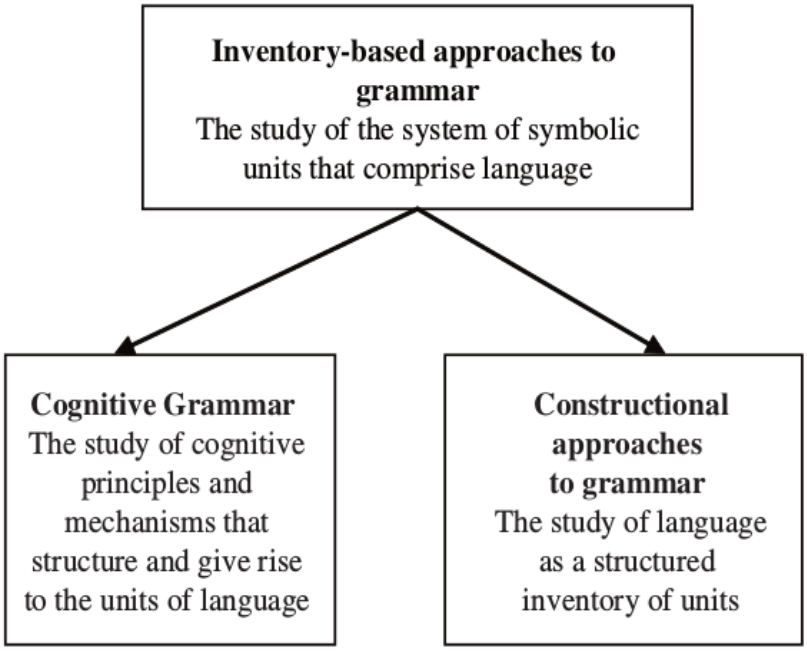

Figure 10. Inventory-based approaches to grammar (Evans and Green 2006: 482)

Cognitive Grammar differs, however, from Construction and Radical Construction Grammar in many ways. Grammar is symbolic in nature and incorporated in semantic-phonological pairings (in Cognitive Grammar). Construction Grammar as developed by Fillmore and Kay, takes Chomsky's Universal Grammar as basis and aims at developing a set of statements, represented as constructions, that determine speakers' language knowledge. In Cognitive Grammar, being usage-based, knowledge of language emerges from language use. Fillmore and Kay concentrated mostly on what is 'irregular' in language, they studied idiomatic expressions and idiomatic grammatical constructions *let alone* (1988, together with O'Connor) and *what's X doing Y* construction (Kay and Fillmore 1999). These constructions have both some regular grammatical properties, but also some that cannot be predicted from their subparts. Their theory is a reductionist one, meaning that the elements of a construction can be broken down into a set of primitive atomic units which are combined to create more complex units.

Their work was further elaborated by Goldberg (1995) who focused on verb argument structures. She notices that in the 'regular' sentence-level constructions the meaning of the whole cannot be explained as the sum of the meanings of individual parts and that "that constructions themselves carry meaning, independently of the words in the sentence." (Goldberg 1995: 1). To her, a construction is the basic unit of language in which one or more of its properties cannot be predictable from knowledge of other structures in grammar: "A construction is posited in the grammar if it can be shown that its meaning and/or its form is not compositionally derived from other constructions existing in the language." (1995: 5).

Her approach is also usage-based, like cognitive linguistics' one, and acknowledges lexicon-grammar continuum. Language knowledge is knowledge, like other knowledge of any other human experience and "linguistic constructions display prototype structure and form networks of associations. Hierarchies of inheritance and semantic networks, long found useful for organizing other sorts of knowledge, are adopted for explicating our linguistic knowledge." (1995: 5). Speakers are able to store certain syntactic patterns because they have heard them being produced.

Other construction grammar mentioned above is Croft's Radical Construction Grammar (2001). His theory also assumes lexicon-grammar continuum, a grammar as a structured inventory and usage-based approach, as Cognitive Grammar does. His definition of a construction is somehow different from Goldberg's. It also assumes a pairing of form and meaning, but it is broader in the sense that everything, from a morpheme to a sentence, is a

construction. This approach is a non-reductionist because the whole construction is a primitive and parts emerge from that whole.

Cognitive grammar is a functionalist approach to language, as opposition to the formalist one: functional characteristics of language are crucial in language description, with the main functions being a symbolic and communicative/ interractive one (as stated by Langacker 2007). Cognitive grammar allows only symbolic symbolic structures for the description of lexicon, morphology, and syntax. Communicative/ interractive function is in line with the usage-based notion of language: all linguistic units are abstracted from actual usage events.

11.5. Theory of metaphor and metonymy

11.5.1. Metaphor

Metaphor has long been seen as a figure of speech used for comparing two things that are usually different or contradictory, but have some things in common. Cognitive linguists, in their wide studies on metaphor, have all agreed that it is much more than that and that many old beliefs and assumptions about metaphor have to be questioned and altered. One of these is that metaphor is only a figure of speech used for comparing and rhetorical purposes. Its usage was assumed to be conscious and deliberate and not witnessed in every day communication (Kövecses 2010). One of the first works that challenged these assumptions was George Lakoff and Mark Johnson's seminal study *Metaphors We Live By* from 1980. They claim that metaphor is not merely a stylistic feature of language, but that thought is itself metaphorically structured. Metaphor is a matter of cognition, because we humans tend to use some concepts to talk about or understand other concepts. Our conceptual structure is organized in such a way that there are mappings between conceptual domains: one domain, called the source or donor domain, is ‘mapped’, i.e. projected, onto a different domain called the target or recipient domain. The source domain is usually less abstract than the target domain and therefore easier to comprehend. We can understand arguments, love, time and ideas as war, journeys, war, money, food:

ARGUMENT IS WAR

You disagree? Ok, shoot!

LOVE IS A JOURNEY

Look how far we've come.

TIME IS MONEY

You're wasting my time.

IDEAS ARE FOOD

Let me chew on that for a bit longer.

It is easier for us to understand concepts such as money or food because we experience them through our body: we can see them, take them into our hands, interact with them. They help us understand concepts which are abstract. Source domains are therefore grounded in our bodily experience. Kövecses (2010: 18-29) lists the following common source domains: human body, health and illness, animals, plants, buildings and construction, machines and tools, games and sport, money and economic transactions, cooking and food, heat and cold, light and darkness, forces, movement and direction. Common corresponding target domains are: emotion, desire, morality, thought, society/ nation, politics, economy, human relations, communication, time, life and death, religion, events and actions. He groups target domains into psychological and mental states and events, social groups and processes, and personal experiences.

Metaphors work on the formula A is B where the target domain is comprehended as if it were a source domain (Kövecses 2015). This is possible due to the mappings or correspondences between them.

Ruiz de Mendoza (1997) claims that there are one-correspondence and many-correspondence metaphors. In the metaphor PEOPLE ARE ANIMALS animal behaviour is mapped onto human behaviour. In the metaphor LOVE IS A JOURNEY, on the other hand, there is more than one correspondence: the travellers are the lovers, the vehicle is the love relationship, the distance covered is the progress made and so on.

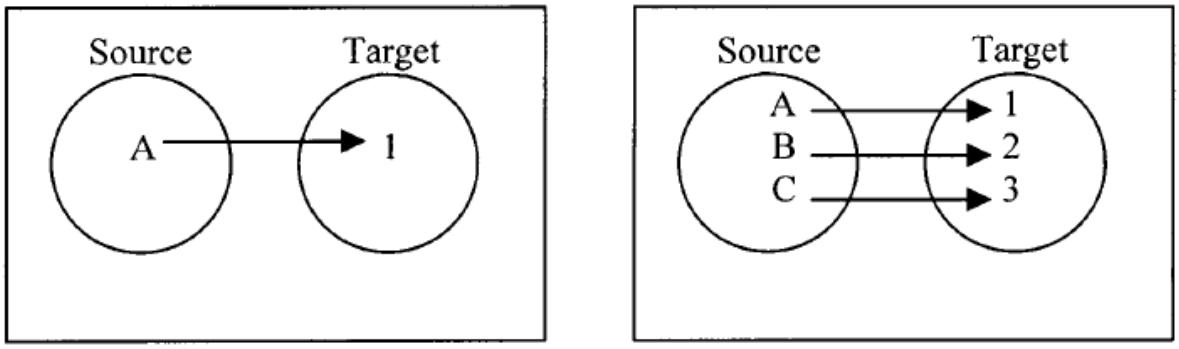

Figure 11. One-correspondence and many-correspondence metaphors (Herrero 2002: 75)

ANGER IS HEAT metaphor is the most general metaphor for heat. This metaphor has two versions, one is ANGER IS THE HEAT OF FLUID IN A CONTAINER (*You make my blood boil*) and the other is ANGER IS FIRE (*He was breathing fire*) (Lakoff 1987: 386). The correspondences that help us understand anger are:

source : FIRE ⟶ target: ANGER

The thing burning is the angry person.
The cause of the fire is the cause of the anger.
The intensity of the fire is the intensity of the anger.
The physical damage to the thing burning is mental damage to the angry person.
The capacity of the thing burning to serve its normal function is the capacity of the angry person to function normally.
An object at the point of being consumed by fire corresponds to a person whose anger is at the limit.
The danger of the fire to things nearby is danger of anger to other people.

These metaphorical entailments are part of our conceptual system, they carry what we know about source domains onto the target domain.

Lakoff and Johnson differentiate between structural, orientational and ontological metaphors.

In structural metaphors, "one concept is metaphorically structured in terms of another." (Lakoff and Johnson 1980: 14):

Your arguments are indefensible.

Here we understand the concept of an argument in terms of war.

Orientational metaphors organize a whole system of concepts in terms of physical orientation. For example, HAPPINESS IS UP:

You're in high spirits.,

while SADNESS IS DOWN:

My spirits sank.

Similarly, health, consciousness, having control, more, good, virtue, and rational are all up, while sickness, unconsciousness, being controlled, less, bad, depravity, and emotional thinking are all generally down. They are based and dependent on our cultural and physical experience. Not all orientational metaphors are up-down, some are ahead-behind, as in FORESEEABLE FUTURE EVENTS ARE UP:

What's coming up this week?

"Our experiences with physical objects (especially our own bodies) provide the basis for an extraordinarily wide variety of ontological metaphors, that is, ways of viewing events, activities, emotions ideas, etc., as entities and substances." (Lakoff and Johnson 1980: 25). Some of the most cited examples are THE MIND IS A MACHINE (*I'm a little rusty today*) and INFLATION IS AN ENTITY (*Inflation makes me sick.*). Container metaphors appear when we project our in-out orientation onto other physical objects that have bounded surfaces. We conceptualize states as containers (*He is in love.*).

Most of the above mentioned metaphors are based on our knowledge, i.e. on our experience and interaction with the world. Basic knowledge structures are mapped from a source to a target. There are also so called image-schema metaphors in which we do not map elements of knowledge from source to target, but conceptual elements of image schemas. Different image schemas structure concepts metaphorically (Kövecses 2010: 43):

Image-Schema	metaphorical extension
in-out	*I'm out of money.*
front-back	*He's an up-front kind of guy.*
up-down	*I'm feeling low.*
contact	*Hold on, please.* ('Wait')

motion	*He just went crazy.*
force	*You're driving me insane.*

An important observation made by the theorists of conceptual metaphor is its unidirectionality: metaphoric mapping go from source to target domain, not vice versa, that is the mapping is asymmetrical.

Metaphorical mappings obey the Invariance Principle: "Metaphorical mappings preserve the cognitive topology (that is, the image-schema structure) of the source domain, in a way consistent with the inherent structure of the target domain." (Lakoff 2006: 199). For example, in the metaphor PEOPLE ARE PLANTS we map the top of the tree on the person's head, the trunk onto to body and so on. This principle guarantees that the image schematic organization of the source domain will be preserved by the mapping in a way consistent with the target domain.

Ruiz de Mendoza (1998) expands this into all kinds of generic-level structure, not only image- schematic ones, which he calls Extended Invariance Principle. (In Ruiz de Mendoza and Usón 2007: 37). For example, mapping animal behaviour onto human behaviour in *Achilles is a lion*, we simply state that he behaves bravely, here image-schemas play no role.

In 2003 Ruiz de Mendoza and Santibáñez Sáenz have formulated the Correlation Principle, which ensures that source and target elements in a metaphor share the relevant implicational structure. In the ARGUMENT IS WAR metaphor a heated debate is compared to a serious war, not just some minor conflict between the opponents:

He shot down all of my arguments.

There is another principle, namely the Mapping Enforcement Principle, which ensures that "no item in the target will be discarded from a mapping system if there is a way to find a corresponding item in the source." (Ruiz de Mendoza and Usón 2007: 38). In the example

He gave John a kick.

the target elements have their corresponding elements in the source: we map a giver onto a kicker and giving onto kicking, but the possession element seem to have no corresponding

element in the target. The person receives the kick, but does not have it later. What he does have is the effect of kicking which is led to by the activation of ACTION FOR EFFECT OF THE ACTION metonymy. Possession of the object of the source domain is mapped onto the effects of kicking in the target domain.

Conceptual metaphor theory proposes the idea that metaphors work on the basis of highlighting and hiding: the metaphor AN ARGUMENT IS A JOURNEY highlights the progressive and organizational aspects of arguments and hides the confrontational aspects:

We'll proceed in step-by-step fashion.

We've covered a lot of ground.

Metaphoric mapping is therefore only partial: speakers use only some aspects of a source domain in understanding a target.

Croft and Cruse (2004: 198) summarize Lakoff's theory of conceptual metaphors as follows:

-It is a theory of recurrently conventionalized expressions in everyday language in which literal and metaphorical elements are intimately combined grammatically.

-The conventional metaphorical expressions are not a purely linguistic phenomenon, but the manifestation of a conceptual mapping between two semantic domains; hence the mapping is general and productive (and assumed to be characteristic of the human mind).

-The metaphorical mapping is asymmetrical: the expression is about a situation in one domain (the target domain) using concepts mapped over from another domain (the source domain).

-The metaphorical mapping can be used for metaphorical reasoning about concepts in the target domain.

Since the publishing of *Metaphors we live by* many different but equally important contributions have been added to the theory of metaphor. One of them is made by Joseph Grady (1997) who makes a distinction between primary metaphors and compound metaphors. Primary metaphors are foundational metaphors and when combined, they produce compound ones. He rejects the distinction between source and target domains as concrete and abstract, to him primary source concepts relate to sensory-perceptual experience, while primary target concepts relate to subjective responses to sensory-perceptual experience. Primary source concepts are derived from external sensory experience and have image content, whereas primary target concepts, which are more evaluative and subjective in nature, are said to have

response content. In the metaphor DESIRE IS HUNGER (*We're hungry for a victory*) desire as target is not something abstract to us humans, but something we experience as fundamental and essential. Hence the term 'primary'. Primary metaphors are basic mappings with strong experiential basis which, when combined, produce more complex metaphors. An example of a complex metaphor would be THEORIES ARE BUILDINGS (*The theory needs more support*) because here the entire complex domains of experience are related. In this complex metaphor, two primary metaphors are united: PERSISTING IS REMAINING UPRIGHT and ORGANIZATION IS PHYSICAL STRUCTURE.

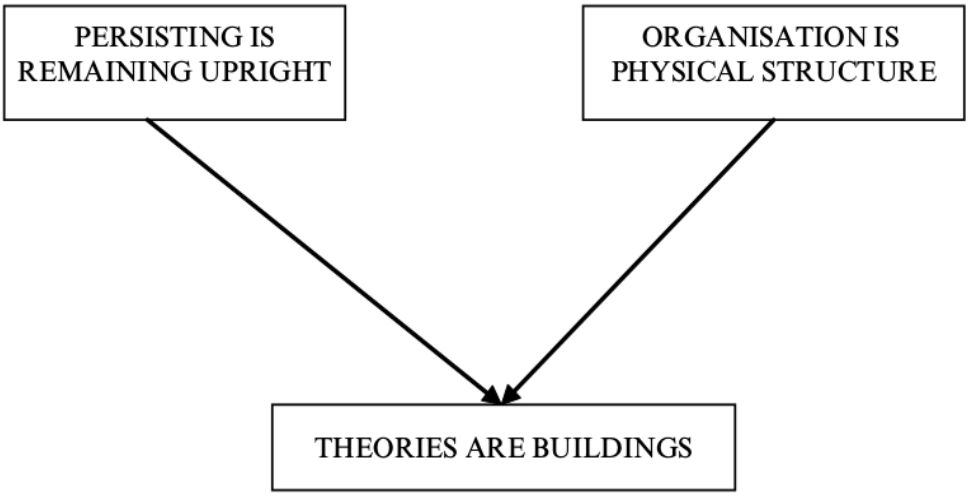

Figure 12. Compound metaphor (Evans and Green 2006: 330)

So far it has been shown that metaphors can be based on similarity between two concepts or on embodiment. Kövecses (2015) adds that metaphors can also emerge through schematization. In the metaphor HEAVEN IS AN IDEAL PHYSICAL PLACE, the target is "an idealized schematization of a variety of particular and specific source domains." (2015: 22).

When it comes to levels of language description, metaphor is not only found on the sentential level, as it is often described in literature, but on all levels of linguistic structure. Dirven (1985), following Ullmann's (1959) proposal of four levels of linguistic structure (phonology, lexis, syntax and discourse, with morphology and semantics as part of all four levels), claims that metaphor operates on all four levels. He distinguishes between sound metaphors, word metaphors, phrase and sentence metaphors and discourse metaphors (1985: 87-94). Sound metaphors appear at the level of phonology due to the fact that the relationship between form and meaning is not always arbitrary. One of the examples is *sw* sound denoting

a curved, fast motion as in *swerve*, *swish*, *swipe*, *swift* and many more. The curved motion of the air stream in the mouth is the vehicle for the meaning curved fast motion of these verbs. Word metaphors are words used as vehicles for other meanings, either already familiar ones or new ones. Thus the word *heart* can express love (*lose someone's heart to*), tenderness (Y*ou have no heart*), central part of something (*the heart of the city*), emotional disposition (*happy heart)*, or the most important part (*the heart of the matter*). Since for Dirven a metonymy is a metaphorical process, he labels all his examples as metaphors. Phrase and sentence metaphors occur due to the syntagmatic relations within the phrase or a sentence, that is, the whole sentence or a phrase stands as a vehicle for some other target. Dirven's examples are phrasal verbs, specifically the verb *talk* which creates spatial metaphors *to talk back*, *to talk somebody into*, *to out-talk* and many more. Discourse metaphors are found in in poetry, proverbs (*The early bird catches the worm*), sayings, catch-phrases, but even myths, allegories and fables. The example given is George Orwell's *Animal Farm w*here animals and their behaviour represent different types of people, but not only the characters are metaphorical, the setting as well. As Dirven claims, the metaphorical character is based on the discourse as such, not on individual words or utterances.

11.5.2. Metonymy

Metonymy, like metaphor, has long been seen as a figure of speech in which one concept simply stands for another concept. Lakoff and Johnson were the first to describe metonymy as a cognitive tool used for conceptualization. They define it as “a process which allows us to conceptualize one thing by means of its relation to something else” (1980: 39). Later, the studies on metonymy add that it is a conceptual mapping within a single domain, it involves a ‘stand-for’ relationship and has a mainly referential function.

Lakoff (1987: 288) states that metonymic mapping takes place “within a single conceptual domain, which is structured by an ICM” where the term 'domain' is equated with Langacker's abstract domain. This abstract domain or domain matrix is created by experience.

Kövecses and Radden (1998: 39) define metonymy as “a cognitive process in which one conceptual entity, the vehicle, provides mental access to another conceptual entity, the target, within the same domain, or ICM.” Their definition does not include the term 'mapping' since they base their conception of metonymy on Langacker's notion of 'reference-point' where one conceptual entity provides access to another conceptual entity. We can say that

metonymy serves as an access mechanism (Langacker 1993, Croft 1993). We access a target through domain highlighting within domain matrix. In

Proust *is tough to read.*

the expression highlights Proust's literary work, it becomes the active zone[6].

Martin Hilpert (2006) states that a linguistic sign can have a reference to another referent if they belong together, that is they stand in the contiguity relationship. One aspect can stand for another because they coexist within the same domain. In the well-known example

The ham-sandwich *is waiting for his check.*

the ham-sandwich can stand for the customer because both the source (ham sandwich) and the target (customer) belong to the same domain, the one of CAFÉS.

Klaus-Uwe Panther and Linda L. Thornburg (2009a: 180-181) sum up all the given aspects of metonymy as follows:

i. Metonymy is based on associative thinking, which itself may be grounded in human experience and culture.

ii. A linguistic metonymy consists of a vehicle that conveys a source meaning that provides mental access to an associatively connected target meaning. More specifically, the target meaning is an elaboration of the source meaning, i.e., the source meaning is 'contained' in the target meaning, but becomes backgrounded as a result of the metonymic operation.

iii. Access to the target meaning may be facilitated or even enforced by other meaning components in the conceptual domain of the metonymic operation and/or contextual triggers (including the linguistic and extralinguistic environment).

iv. The metonymic shift is construed as occurring in a single conceptual domain – in contrast to metaphor, which involve cross-domain mappings.

6 The term 'active zone' is Langacker's term: "An entity's active zone, with respect to a profiled relationship, is defined as that facet of it which most directly and crucially participates in that relationship." (2009: 42). In the example *The cigarette in her mouth was unlit* the nominal *the cigarette in her mouth* does not denote the whole cigarette, but only the first part of it, just as the landmark *in her mouth* denotes the part between her lips.

v. The relation between source and target meaning is contingent, i.e., the metonymic relation as such is conceptually non-necessary. This entails that the metonymic relation is, in principle, defeasible.

vi. In a prototypical metonymy, the target becomes conceptually prominent; the source is contained in the target but backgrounded.

vii. In prototypical metonymies the relation between source and target is conceptually tight.

viii. Metonymic relations provide natural inference schemas that allow fast, economical, and effortless access to target concepts.

Since our knowledge of the world is organized by structured ICMs which we perceive as wholes with their parts, Kövecses and Radden (1998, 1999) argue that there are two kinds of motivating relationships that produce metonymies:

a) part-whole, whole-part relationships, where parts of the domain stand for the whole domain and vice versa, that is we access a part of an ICM via its whole or a whole ICM via one of its parts;

b) part-part relationships, where parts of domain stand for other parts, that is we access a part via another part of an ICM.

The first type of metonymy producing relationships can be exemplified as follows (all the examples are taken from Kövecses and Radden (1998 and 1999)):

Part-whole, whole-part relationships

WHOLE THING FOR PART OF A THING:

America for 'The United States'

PART OF A THING FOR THE WHOLE THING:

England for 'The United Kingdom'

A CATEGORY FOR A MEMBER OF THE CATEGORY:

The pill for 'birth control pill'

A MEMBER OF A CATEGORY FOR THE CATEGORY:

Aspirin for ‘any pain-relieving tablet’

These whole-part configurations typically apply to things and underlie following ICMs:

-Thing-and-Part ICM: this ICM mainly includes metonymies which involve things. Parts of the things can stand for the whole (the above example of England), just as the whole thing can represent its parts (America). Other metonymies within this ICM are:

THE PLACE FOR THE INSTITUTION:

Washington for 'political institution'

and

THE PLACE FOR THE EVENT:

She is in the hospital, meaning 'She is ill'.

-Scale ICM: here the metonymy WHOLE SCALE FOR UPPER END OF THE SCALE is at work:

Henry is speeding again for *Henry is going too fast*.

There are also cases with a reversed situation:

UPPER END OF A SCALE FOR WHOLE SCALE:

How old are you? used to ask for somebody's age.

-Constitution ICM contains two metonymies:

OBJECT FOR MATERIAL CONSTITUTING THAT OBJECT:

*There was **cat** all over the road*.

THE MATERIAL CONSTITUTING AN OBJECT FOR THE OBJECT :

Wood for 'the forest'

In these kind of metonymies object that is perceived as material becomes a mass noun (*cat*) and when material is used as an object, it can be coded as a count noun (*in the woods*).

-Event ICM: events consist of several parts or subevents that can occur in succession or simultaneously and they metonymically stand for the whole event:

SUCCESSIVE SUBEVENTS FOR COMPLEX EVENT:

They stood at the altar.

CO-PRESENT SUBEVENTS FOR COMPLEX EVENT:

Mary speaks Spanish.

In the first example, 'the first part' of event stands for the whole wedding ceremony. In the second example all four skills we understand as knowing a language (speaking, writing, listening and reading) are represented through speaking. This example also shows the effect metonymies have on the English tense system and can also be viewed as PRESENT FOR HABITUAL metonymy. The Present Tense can also be used to express the Future via PRESENT FOR FUTURE metonymy:

I am off. for 'I will be off'.

The influence of metonymy on grammar is a special section of this thesis, but another type of metonymy is worth mentioning here and this is POTENTIALITY FOR ACTUALITY metonymy studied by Panther and Thornburg (1999), since it also belongs to the event ICM. This pattern has two variants:

ACTUAL FOR POTENTIAL:

He is an angry person. means that he sometimes can get angry or that it is possible for him to easily get in the state of being angry.

POTENTIAL FOR ACTUAL:

I can see your point. actually means *I see your poin*t.

-Category-and-Member ICM: this ICM was already exemplified with the 'pill' and the 'Aspirin': in these cases either a source or a target is somehow salient among its members. A special type of metonymic relationship can be observed in the following examples:

Boys don't cry.

The/ a spider has got eight legs.

The first example is a generic statement about boys, but can be used in a specific situation due to the GENERIC FOR SPECIFIC metonymy. The second example can be applied to spiders in general via SPECIFIC FOR GENERIC metonymy. Radden and Kövecses (1999: 48) claim that

the use of this metonymy can be explained due to people's tendency to generalize. The authors also put proverbs here:

Blind blames the ditch [7].

In proverbs there is usually a specific situation described which can then be used more generally.

-Category-and-Property ICM: within this ICM a category can metonymically stand for the property and vice versa:

CATEGORY FOR DEFINING PROPERTY:

jerk for 'stupidity'

DEFINING PROPERTY FOR CATEGORY:

blacks for 'black people'

-Reduction ICM: Metonymies that belong here typically involve abbreviations (UN), acronyms (NATO), clippings (exam), euphemism (*What the heck are you doing?* for *What the hell are you doing*?). Here the linguistic form changes, but the concept stays the same:

FORM$_A$-CONCEPT$_A$ FOR FORM$_B$-CONCEPT$_B$

The variant of this type is PART OF A FORM FOR THE WHOLE FORM as in crude for 'crude oil'.

Part for part metonymies are built on the interaction between a relation and one of the things participating in the relation. Relation can be construed as a thing, just as a thing can be recategorized as a relation. These metonymies include the Action ICM, the Perception ICM, the Causation ICM, the Production ICM, the Control ICM, the Possession ICM, the Containment ICM, the Location ICM, the Sign and Reference ICMs and the Modification ICM. We will briefly describe each of them.

-Action ICM: participants within this ICM can be related to an action or to each other by the following types of metonymies:

AGENT FOR ACTION:

to author a new book

7 Lakoff and Turner (1989) treat proverbs as GENERIC IS SPECIFIC metaphor, but since they belong to the same ICM, Radden and Kövecses treat them as metonymies.

ACTION FOR AGENT:

driver

INSTRUMENT FOR ACTION:

to ski

ACTION FOR INSTRUMENT:

screw*driver*

OBJECT FOR ACTION:

to blanket the bed

ACTION FOR OBJECT:

The flight is waiting to depart.

RESULT FOR ACTION:

to landscape the garden

ACTION FOR RESULT:

the production

MANNER FOR ACTION:

to tiptoe into the room

MEANS FOR ACTION:

He *sneezed* the tissue off the table.

TIME FOR ACTION:

to summer in Paris

DESTINATION FOR MOTION:

to porch the newspaper

INSTRUMENT FOR AGENT:

the pen for 'writer'

TIME OF MOTION FOR AN ENTITY INVOLVED IN THE MOTION:

The 8.30 just arrived.

In all the examples we see how metonymies affect the grammatical system: nouns are converted into verbs and verbs are presented as nouns. There are cases, however, where metonymies do not bring about changing of the word class, as in RESULT FOR ACTION metonymy:

Win a fortune!

Here, the verb *win* as a result metonymically stands for the action of gambling. Again, this issue of metonymy's impact on grammatical system will be addressed a bit later.

-Perception ICM: this ICM can produce following patterns:

THING PERCEIVED FOR PERCEPTION:

There goes my knee. for *There goes the pain in my knee* (from Lakoff 1987: 511).

PERCEPTION FOR THING PERCEIVED:

sight for 'things seen'

-Causation ICM: effects and causes can both serve as metonymic vehicles and thus we can talk about following metonymies:

CAUSE FOR EFFECT:

healthy complexion for 'the good state of health bringing about the effect of healthy complexion'

EFFECT FOR CAUSE:

sad book for 'sadness resulting from reading a book'

EFFECT FOR CAUSE metonymy can have several subtypes:

STATE/EVENT FOR THING/PERSON/STATE CAUSING IT:

She was *my ruin.*

EMOTION FOR CAUSE OF EMOTION:

She was *my joy.*

MENTAL/PHYSICAL STATE FOR OBJECT/PERSON CAUSING IT:

You are *a pain in the neck.*

PHYSICAL/BEHAVIORAL EFFECT FOR EMOTION CAUSING IT:

She was upset.

The Action ICM and Causation ICM can sometimes be combined and produce SOUND FOR EVENT CAUSING IT metonymy:

The train *whistled* into the station.

-Production ICM: in the metonymies belonging to this ICM one of the participants is a product, as in:

PRODUCER FOR PRODUCT:

a Ford for 'a type of a car'

ARTIST FOR HIS WORK:

They are playing *Mozart* tonight.

INVENTOR FOR THE THING INVENTED:

macadam

INSTRUMENT FOR PRODUCT:

Did you hear the whistle? meaning the sound of it.

PLACE FOR PRODUCT MADE THERE:

mokka, java, China

-Control ICM: This ICM involves the controller and the controlled:

CONTROLLER FOR CONTROLLED:

Schwarzkopf defeated Iraq.

CONTROLLED FOR CONTROLLER:

The Mercedes has arrived.

-Possession ICM can lead to the following metonymies:

He married money, where money stands for the person with money, via POSSESSED FOR POSSESSOR metonymy. It is also possible to have the reversed type:

POSSESSOR FOR POSSESSED:

That's me! for 'my bus'.

-Containment ICM: in this ICM the target is usually the content, so the type CONTAINER FOR CONTENTS:

glass for 'wine'

is found more frequently than CONTENTS FOR CONTAINER:

The milk tipped over.

-Location ICM: within this ICM it is possible to have several metonymies:

PLACE FOR INHABITANTS:

The whole town showed up. for 'the people who live in that town'

INHABITANTS FOR PLACE:

The French hosted the World Cup Soccer Games.

INSTITUTION FOR PLACE:

I live close to *the University.*

PLACE FOR EVENT:

Waterloo for 'battle fought at Waterloo'

EVENT FOR PLACE:

Battle for 'name of the village in East Sussex where the Battle of Hastings was fought'

-Sign-and-Reference ICM: there are two types of metonymies belong here, a sign metonymy and a reference metonymy. In a sign metonymy, a word (a form) stands for a concept (*dollar* for 'money'). In a reference metonymy, a sign, a word form or a concept stand for a real thing (word *cow* for a real cow).

-Modification ICM: this ICM is applied when a sign is modified, but cases other than reduction (which was the case with PART-FOR-WHOLE metonymies). Thus SUBSTITUTE FORM can stand for THE ORIGINAL FORM:

Do you still love me?- Yes, I do.

Several cognitive principles are responsible for the choice of the metonymic vehicle: human experience (HUMAN OVER NON-HUMAN, SUBJECTIVE OVER OBJECTIVE, CONCRETE OVER ABSTRACT, FUNCTIONAL OVER NON- FUNCTIONAL, INTERACTIONAL OVER NON-INTERACTIONAL), perceptual selectivity (IMMEDIATE OVER NON-IMMEDIATE, MORE OVER

LESS, DOMINANT OVER LESS DOMINANT, OCCURENT OVER NON-OCCURENT, GOOD GESTALT OVER POOR GESTALT, BOUNDED OVER UNBOUNDED, SPECIFIC OVER GENERIC) and cultural preference (STEREOTYPICAL OVER NON -STEREOTYPICAL, IDEAL OVER NON-IDEAL, CENTRAL OVER PERIPHERAL, TYPICAL OVER NON-TYPICAL, INITIAL OR FINAL OVER MIDDLE, BASIC OVER NON-BASIC, IMPORTANT OVER LESS IMPORTANT, COMMON OVER LESS COMMON, RARE OVER LESS RARE) (from Kövecses and Radden 1998). Let us see what it means on the following examples. When we talk about driving, as part of our everyday experience, we do not normally use non-functional parts of a car as doors or windshield wiper, but rather more functional ones, as the wheels or the motor:

Sit behind the wheel!

When it comes to perceptual selectivity, we usually take something more immediate, bigger or more dominant as a vehicle since it is usually more salient. The reason why England can stand for Great Britain is that it is the biggest of the countries (and the most powerful). The same is the reason why we do not ask somebody *How short are you?* but rather *How tall are you?*

Some members of a category are 'better' examples of it than the others. When wanting to emphasize the repetition of one's utterance, we say *I've told you a hundred times!* meaning *I've told you that many times.* This happens because hundred is a basic number (BASIC OVER NON-BASIC PRINCIPLE).

Communicative principles that determine the metonymic vehicle are the principle of clarity (CLEAR OVER LESS CLEAR) and the principle of relevance (RELEVANT OVER IRRELEVANT). They ensure that communication flows without misunderstandings. Some metonymies are so 'natural' that the usage of the targeted meaning would sound 'unnatural':

The dog bit the cat. **The dog's teeth bit the cat*.

Sometimes one principle overrides the other, as in the example *The ham-sandwich is waiting for his check*, where relevance principle overrides the one of HUMAN OVER NON-HUMAN. All the mentioned principles help us understand why something is or is not a metonymic source. These principles, as already exemplified with the ham-sandwich, do not always function and that is due to various social-communicative and rhetorical reasons to produce euphemism or even humor.

In domain-internal mapping of metonymies The Invariance Principle and Extended Invariance Principle are also implied (Ruiz de Mendoza and Usón 2007). In the example

He has been drinking *bottle after bottle.*

container-content relationship of the container image-schema is preserved, as is controller-controlled relationship between 'bus-driver' and 'bus' in

The buses are on strike.

Correlation Principle is also of relevance. This is the reason why the patient is referred to as gallbladder

Go see *the gallbladder* in room 203.

and not the newly changed sheet or some other element of the hospital environment.

Kövecses (2015: 19) claims that metonymic mapping is a 'through-connection'[8]: "one entity is mentally activated by or through another entity." He differentiates between outward looking and inward looking. In the example

I bought another *Hemingway.*

we are dealing with outward looking because the target (the book written by Hemingway) is outside the primary domain of Hemingway as a person. Inward metonymies, on the other hand, activate or highlight an aspect that is inside the primary domain:

This book is large.

This book has more primary domains, one of them being a physical object, and what is activated in the example is its size.

8 Metaphoric relations are 'as-if-connections': a frame or an element of a frame is conceived in terms of another frame or element. The third connection between constituents of a conceptual system Kövecses (2015) mentions is 'is-connection' or identification connection: a concept is identified with another concept.

11.5.2.1. Metonymic models in literature

Metonymies can be categorized according to what they are used for, according to the relationship between domains and according to different types of contiguity that operate within metonymies. The most important authors and their distinctions will be given below.

Warren (1999, 2003, 2006) distinguishes between referential and propositional metonymies. The first type relates one entity to another, the other one proposition to another proposition.
In referential metonymy:

Table 13 is complaining. (people sitting at table 13)

truth conditions are violated, since things (tables) cannot complain.

This is not the case with propositional metonymies:

How did you get there? *I waved down a taxi*. (A taxi took me there).

Here one proposition is related to another via if-then relationship (If I waved town a taxi, then it took me there).

Warren states that referential metonymies occur in the head noun and they function as nominals and modifiers, whereas propositional metonymies involve other parts of speech.

Panther and Thornburg (1999, 2004) identify two broader types of metonymy, namely propositional and illocutionary. Propositional metonymies are divided into referential (in Warren's terms) and predicational. Referential metonymies have, as their name states, referential function:

The Pentagon has issued a warning. PLACE FOR INSTITUTION

Predicational metonymies involve relationships between events:

General Motors *had to stop production.* OBLIGATION TO ACT FOR ACTION

In these metonymies, a potential event (such as he ability, possibility, permission, obligation to undertake an action) is metonymically connected to its achievement in reality.

Panther and Thornburg add another type and these are illocutionary or speech act metonymies. They involve pragmatic inferencing. In the example

I would like you to close the window,

the wish of the speaker metonymically evokes the request for the window to be closed. An attribute of the speech act can stand for the speech act itself, just like an attribute of a person can stand for the person.

Panther and Thornburg's contribution to the study of metonymies is not relevant only because it classified metonymies. They view metonymies as something far more inclusive than just a lexical phenomenon used for understanding one concept in terms of another concept. They insist that research on metonymy should be carried out from a much broader perspective, which includes both pragmatics and grammar.

Metonymies can also be predicative (Ruiz de Mendoza 2000, Ruiz de Mendoza and Pérez 2001), as in the example

She is just a pretty face.

Here a statement is used to refer to a different statement.

Ruiz de Mendoza Ibáñez and Díez Velasco (2001) base their distinction on Radden and Kövecses's analysis of metonymy-producing relationships and Panther and Thornburg's classification. They differentiate between low-level metonymies based on non-generic ICMs and high-level metonymies based on generic ICMs. Non-generic ICMs are conventional representations that are based on experience and created by well-entrenched links between elements of our knowledge. Generic ICMs "are observed to underlie axiological effects, pragmatic inferences, and discourse connections like cause-consequence and evidence–conclusion." (Ruiz de Mendoza and Pérez 2001: 355). Low-level metonymies can be subdivided into propositional and situational. Propositional metonymies are cases of typical metonymies, where a concept stands for another concept:

Tired faces all of them, some old, some young. FACE FOR PERSON

In a situational metonymy, one part of a situation stands for the whole situation or event:

The poor dog *left with its tail between its legs.*
In this example the leaving of the dog stands for the whole scenario of a dog being punished and leaving in the described manner.

High-level metonymies are also divided into propositional and situational. Propositional ones are sometimes termed grammatical metonymies since they can influence the grammatical structure, like turning a noun into a verb:

He *hammered* the nail into the wall. INSTRUMENT FOR ACTION

Situational ones are employed in indirect speech acts and can be equivalents to Panther and Thornburg's illocutionary metonymies.

Summing up this division, we can say that only high-level metonymies influence the grammmatical structure, while low-level ones operate on lexical level. Referential metonymies are of the low-level type, while predicative and illocutionary metonymies are cases of the high-level type.

Another important classification of metonymies is aimed at the relationship between a source and a target domain. Ruiz de Mendoza (2000) argues that there are:
a) target-in-source and (target-source inclusion)
b) source-in-target (source-target inclusion) metonymies.

In target-in-source metonymies a whole domain stands for one of its subdomains:

She's taking *the pill.*

The pill stands for the contraceptive pill.

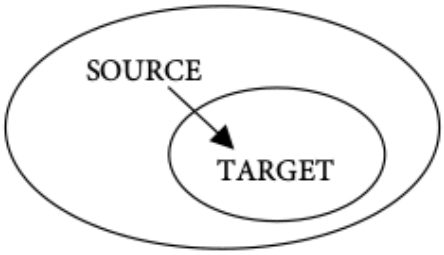

Figure 13. Target-in-source metonymy (Ruiz de Mendoza and Peña Cervel 2009: 7)

In source-in-target metonymy a subdomain stands for the whole domain matrix:

All hands on deck.

Here *hands* stands for the sailors who do hard physical work on the ship.

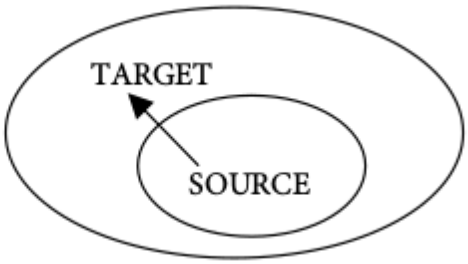

Figure 14. Source-in-target metonymy (Ruiz de Mendoza and Peña Cervel 2009: 6)

In target-in-source we are dealing with a process of domain reduction: we highlight only the relevant subdomain in the whole domain. We find domain expansion in the examples of source-in-target metonymies: by means of one subdomain we gain access to the whole domain.

Sometimes it is possible to have both mappings at the same time, which is illustrated by the next example (Ruiz de Mendoza Ibáñez and Díez Velasco 2003: 517):

Shakespeare is on the top shelf.

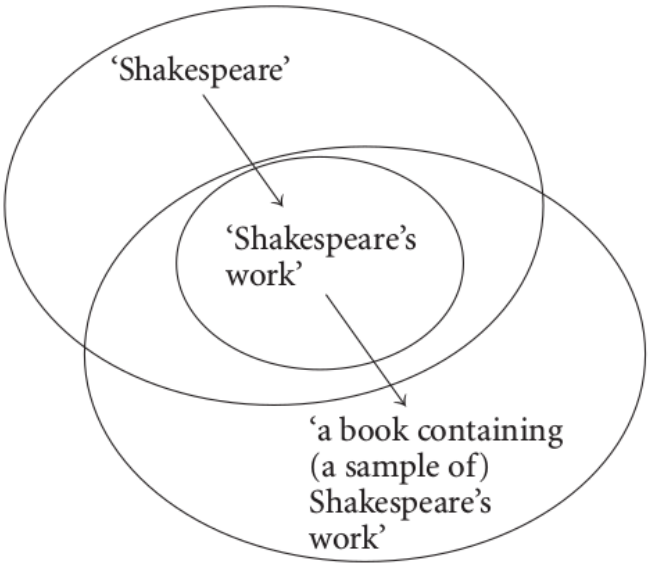

Figure 15. Double metonymy AUTHOR FOR WORK FOR (NON-UNIQUE) SAMPLE (Ruiz de Mendoza Ibáñez and Pérez Hernández 2003: 39)

Shakespeare is used to refer to 'books written by Shakespeare' and it is a target-in-source relationship. At the same time, Shakespeare's work is used to refer to the actual books in which this work appears and this is a source-in-target relationship. This is labelled double metonymies or metonymic chains.

Peirsman and Geeraerts (2006) treat metonymy as a radial category where concrete metonymies are at the center of the category and abstract ones are more towards periphery. In concrete or prototypical metonymies such as

I'll be able to eat every day and have *a roof over my head*,

the vehicle (*roof*) is very close to its target (*house*) since they are both concrete things, but also since *roof* is actually part of the intended meaning (*house*).

In the example

Clinton plans *a round table* discussion.

the vehicle (*table*) stands for people involved in a discussion, but there is no contiguousness between the source and the target so it is the case of more peripheral metonymy.

They also argue that metonymies that are on the edge usually have unbounded referents and targets, as in:

The classic *Hollywood* narrative.

Hollywood as a city is bounded, but as a referent not so. Metonymies with concrete, bounded terms and referents are prototypical and stand at the center of the category:

I couldn't bear the way men regarded me as just *a pair of legs.*

Another distinction is given by Barcelona (2003, 2005, 2011a). He proposes four classes of metonymies: schematic, typical, prototypical and conventional metonymies.

"A schematic metonymy is a mapping, within one cognitive domain, of a cognitive (sub)domain, the source, onto another cognitive (sub)domain, the target, so that the target is mentally activated." (2003: 245). In the example

This book is highly instructive.

subdomain THE SEMANTIC CONTENT of the domain THE BOOK is mentally activated. These kinds of metonymies always include intradomain mapping and activation of a target or an 'active zone' of a target by a source (Barcelona 2005, Langacker 1999).

In a typical metonymy the target is distinct from the source:

She is just *a pretty face.* (Lakoff and Johnson 1980: 37)

Prototypical metonymies have individuals as targets and as referents:

Paris agreed to a truce.

They represent "the 'classical' instances of metonymy, and, as such, they constitute the model for the whole category of metonymies." (Barcelona 2005: 315).

All of them may eventually become conventional, with protoypical metonyies having the highest degree of likelihood of becoming conventionalized.

To conclude the part on topology of metonymies, it is obvious that metonymies do not only have a referential function, which was held by many cognitive linguists for a long time, but they can be used non-referentially as well. Different classifications and definitions of

metonymy are due to the fact that there are different views on the concepts used in them, such as mapping, domain, highlighting etc. One of the more recent definitions of metonymies was given by Barcelona (2015: 146-147) and can serve as the one uniting all of the previously mentioned ones:

Metonymy is an asymmetric mapping of a conceptual entity, the source, onto another conceptual entity, the target. Source and target are in the same frame and their roles are linked by a pragmatic function, so that the target is mentally activated.

His definition does not include the term 'domain', because he believes it to be ambiguous, but the 'frame', which is the same as Fillmore's frame or propositional ICM.

11.5.3. Contrasting and comparing metaphor and metonymy

Cognitive linguists have long been trying to pinpoint the crucial differences between metaphor and metonymy, but also to see how and why they are so closely related. This task is a complex one and here is only a brief overview of similarities and differences between the two.

To start with the characteristics they share, Barcelona (2003a) argues that both metaphor and metonymy are conceptual processes and that they both have experiential basis. They are also conventional and systematic and include conceptual mappings.

As far as the differences are concerned, Lakoff and Johnson (1980: 35-40) and Lakoff and Turner (1989: 103-104) name the following ones:

1. In metaphor there are two conceptual domains involved, one being understood in terms of the other, while metonymy only involves one conceptual domain, i.e. the mapping occurs within a single domain and not across domains.

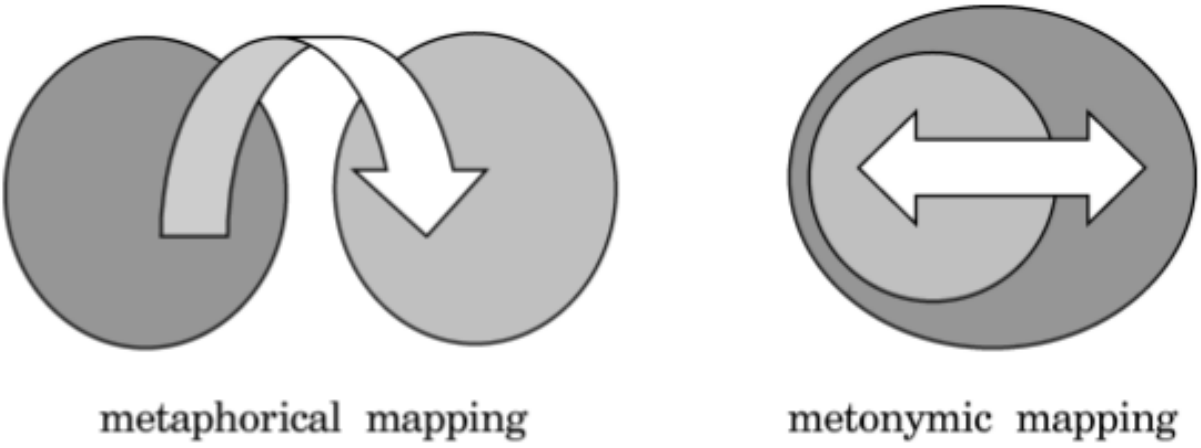

Figure 16. Metaphorical and metonymic mappings (Figure taken from Brdar et al. 2001: 39)

2. In metaphor, the source domain is mapped onto the target domain, and thus it is mainly used for understanding, e.g. *I have control over him* (HAVING CONTROL OR FORCE IS UP). In contrast, metonymy is mainly used for reference, as we can refer to an entity in a schema by referring to another entity in the same schema,
3. The relationship between the source and target domains in metaphor is of the 'IS A' kind; in metonymy there is a 'STANDS FOR' relationship, since one entity in a schema is taken as standing for another entity in the same schema or for the schema as a whole.

Beatrice Warren (2003) states that metaphors are hypothetical (LOVE IS A JOURNEY- We see love as if it were a journey), whereas metonymies are not. Metaphor is used to extend lexicon, whereas metonymy does not have to fulfill this function. Metonymy is limited to a phrase level, and metaphor is not. Metaphor allows multiple mapping from the source to the target domain; metonymy never allows more than one relation. Metaphor is based on similarity and metonymy on contiguity. The essence of metaphor is property transferral, and of metonymy highlighting. Metonymy, in her view, is a syntagmatic construction consisting of a modifier and a head. The head is implicit and it is the target, the source is that which is explicit and it is the modifier of the construction. What is meant by

The kettle is boiling.

is *that which is in the kettle is boiling*, that is, water (which is the head of the construction). Thus, the source and the target are connected via relation that is "typically one of location in time or space, possession, causation or constituency giving rise to metonymic patterns."

(2003: 122). In metaphors, the source and the target are connected via a property, usually more than one property, which is contained in the source and transferred onto the target.

Ruiz de Mendoza and Díez Velasco (2003) argue that some of the above mentioned differences need modification. They state that metonymies can be predicative, just like metaphors are, and that at the same time metaphors can have referential function, which was a typical characteristic of metonymy. Domain highlighting can appear in both metaphors and metonymies.

METAPHOR :

- Used referentially: *The pig* is waiting for his bill. (the pig is the customer).
- Used non-referentially: *I have control over him.* (HAVING CONTROL OR FORCE IS UP).

METONYMY:

- Used referentially: *Wall Street* is in crisis. (*the street* stands for *the institution*).
- Used non-referentially: He is *a brain.* (*He is very intelligent*).

To them, “the only really crucial difference between metaphor and metonymy concerns the domain-internal or domain-external nature of the mapping.” (2003: 496). They base their distinction of source-in-target and target-in-source metonymies on this assumption.

Klaus-Uwe Panther (2006) proposes that the difference between metaphor and metonymy lies in the type of semiotic relation between their respective source and target. He claims that metaphor is an iconic relation and metonymy an indexical relation. He takes into account Jakobson's approach (2003) to metaphor and metonymy who distinguished between relations of similarity and relations of contiguity and they are manifested in the two dimensions of meaning and (syntactic) position, respectively. Paradigmatic axis of language are words that occur in similar position and words that occur in syntactic position represent syntagmatic axis of language. For Jakobson, metaphors are linked to paradigmatic, and metonymies to syntagmatic structuring.

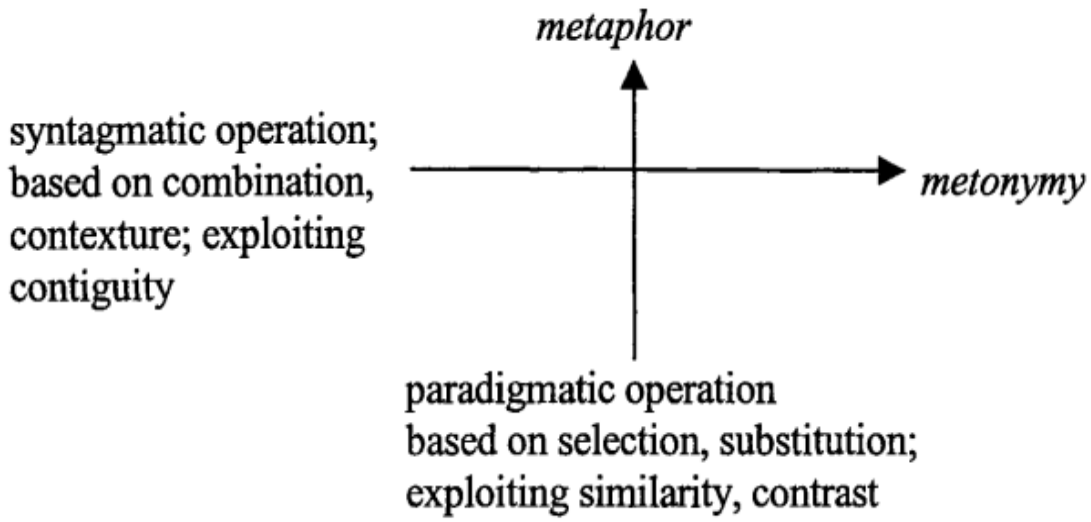

Figure 17. Metaphor and metonymy along paradigmatic and syntagmatic axes (Dirven 2003: 77)

The link between source meaning and target meaning in metonymies is indexical: source indexically evokes, or points to, the target. Metaphor is based on an iconic relation between source meaning and target meaning. The source meaning has some frame or domain structure that is iconically replicated in the target domain.

Barcelona (2003b) claims that in both metaphors and metonymies there is a mapping of a conceptual domain, the source, onto the target domain, the difference being that in metaphors these domains are not linked by a pragmatic function, whereas in metonymies they are. Pragmatic function is a kind of conceptual link in our memory that activates the target (CONDITION-RESULT, AGENT-INSTRUMENT) and that allows metonymic sources to be the sources.

Croft (2006) uses the term domain matrix as an essential part to differentiate the phenomena: a metonymic mapping occurs within a single domain matrix, not across domains. Metaphor is a mapping between two domains that are not part of the same matrix.

Geeraerts (2010) also claims that the notion of domain cannot be taken as a criterion for distinguishing metaphors from metonymies. In the example

Proust is tough to read.

Proust and his creative work do not seem to belong to the same domain. Proust as a person is a concrete domain, whereas his literary work belongs to an abstract domain. He calls this cross-domain metonymy. (2010: 216).

He also gives an example of non-metonymical intra-domain mapping:

Maggie Thatcher is the *Ronald Reagan* of the UK.

where *Thatcher* and *Reagan* belong to the same domain.

Some expressions can be explained both metonymically and metaphorically:

There are *dirty fingers on the window.*

This is a metaphor if there is a similarity relationship between fingers and their prints on the window; it can also be a metonymy if we take fingers as the cause of the visual image.

Later developments in cognitive linguistics have shown that it is sometimes difficult to make an absolute distinction between these phenomena. Since they are both cognitive phenomena present in our everyday language, they interact with each other in many ways.

11.5.4. Interaction between metaphors and metonymies

A very important description of metaphors was done by Dirven (1985) where he distinguishes three major metaphorical processes: metonymy, metaphor and synaesthesia and thus makes a connection between metaphor and metonymy. He describes these phenomena in relation to the extension of the lexicon, claiming that they are “the most productive and the most natural means” (1985: 107) used there. He defines metonymy as “the metaphorical process whereby one thing comes to stand in place of something else due to their various intrinsic relationships.” (1985: 96) and it can be used to expand the lexicon in the cases where the place stands for people living there (*village* for 'villagers'), the symbol stands for the person representing it (*the Crown* for 'the British monarch'), container for the contained (*dish*

for 'food prepared in it') and the name of a product or a place for the product (*Hoover* as a product). A subcategory of metonymy where the part stands for the whole or vice versa is termed synecdoche (*hands* for 'people working with their hands'). Here he mentions an expression

Give me a hand!

as a transitional case between metaphor and metonymy. When we take *hand* to mean manual assistance, it has got a metonymic reading, if it means any kind of help, its reading is metaphorical.

He defines metaphor as follows: “a process of transference where the relationship between the two entities, qualities, processes or states is no longer a contiguous one as is the case with metonymy, but metaphor presupposes a non-contiguous relationship.” (1985: 98). Not only that in metaphor this relationship understands an 'associative leap', as he puts it, but also in metaphors the ground on which it operates is less transparent and self-evident.

The third metaphorical process he discusses is synaesthesia, “a process whereby one sensory stimulus may evoke a stimulus in a different sensory organ” (1985: 99), as in 'warm color'. Here one domain of a sensory experience is transferred into another.

Dirven emphasises the similarity between the three processes since “they are all associative processes which eliminate or cancel the first or literal interpretation, so that another, viz. figurative interpretation must be looked for.” (1985: 100).

One of the most influential works on the interaction is the one by Goossens (1990). He calls this interaction *metaphtonymy* and there are four ways of its realization:

a) Metaphor from metonymy- here a metaphor is grounded in a metonymic relationship. The expression *close-lipped* can mean 'silent' which derives from metonymy. It can also mean 'speaking but giving very little away', which is metaphoric: we understand the absence of meaningful information in terms of silence.

b) Metonymy within metaphor- the expression *to catch one's ear* can be described as ATTENTION IS A MOVING PHYSICAL ENTITY metaphor, with a metonymy within it: *ear* stands for 'attention'.

c) Demetonymization inside a metaphor- in the expression *to pay lip service, 'lip service'* which stands for 'speaking' lost its metonymic property.

d) Metaphor within metonymy- *to be on one's hind legs* where metaphor is used in order to add expressiveness to a metonymy.

Similar view was discussed by Warren (1992) in the analysis of noun + noun compounds: *hammerhead* ('a stubborn person') is an example of metaphor within metonymy, since the whole compound is PART FOR WHOLE metonymy (*head* stands for the person), within which *hammer* metaphorically refers to something hard.

Francisco José Ruiz de Mendoza and Alicia Galera-Masegosa claim that all these cases are, in fact, "metonymic developments of a situational metaphoric source." (2011: 10). They agree with Ruiz de Mendoza (1997) and Ruiz de Mendoza and Díez (2003) proposing that metaphor and metonymy interact through following patterns:

(i) metonymic expansion of a metaphoric source,

(ii) metonymic reduction of a metaphoric source,

(iii) metonymic expansion of a metaphoric target and

(iv) metonymic reduction of a metaphoric target.

In (i) *To beat one's breast,* the action of breast beating action in the metaphoric source is metonymically expanded onto a situation in which someone does the same in order to show regret about his actions. The target domain of this metonymy is metaphorically mapped onto a situation in which the speaker regretfully shows his sorrow in order to avoid punishment or any other undesired consequences of his behaviour.

In (ii) *to be the life and soul of the party* means to be the most cheerful person of the party. The source domain is the person, the target domain is the party, and in the source domain there is metonymic reduction because of the highlighting the most relevant aspects of the target.

In (iii) the metaphoric source has the function of enhancing the meaning impact of a selected aspect of the target:

The singer *was given a big hand* after her performance.

To give a big hand is a metaphor in which target domain contains metoynymy: *big hand* stands for 'a loud applause', and further *a loud applause* stands for 'enjoyment' or 'appreciation'.

In (iv) *He finally won her heart* we conceptualize love in terms of winning. In the target domain 'love' someone's heart is reduced to mean someone's love.

Riemer (2003) uses the terms post-metonymy and post-metaphor to show the interaction between the two. Post-metonymy appears in situations where "description of the semantic relation between source and target can no longer be convincingly presented in metonymic terms, but whose origin and principle of explanation nevertheless remain metonymic in character" (2003: 397), an example of which is *to kick someone out of the flat*. We are not dealing here with the real act of kicking, which could also bring about similar effect, but an action that causes someone to leave. Riemer uses the term post- or dead metonymy since the target may become completely detached from its source. The same is true for post-metaphors: "originally metaphorical applications of a core meaning which have subsequently lost their metaphoricity and now refer to the original target of the metaphor, which is no longer seen as being metaphorically conceptualised." (2003: 398), as in *to knock someone about their haircut* meaning to tease someone about it. These two phenomena often interact and it is difficult to fully commit to either one description. Thus the verb *knock* can be interpreted in both ways:

Knocking up and down all over the country.
He had knocked about all over the Pacific.

Metonymically, *knocking* could mean moving and wandering if we assume that *knocking* stands for the sound that human or animal feet or vehicle do against the ground while travelling, or metaphorically, if we visualize the area in which one does the 'knocking' as a container.

Interaction between metaphor and metonymy in composite expressions was studied by Geeraerts (2003), who classifies the interaction in three categories:

1. consecutive interaction between the two,
2. parallel presence of metaphor and metonymy and
3. interchangeability of metaphor and metonymy.

Metaphor and metonymy can act consecutively in the examples such as *schapenkop* ('sheep's head', meaning 'dumb person'): sheep's head metaphorically stands for human head like that of a sheep (stupid head), and then the head metonymically stands for the whole (dumb) person. Metaphor and metonymy can act parallely when "there is a difference in type among the different motivational links that occur in the semantics of a composite expression." (2003: 457). And finally, the examples such as *badmuts* ('swimming cap', meaning 'bald person') show the interchangeability of metaphor and metonymy: *swimming cap* as a compound can metonymically stand for the person who looks as if he was wearing a swimming cap, or it can be interpreted in a way that swimming cap is metaphorized as a head that looks as if it is covered by a swimming cap, a bald head, which then metonymically stands for the bald-headed person.

Many linguists such as Kövecses, Lakoff and Barcelona (as reported in Barcelona 2000) investigated metonymy-based metaphors and claim that most metaphors for emotions have metonymic basis. Taylor (1995) was the first to investigate these types of metaphors. They are primary metaphors with experiential correlations as a basis and he claims that this correlation is metonymic in nature: In the metaphor MORE IS UP height correlates with quantity, that is increasing of heights stands for increasing of quantity. Radden calls them 'metonymy-based metaphors' (2003: 412). Expressions like *high prices* and *rising prices* are metaphoric expressions (MORE IS UP) based on metonymic relationship. Barcelona (2000, 2011a, 2015) calls this 'generalization' or 'detextualization of metonymy'. In the metaphor DEVIANT COLOURS ARE DEVIANT SOUNDS (*a loud colour*) salient EFFECT of deviant sounds and colours is metonymically mapped onto its CAUSE. This metonymic motivation for metaphor is called correlation-abstraction. He even goes to say that "The tendency for metaphor to be conceptually motivated by metonymy seems to be the rule, rather than the exception." (2010: 277).

There are four metonymic sources of metaphors (Radden 2003, 2005):
a) the common experiential basis of two domains, with two types of metonymic relationship, namely correlation and complementarity. The notion of correlation means that any change in

one variable is followed by a change in another variable, as in MORE IS UP, HAPPY IS UP, IMPORTANT IS BIG, ACTIVE IS ALIVE or SIMILARITY IS CLOSENESS metaphors:

He is a big man.

This example can be applied in situations where somebody, who is very important, physically takes up a lot of space (for example the biggest office).

The complementarity relationship is a metonymy-producing relationship where complementary, or opposing, parts form a unity. This is evident in THE MIND IS A BODY metaphor, "based on our common complementary experience of BODY and MIND." (Radden 2003: 417):

How are you going to handle this situation?

b) conversational implicature, when metaphors emerge from the pragmatics of a situation. There are three types of metonymic relationship that create metaphors and these are
-implicated result and causation, as in SEE FOR KNOW metonymy (*I see the solution*) producing KNOWING IS SEEING metaphor,
-implicated possession, as can be seen in the POSSESSION IS HOLDING metaphor (*to hold power)* and
-implicated purpose and activity, where PLACE FOR (PLACE AND) ACTIVITY and DESTINATION FOR (DESTINATION AND) PURPOSE metonymies produce PURPOSES ARE DESTINATIONS metaphor (*We've reached an agreement*).

c) taxonomic structure of categories, when categories may stand for one of its members and vice versa, also exploited in metaphors that contain category inclusion. In the example

Her death hurt him.,

HARM IS PHYSICAL INJURY metaphor is based on a metonymic relationship between PHYSICAL INJURY and PSYCHIC HARM, since we usually experience them together. Other metaphors where an abstract category is understood in terms of a concrete member are PROPERTIES ARE PHYSICAL PROPERTIES (*a big discovery*), A PROBLEM IS A TANGLE (*a knotty problem*), COMMUNICATION IS LINGUISTIC COMMUNICATION (*People should have a say on the treaty*), ACTION IS MOTION (*What's your next move?*) and CHANGE IS MOTION (*She fell in love*).

d) cultural models are widely accepted models of the world shared by language users. There are three ways how these cultural or folk models can be used to explain metonymy-based metaphors:

- physical forces: Here metaphors FORCE IS A SUBSTANCE CONTAINED IN AFFECTING CAUSES and FORCE IS A SUBSTANCE DIRECTED AT AN AFFECTED PARTY are based on SUBSTANCE IS FORCE metonymy (*His punches carry a lot of force*),

-communication and language: In the folk model of language and communication, the form of a word metonymically stands for its content and since they belong to different domains, their relationship can also be described metaphorically.

-emotions and physiological reactions to them: Some metaphors of emotions have metonymic basis, such as ANGER IS HEAT, LUST IS HEAT, AFFECTION IS WARMTH, LOVE IS MADNESS and LOVE IS FIRE.

Radden concludes that traditional distinction between metaphors and metonymies should be abandoned and replaced by the view that metaphors and metonymies are "prototypical categories along a metonymy-metaphor continuum." (2003: 431).

Barnden (2010) also investigated the distinctions and overlaps between metaphor and metonymy. He questions many previously established elements of differentiation such as similarity/ contiguity and domain-internal/ domain-external nature of the mappings and concludes that metonymies can also be built on resemblance, just as contiguity can be found in metaphors. As the example of contiguity in metaphors, he uses the following referential metaphor:

The creampuff didn't even show up.,

where *the creampuff* metaphorically stands for the person whose profession is a boxer. This metaphor is based on the relation of similarity between boxers and creampuffs, but to him this similarity is actually a type of contiguity, which appears "whenever a metaphorical link is used for accessing something in the target via something in the source." (2010: 10).

Similarity can be found in two types of metonymies, namely in representational metonymy and partitive metonymy. He uses the term 'representational' metonymy in the sense of Warren's (2006) referential metonymy and the term includes REPRESENTATEE FOR REPRESENTATION (*There is a tanker in the left hand side of the picture.*) and REPRESENTATION FOR REPRESENTATEE (*In 'Goldfinger' Sean Connery saves the world from a nuclear disaster.*)

metonymies. In these metonymic patterns there need not be any visual resemblance between representation and representatee, but rather some sort of “intrinsic perceptual similarity” (2010: 12). Partitive metonymies include patterns WHOLE FOR PART and PART FOR WHOLE. For example, *hand* is often used do denote *a sailor* due to the functional similarity between the two.

Source-target link can sometimes be both metaphoric and metonymic. The conclusion of his investigations is that there are no clear cut differences between metaphors and metonymies.

This all goes to show that there are different approaches within cognitive linguistics and that scholars define and classify metaphors and metonymies differently. However, all of them do agree that

In Cognitive Linguistics, metaphor and metonymy are not considered as tropes of figurative language, but as cognitive mechanisms used for drawing inferences, and to reason about and understand the world. These cognitive operations are accomplished by means of conceptual mappings of knowledge from a source domain into a target domain and are crucial for concept formation and concept understanding. (Ruiz de Mendoza and Pérez 2003: 24).

Metaphor and metonymy are like natural categories: they do not have clear-cut boundaries, but fuzzy ones, and form a continuum. It has been shown that metaphors may emerge from metonymies or be based on them.

11.5.5. Metaphor and metonymy in grammar

Recent developments in cognitive linguistics have shown that grammatical patterns are motivated by conceptual and pragmatic factors. Metaphor and metonymy are no longer seen as figures of speech, but figures of thought that affect grammar. Ruiz de Mendoza and Pérez (2001: 329) call the instances of metonymies that bring about grammatical rearrangement of clausal elements 'grammatical metonymies'. Grammatical metaphors and metonymies are defined by Panther and Thornburg (2009b: 16) as follows:

Grammatical metonymies/metaphors are conceptual metonymies/metaphors that motivate distributional properties of function words, grammatical morphemes, and word classes (nouns, verbs, adjectives, etc.). To the extent that the boundaries between lexicon and grammar are fuzzy, the boundaries between lexical metaphor/metonymy and grammatical metaphor/metonymy will also be fuzzy.

Metaphor plays an important role in the grammaticalization process where lexical words acquire grammatical function. For example (Heine, Claudi and Hünnemeyer 1991; Evans 2013) the conceptual metaphor TIME IS OBJECT IN MOTION (ALONG THE PATH) accounts for the future meaning of the *going to* construction:

Lilly is going to town. -allative sense
It is going to rain.- future sense.

There are also intermediate senses of intention/purpose:

Jane is going to work in our office.

so the shift went from motions sense to intention and then finally to prediction.

Metaphors also shape the English tense system, for example using the present simple tense to refer to the past (PAST IS PRESENT). Brdar (2007) addresses two metaphoric processes here:

1. TIME IS SPACE (PROXIMITY/DISTANCE IN TIME IS PROXIMITY/DISTANCE IN SPACE)
2. SOCIAL AND MENTAL WORD IS PHYSICAL WORLD (PROXIMITY/DISTANCE IN SOCIAL AND MENTAL WORLD IS PROXIMITY/DISTANCE IN SPACE)

These two processes correlate creating PROXIMITY/DISTANCE IN THE SOCIOPHYSICAL AND MENTAL WORLD IS PROXIMITY/DISTANCE IN TENSE (VIA TIME).

Klaus-Uwe Panther and Linda L. Thornburg (2009b: 17) explain this on the example

And then he grabs my book.

Here the source is the present tense with the targeted past tense. They claim that grammatical metaphors usually have their grounding in the source, that is, the source influences the grammatical structure of the target.

Annalisa Baicchi (2011: 149-169) investigates the behaviour of non-motion verbs in the caused- motion constructions as in

The dogs barked them out of town.

and many other examples containing cognition verbs (*deceived us into thinking*), verbs of visual and tactile perception (*gazed me out of the club; knocked him into a coma),* speech verbs (*shouted me out of the shop*) and verbs of sound emission (*laughed me out of the classroom*). Her conclusion is that this is made possible by the activation of some high-level metaphors such as A COGNITIVE ACT IS AN EFFECTUAL ACTION/ ACCOMPLISHMENT or COMMUNICATIVE ACTION IS EFFECTUAL ACTION/ ACCOMPLISHMENT.

Metonymy, although long neglected, has been proven to have even greater impact on grammatical patterns than metaphor. Langacker (1999: 67) states that though "usually regarded as a semantic phenomenon, metonymy turns out to be central and essential to grammar", and that grammar is "a rich source for the investigation of metonymy. At the same time, a recognition of its prevalence and centrality is critical not just for describing grammar but for a realistic assessment of its basic nature."

Whereas in metaphors it is the source that is at play in structuring the system, in grammatical metonymy the targeted meaning is the one that has the crucial role.

We will now give a brief overview of the most cited examples and phenomena that include the metonymic influence on grammar. We will start with Dirven (1999) who claims that noun-verb conversion in English has metoynymic basis and can be explained by three different types of schema and belonging metonymies.

1. the action schema that includes OBJECT (INSTRUMENT OR MANNER) FOR ACTION metonymy:

I *spooned* a gob of whipped cream over my gooseberry pie. (BNC)

2. the location schema that involves PLACE FOR ACTION metonymy:

It is often *bottled* and sold as mineral water. (BNC)

3. the essive schema involves STATUS FOR ACTION metonymy:

Dhani put him in a Buddhist monastery and *nursed* him back to health. (BNC)

Recategorization can also be found with adjectives and verbs, as well: adjectives can be recategorized into nouns via A DEFINING PROPERTY FOR AN ENTITY metonymy (*black, nobles*), and so do verbs (*a big cut, a bad scratch*) via ACTION FOR RESULT metonymy. (Ruiz de Mendoza and Pérez 2001).

Klaus-Uwe Panther and Linda Thornburg (1999) explore POTENTIALITY FOR ACTUALITY metonymies. They can appear as:

ABILITY TO PERCEIVE FOR ACTUAL PERCEPTION:

I can taste the vanilla.

This pattern is found with verbs of perception such as seeing, hearing and tasting.

ABILITY TO PROCESS FOR ACTUAL MENTAL PROCESS:

I can remember when we got our first TV.

This metonymy is fully exploited in the domain of mental processes and states.

POTENTIALITY FOR ACTUALITY metonymy is also found with hedged performatives with *can*, *must*, *would like* (*I must ask you to leave*) and indirect speech acts (*Can you pass the salt?*). Other variants of this metonymy are

ABILITY TO ACT FOR ACTION:

John was able to finish his paper before deadline.

DISPOSITION FOR OCCASIONAL BEHAVIOR:

Dogs can be dangerous.

Metonymy also places constraints on many grammatical phenomena, for example when inherently mass, non-count nouns are recategorized as count nouns due to MATERIAL FOR OBJECT MADE OF THE MATERIAL metonymy:

Too much polishing can wear down the finish on some *silvers.*

This metonymy can be reversed and appear as OBJECT FOR MATERIAL CONSTITUTING THE OBJECT:

We did not always have *turkey* for dinner.

This metonymy produces a non-count noun from a count one. The similar process can be found with names of trees and some plants where some lexical items denote a species or an instance of it, but also metonymically refer to type of material (for trees), to the product of a fruit tree used as food, to the root of a vegetable used as food or spice etc. (Brdar 2007: 83):

Lavender, known for its fragrance, is a perennial that may reach 1-3 feet tall with narrow, gray-green foliage.

An impact of metonymy on grammatical structure is seen by the use of proper names as common nouns (paragons) denoting whole class of individuals (Panther and Thornburg 2007):

A real Shakespeare would never use those trite images.
The Shakespeares of the twentieth century.

The use of names as paragons is motivated by a chain of two metonymies: the first assigns a stereotypical property to a famous individual (CHARACTERISTIC PROPERTY FOR INDIVIDUAL) creating a class of distinct individuals that have that same property, and the second activates that class from its ideal member (MEMBER/SUBCATEGORY FOR CATEGORY) (Barcelona (2004a: 38, 2004b: 365). Due to these metonymies proper nouns can be used with articles or be pluralized.

When names of places are used to mean 'aspect/ edition/ issue' of the given instance, they lend themselves to recategorization as common nouns and can have articles in front of them:

The first was a satirist and journalist, whose hard-driving works pointed out anachronisms and absurdities of *the Spain* of his day. (Brdar 2007: 88).

Panther and Thornburg (2000) discuss the usage of stative verbs in imperative constructions such as

Be quiet, John!

and claim that this is made possible by the activation of the RESULT FOR ACTION metonymy. It is not possible to have

Be tall, John!

since *tall* denotes a state, and *quiet* a result.

Metonymy can also influence transitivity. In the example

John *walked* the dog.

the intransitive verb *walk* is used as transitive, that is predicate got an extra argument which is called valency extension (Dik 1997). Ruiz de Mendoza and Pérez (2001: 334) argue that metonymy that is active here is ACTIVITY FOR CAUSED EVENT. *Walk* is elaborated into *caused to walk*, the activity of walking stands for the whole event, and that includes the instigator of the activity (John).

It is also possible to find metonymy in valency reduction, such as

The door opened.

Here we have target-in-source metonymy ACTION FOR PROCESS. We must assume that someone or something have opened the door. In both cases we have recategorisation of a predicate and consequences for the syntactic organization of the clause.

Metonymy ACTION FOR (ASSESSED) RESULT is also at work in so-called middle constructions, such as

This bread cuts easily.

The adverb is obligatory here since the focus is not on the action, but on the result. (Ruiz de Mendoza and Díez Velasco 2001).

Metonymy is also responsible for the choice of anaphoric pronouns (Ruiz de Mendoza and Díez Velasco 2003, 2004; Ruiz de Mendoza and Pérez 2001):

The ham sandwich is waiting for **his** check and **he** is getting upset.

The usage of *his* and *he* instead of *its* and *it* is because of the metonymic reading ORDER FOR CUSTOMER of the sentence. Here the target meaning is conceptually prominent and *Domain Availability Principle* (Ruiz de Mendoza and Pérez 2001) requires the anaphoric pronoun to be coreferential with the matrix domain. The term 'matrix domain' was first used by Ruiz de Mendoza to refer to the most encompassing of the two domains in a metonymic mapping.

Metonymy is also involved in word-formation processes such as clipping, abbreviations and blending. MODIFIED FORM FOR THE ORIGINAL FORM enables us to use short or blended forms instead of longer or original forms (e.g. *NATO* for North Atlantic Treaty Organization or *math* for mathematics). Radden (2005) claims that metonymy is evident in compounding. Compounds are subcategories of the category described by the head (a wheelchair is a kind of a chair with wheels). This modifier (wheels) is a salient property that distinguishes a wheelchair from other types of chairs, thus metonymy PART FOR WHOLE is implied, or to be more specific, A SALIENT PROPERTY FOR A BUNDLE OF PROPERTIES since categories and subcategories own a bundle of properties.

Many examples on how metaphor, metonymy or both can be found in compounding is given in Benczes (2006). The author gives numerous examples that show how metaphors operate on either one constituent, modifier (*heartland,* the central part of a country or area of land) or profile determinant (*belly button*, navel) or both constituents (*chicken hawk,* a person who now advocates war but who once took special measures to avoid military service), as well as on the relationship between them (*submarine sandwich*). In the example *submarine sandwich* (a long bread roll split open and filled with meat, cheese, etc.) the shape of the submarine is metaphorically mapped onto the shape of a sandwich (here the first constituent is the source, and the second one is the target). When it comes to metonymies, they can also act on the modifier (*bear jam,* a traffic jam in a park caused by motorists stopping to watch one or more bears), on the profile determinant (*handwriting*, the style of someone's writing), or on both elements (*phone neck,* neck and shoulder pain caused by holding a phone for long periods). There are cases where the whole compound is metonymical, that is, the whole structure is a referent point for the targeted meaning within the same ICM. The example she mentions, among others, is *glue sniffing* (the habit of breathing in gases from glues or similar substances in order to produce an artificial state of excitement), where the whole compound

stands for one stage of the activity via SUBEVENT FOR MAIN EVENT metonymy. Metonymic relationships WHOLE–PART, THE PART–WHOLE AND THE PART–PART can be found between compound constituents in many cases in the English language, such as *bookcover*, *student group* and *lamppost.*

We have already discussed the interaction between metaphors and metonymies and Benczes also gives evidence for this phenomena. There are four ways in which they interact:
1. metonymical modifier and metaphorical profile determinant, as in *gutter bunny* (person who commutes to work on a bicycle);
2. metaphor based modifier and metonymical profile determinant, as in *acidhead* (an LSD user);
3. metaphorical relationship between modifier and profile determinant and the modifier is metonymical, as in *alpha geek* (the person with the most technological prowess in an office or a department) and
4. metaphor based semantic relationship between constituents of the compound and the profile determinant is metonymical, as in *snakehead* (a smuggler, particularly one from China, who specializes in getting people into another country without going through normal immigration channels).

All of these are only a few examples from the vast studies of metaphor and metonymy in grammar that show that they are used to explain various grammatical phenomena. Metaphor and metonymy do motivate grammatical system, at least the English grammatical system. We have shown this on different examples of recategorization: using stative verbs in imperative constructions (*Be quiet!*), turning of nouns into verbs (*bottle*) or adjectives into nouns (*nobles*), conversion of proper nouns into common nouns (*John has five Picassos*) and conversion of mass nouns into count nouns (*silvers*) and vice versa (*to have Turkey for dinner*), just to sum up what has already been stated.

Valency reduction and expansion is also metonymically motivated, and so is transitivity and anaphoric choice. Metaphors and metonymy also play role in English morphology, what is shown mainly in compounding and affixation. Metaphors and metonymies are employed in indirect speech acts and implicature. This all shows that metaphors and metonymies are really much more than figures of speech used in reasoning and understanding, they are much more than lexical phenomena, but rather basic cognitive tools for expanding lexicon and motivate grammar.

11.5.6. Metaphor and metonymy- recent developments

Theory of metaphor and metonymy has, since Lakoff, largely been focused on cognition. Newer developments suggest that "metaphor is not just a matter of language and thought, but also of communication; and metaphor cannot just be approached from a linguistic (or more generally, semiotic) as well as a cognitive (or more adequately, psychological) perspective, but it also demands a social approach." (Steen 2013: 28).

He proposes a three-dimensional model of metaphor which adds the dimension of communication to the already existing language and thought dimensions. He also addresses the question of metaphor deliberateness, which is about the presence or absence of a change of addressee's perspective. Non-deliberate metaphor stays on the topic and does not require the addressee to "step outside the dominant target domain of the discourse and look at it from an alien source domain." (Steen 2013: 38), which deliberate metaphors do.

Steen (2008) claims that those metaphors that are used deliberately are processed by comparison of two domains. Non-deliberate metaphors involve categorization. Processing by categorization was introduced by the psycholinguists Glucksberg and Keysar (1993), who claim that "metaphors are class-inclusion statements" (1993: 423). The topic (*my job*) of the metaphor in the sentence

My job is a jail.,

belongs to a certain category (something unpleasant, hard to escape from etc). The vehicle, *jail*, is a protoypical example of that category. (Glucksberg and Keysar 1990, 1993).

Whether people process metaphors by comparison or categorization is one of the main issues for *The Career of Metaphor Theory*, developed by Gentner and Bowdle (2001, 2005). They claim that it depends on the degree of conventionality: conventional metaphors may be processed by categorization or comparison, whereas novel metaphors are processed by comparison alone (Gentner and Bowdle 2001).

Recent researches into metaphor and metonymy do not only concentrate on their roles in language and thought, but also in artificial intelligence, psychotherapy and non-verbal communication (art, gestures). All this provides a rich soil for the future exploration of these cognitive phenomena.

11.6. Conceptual integration theory or blending theory

This theory was developed by Gilles Fauconnier and Mark Turner. They introduce the term integration network which consists of inputs that are linked by mapping, but unlike in the Conceptual Metaphor theory where the mapping takes place between domains, here it appears between mental spaces. Domains are relatively stable knowledge structures, whereas mental spaces represent temporary constructions created context dependently. Two or more input spaces are connected by generic space. This generic space contains all the features that input spaces have in common. Input spaces are then projected to the blend and this space contains a new or emergent structure. It is new because it is not contained in any of the input spaces. This theory can explain examples like

This surgeon is a butcher.

which could not be adequately described by the Conceptual Metaphor theory. In this example the input space BUTCHER describes someone who is skilled at what they do, but it certainly does not involve operations on humans. This is a surgeon's task, which is the second input. So the two inputs defer in many respect: a surgeon operates on humans, while a butcher operates on dead animals; a surgeon usually tries to heal a human body by repairing what is damaged, a butcher on the other hand brings animal's body into pieces and so on. These differences are brought together in the generic space and a new, emergent meaning appears in the blend: a surgeon here is described as incompetent and not skillful enough. So this feature of incompetence is what is created by the blend.

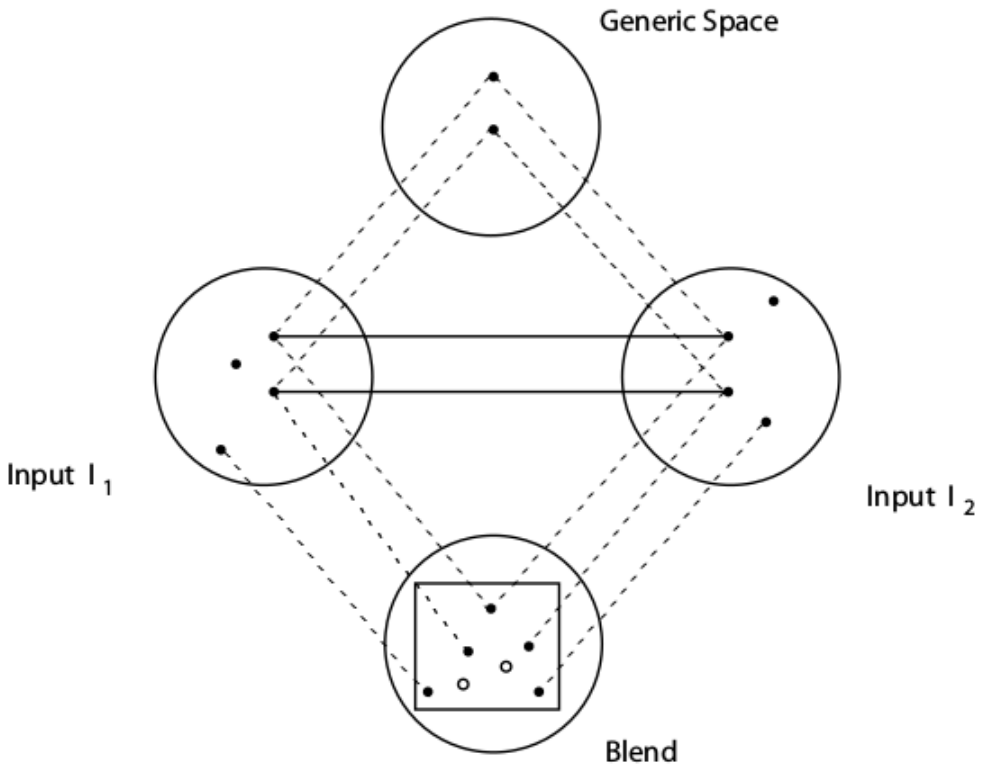

Figure 18. A basic integration network (Fauconnier and Turner 2006: 313)

In this figure the circles represent mental spaces. The bold lines between input spaces represent counterpart connections and they can be of many kinds: connections between frames and roles in frames; connections of identity or transformation or representation; metaphoric connections, etc. In this example an animal, cleaver, a goal (of severing flesh) of input space 1 correspond to a human, a scalpel and a goal (of healing) in input space 2. What is shared by these two inputs in projected onto a generic space, which in turn, maps onto input spaces. This space is highly schematic. A structure form two input spaces is projected onto a blend. Blended and generic spaces are related, but blends contain more specific structure than the generic space. Not all structures from the inputs are projected to the blend, only the matched information, which is called selective projection. Blend is constructed through three operations: composition, completion, and elaboration. Composition brings together elements form input spaces and provides relations that do not exist in the separate inputs. Counterpart elements can appear as separate elements or as fused elements. Completion involves schema induction, that is, a great deal of our background knowledge or background frames is recruited unconsciously to complete the blend. Without these background frames we would not be able to infer the emergent meaning. Elaboration is the final process which creates the

unique blend structure, because structures in the blend are not copied from the inputs. The square inside the blend in the above represents emergent structure.

Any space in the integration network can be modified by reverse mapping from the blend. This is called backward projection since the structure that emerges in the blend is projected back to the input spaces. Let us look at the example from Evans and Green (2006: 46):

In France, Bill Clinton wouldn't have been harmed by his relationship with Monica Lewinsky.

which means

Clinton is not politically harmed by his relationship with Lewinsky if he were a French president.

In one input space there is Clinton, Lewinsky and their relationship and this space is structured by the frame American politics and all the implication connected to it: responsibility, moral and the fact that infidelity can harm political status. In the other input space there is a French president, but also a mistress since it is known in the French public life that presidents often enjoy companies of mistresses. Generic space contains generic roles COUNTRY, HEAD OF STATE, SEXUAL PARTNER and CITIZENS. The blended space contains BILL CLINTON and MONICA LEWINSKY, as well as the roles FRENCH PRESIDENT and MISTRESS OF FRENCH PRESIDENT. The frame that structures the blend is FRENCH POLITICS rather than AMERICAN POLITICS which produces the meaning that Clinton is not politically harmed by his marital infidelity. In this case backward projection produces disanalogy between the US and France, that is there is a great contrast between the French and American moral attitudes.

An interesting work on how blending theory can be applied in word formation research was done by Benczes (2006, 2010) who studied creative compounding in English. Since compounding is not our main concern here, it is worth mentioning since it sheds some light on how cognitive approaches of metaphor, metonymy and blending can be used to describe different language phenomena, one of them being word formation. We will give the example *Hogwarts headache* ('migraine headache caused by the physical stress of reading the 870-page Harry Potter book, *The Order of the Phoenix*', 2010: 223). Here the first part of it is a PART-FOR-WHOLE metonymy (the name of the school stands for the whole novel). The

author also uses blending to explain the compound. Hogwarts is the name of the school, and school with its requirements can often cause too much stress with children resulting in headache. The same is true for reading. These are two input spaces brought together in the generic space by cause-effect relationship, producing compound *Hogwarts headache* in the blend.

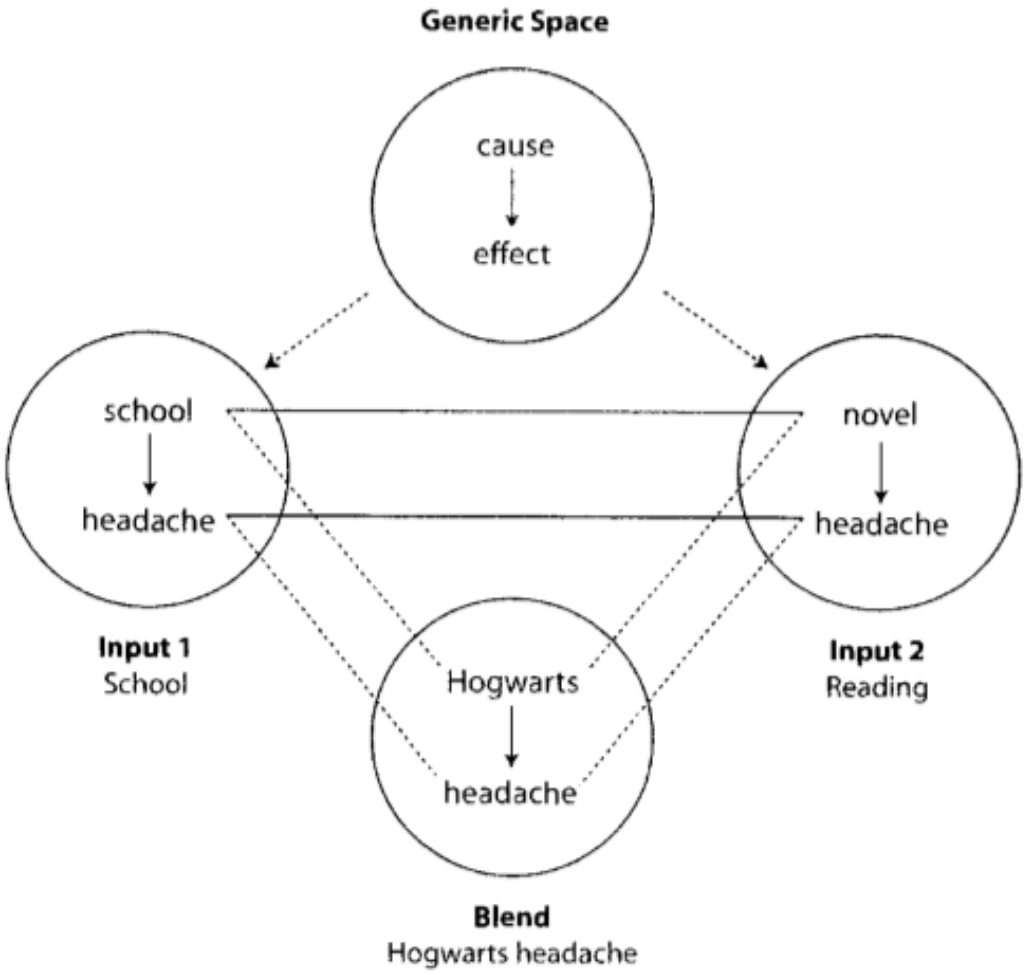

Figure 19. The blend analysis of Hogwarts headache (Benczes 2010: 228)

In their 2002 book *The Way We think* Fauconnier and Turner (2002) argue that blending is a fundamental cognitive operation, pervasive not only in language, but in human cognition in general.

12. SUFFIXES *-HOOD* AND *-NESS*

Haselow (2011) studied English suffixes and how they changed historically. He sees suffixes as linguistic signs with abstract, categorical meanings. He adopts Langacker's approach in describing the meaning of derivatives as 'meaning potentials' they are equipped with (2011: 51), since many derivatives have more than one sense. The meanings change according to the context they appear in. The semantic context of suffixes is abstract and categorically construed. Categories derive from the interaction between the speakers and their environment and this interaction produces cognitive activities reflected in language use. Different categories form the schema of a particular situation, where a schema is an abstract cognitive structure of knowledge and experience. Haselow distinguishes between five conceptual categories that suffixes can indicate and these are: Person, Object, Location, Action and Abstract. Suffixes *-hood* and *-ness* belong mainly to this last category which is defined in the following manner (2011: 68):

Lexical items of the category Abstract denote entities in the extra-linguistic environment which are characterized by the absence of a physical body and therefore lack perceptibility. The entities are usually mental constructs, which become materialized either through particular actions which they are related to, or through objects or persons for which a particular abstract quality is characteristic.

They can denote mental or physical states, non-material result of an action, the temporally extended consequence of a particular type of action/behaviour, an extended period in time or a a group of individuals who have certain properties in common such as rank, office, occupation, or behavioural practices in general. The specific meanings of the suffixes of this study will be given below.

Suffix *-hood* is of Germanic origin and can attach to both native and non-native bases. In OE *hād* was an independent noun, a free morpheme, denoting degree, rank, order, character, nature, kind and state, but just as similar to the suffix *-dom*, it underwent change from a free to a bound morpheme during the Middle English period. Carola Trips (2009) studied diachronic morphology of English suffixes *-ship*, *-dom* and *-hood* and claims that most formations ending in *-hood* have the meaning 'the status of' or ‘general natural conditions of human life’. Some derivations denote 'civil states with legal right and duties’, exemplified in *widowhood* or *wifehood*, some denote time or period (*boyhood*, *girlhood*);

examples like *ladyhood* and *brotherhood* denote collectivity and the nominal base in the examples of *cathood* or *duckhood* denotes the nature of animals. (2009: 41). Before giving more detailed description of the semantics of this suffix, let us look at the diachronic development of the suffix.

Trips mentions Wiesner's study (1968) who gives the meaning 'clerical order' found in the church texts. This meaning is a translation of the Latin *ordo* and correlates with the Old Norse where *heidr* denotes a ‘person of high rank’, and more explicitly ‘rank of a priest’. It is also noticed that denominal verb *hādian* with the meaning ‘ordain, consecrate’ often follows the noun denoting the person ortained. It has been suggested that there is a strong connection between the constructions containing the verb *hādian* on the one hand and constructions containing nominal head *hād* [9]on the other.

There are other formations with *hād,* such as *hādung* in the meaning of 'ordination' and with an eventive reading (as contrasted to the result meaning of *hād)*. Trips also gives examples where *hād* is followed by some elements (*hādnotu,* ‘office of a priest' or *hādung*dæg ‘ordination day’). This all implied that the salient meaning of *hād* in Old English must have been the one of ecclesiastical office. Other meanings in either compounds or syntactic phrases of the type noun + *hād* are sex, person and condition. There were also phrases in Old English where an adjective precedes *hād* and shows agreement in case, number and gender (hālgum hāde, 'holy office').

A very interesting example that Trips gives is *clænan hāde* ('pure office') where *clænan* seems to be a qualitive adjective (the property of being pure), but is actually a relational one, which means that *clænan hāde* is metonymically extended to mean the office for pure persons (it is not the office itself that is pure but the people chosen to be in it). The collective usage of the suffix *-hood* is found in the Middle English examples such as *brotherhood*- ‘a fraternal relationship between members of a fraternal organisation’. Due to the metonymical shift this also denotes the fraternal organisation itself.

In the Early Modern English period *-hood* is a suffix with salient meanings of ‘office of N’ and ‘state of N’, “as well as metonymic shifts like ‘time’ (childhood) and ‘surrounding area’ (neighbourhood) that resulted from these old meanings.” (Trips 2009: 77).

Today this suffix attaches to [+common, –abstract, +animate] nouns which is exemplified in *neighborhood*, *priesthood*, **democracy-hood*, **correction-hood*, **George-hood* (Scalise and Guevara 2005: 153, Lieber 2005: 410). There are also word-formations

9 Messing (1917) is the one cited by Trips who first implied that syntactic constructions with certain verbs, e.g German *schaffen* and a noun are a precondition for the compounds containing noun + certain suffix.

with the same nominal base, but ending in suffixes *-dom* and *-ship* and expressing similar abstract concept, the one of 'state of N':

The native suffix *-dom* is semantically closely related to *-hood* and *-ship*, which express similar concepts. *-dom* attaches to nouns to form nominals which can be paraphrased as "state of being X", as in apedom [. . .], or which refer to collective entities, such as professordom [. . .], or denote domains, realms or territories as in kingdom [. . .].(Plag 2003: 88).

Lieber mentions Aronoff and Cho's (2001) distinction between *-ship* and *-hood* nouns, where they state that *-ship* attaches to stage-level nouns only (which denote temporary characteristics of the referents) as in *friendship*, whereas *-hood* can attach to both stage-level and individual-level nouns (these are the nouns that denote characteristics without time taken into consideration). For example, *sisterhood* is a stable property that holds all the time. There are bases that can have both suffixes (Hamawand, 2008: 7), for example *father*, with significant differences in meaning: *fathership* means 'the state or condition of being the oldest member of a community', a property that is not permanent in nature; *fatherhood* means 'the state or condition of being a father', a property that is permanent in nature. Trips (2009: 169) also adds that stage-level property is a state assigned to someone by society (priest), whereas individual-level is not, it is something a person own regardless of the external factors and influences of the society.

As already noted, nominal basis mostly denote animate beings, usually persons that could (*bishop*), but need not to refer to an office (*parent*). They can also denote transient stages like *priest* or enduring properties like *brother.* Sortal nouns that refer to concrete entitites (*thing*) as basis do not appear very often. In general, *-hood* builds formations that denote 'the state of N'. Meanings of 'time' and 'area' are metonymic.

Apart from nouns, adjectives and whole phrases can also serve as basis (*falsehood*, *wife-and-motherhood, blood-brotherhood*).

Ingo Plag (2003: 113) also describes the suffix and claims that it expresses concepts such as 'state' (the examples being *adulthood, childhood, farmerhood*) and 'collectivity' (*beggarhood, Christianhood, companionhood.*). He says that the meaning of *-hood* in *neighborhood* is metaphorically extended to mean 'area'.

Zaki Hamawand claims that each suffix should be understood relative to the category to which it belongs: not all senses of a category have equal status, some or more representative or prototypical, some are less. For the suffix -*hood* he gives (2008: 87) the following meanings:

a) the condition of being what is referred to by the nominal root

b) a union of people sharing the thing referred to by the nominal root

c) the period of time referred to by the nominal root

d) an instance of the quality referred to by the adjectival root.

In Webster's New World College Dictionary we find that the suffix -*hood* is derived form of the Old English 'had' with the meaning order, condition, quality, rank. Following meanings are given:

a) state, quality, condition: *childhood*

b) the whole group of (a specified class, profession, etc): *priesthood*.

Oxford Advanced Learner's Dictionary gives the same definitions.

Longman's Grammar of Spoken and Written English gives only 'state of being N/A' definition (*childhood*, *falsehood*, *widowhood*).

Taken all the above sources into account, we can sum up the meanings of the suffix -*hood* as follows:

1. the state or condition of being N (*fatherhood*)
2. a group of people sharing the thing referred to by N (*priesthood*)
3. the period of time referred to by N (*childhood*)
4. an instance of the quality of A (*falsehood*)
5. the area of the thing referred to by N (*neighborhood*).

Hamawand illustrates it like this:

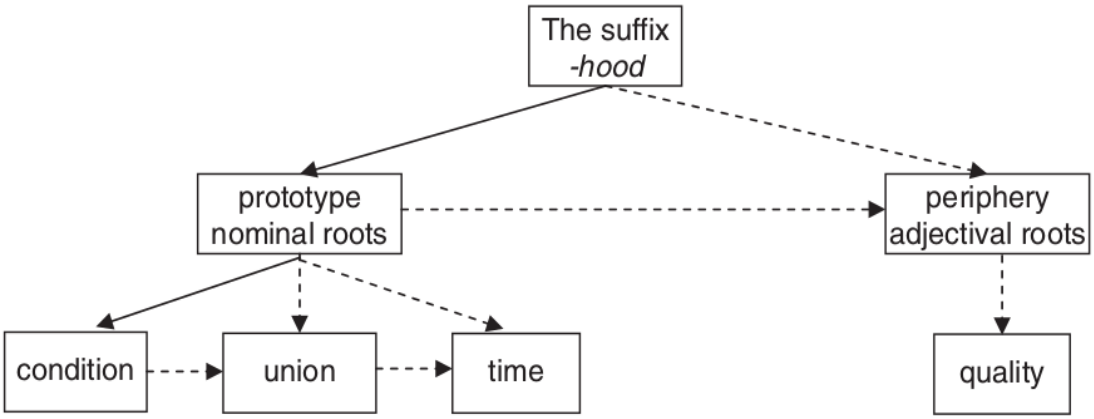

Figure 20. The semantic network of the noun-forming suffix *-hood* (Hamawand 2008: 88)

Prototypical senses are represented by the solid arrows, whereas the extended ones are represented by the dashed arrows.

According to Haselow, the suffix *-ness* was the most frequently used suffix in Old English and the early Middle English. It used to belong to the Action category in Old English, since this category includes all lexical items with an eventive or a situational meaning. Then it had the meaning of one single instance of V-ing. This usage changed in the ME when *-ness* continued to be used to create abstract nouns. It had the following meanings: the quality of a state, the abstract result of an action or process and a permanent state that characterized a particular place.

It is still one of the most productive English suffixes and can be attached to practically any adjective. Its origin is Germanic. It can be attached to adjectives (*naiveness*), nouns (*thingness*), pronouns (*us-ness*) and phrases (*over-the-top-ness*, *all-or-nothing-ness*) to form abstract nouns (Plag 2003).

The suffix that is considered as rivalrous one is *-ity*, and it sometimes blocks the usage of *-ness*, which is called type-blocking. *-ness* is said to belong to an unrestricted domain of application since it can easily be attached to any adjective. The application of *-ity*, on the other hand, is limited by many lexical, phonological, morphological and semantic restrictions. Both suffixes can be attached to bases that end in suffix *-ous* with the exception when simplex abstract noun already exists (e.g., glory ~glorious, but *gloriosity). Suffix *-ity* is preferred if the adjective ends in *-ate*, *-ent*, *-ant*, *-ic*, *-ill* and *-acious*. *-ness* is more productive on bases ending in *-ive* (Aronoff 1976).

The productivity of these suffixes was described by Riddle (1985: 435-61) who claims that they are not in fact synonymous, since we can find difference in meaning between the two. In her view, *-ness* denotes an embodied attribute or trait, whereas *-ity* denotes an abstract or concrete entity:

> *However, don't call this third-grader a picky eater. She's a selective one, a Feingold diet subscriber, whose* ***hyperactiveness*** *has decreased, her mother says, since she began the program four years ago.*
>
> *But to date there is no evidence that this type of dietary regime will have any effect on* ***hyperactivity*** *in children.*

Hyperactiveness is an embodied trait of a certain child and hyperactivity is the condition or abstract entity. She gives many other examples such as ethnicity vs ethnicness, brutality vs brutalness and many others. Her claim is that some words, for example, color words, will always take *-ness*, since color is inherent trait, like *redness*. Ethnic names will do the same (*Slavicness*). On the other hand, count nouns which denote abstract or concrete entities, will take *-ity* (*rarity*). It is possible for *-ness* here to denote an attribute here. She adds that only a handful of *-ness* words can be pluralized (*kindnesses*, *likenesse*s, *weaknesses*, *illnesses* and *sicknesses*).

The meaning of the suffix is given in Oxford Advanced Learner's Dictionary as 'quality, state or character of' *(dryness, blindness, silliness).* Similar is with the Webster's New World College Dictionary: 'state, quality or instance of being' *(togetherness, sadness),* Longman's Grammar of Spoken and Written English: 'state or quality of being A' *(blindness, darkness, preparedness)* and Collins COBUILD English Dictionary for Advanced Learners Dictionary: 'state or quality of being A' (*sadness*- state, *kindness*- quality).

Hamawand gives the following senses (2008: 63):

a) the trait denoted by the adjectival root: Here suffix is usually attached to adjectives describing humans and creates abstract derivatives.

b) the property denoted by the adjectival root: The suffix is attached to qualitative adjectives that are characteristic of both humans and non-humans. Created derivatives are abstract.

c) an instance or example of the quality denoted by the adjectival root. Here countable derivatives are created.

d) characteristic denoted by the adjectival root: *-ness* is here attached to classifying adjectives that apply to humans and result is non-count noun (*deafness*) that usually expresses some kind of inability.

Summing it up, the suffix *-ness* can have the following meanings:

1. the trait or quality denoted by the adjective (the quality of humans to be aware- *awareness*)
2. the property denoted by the adjective (object can be bright- *brightnes*s)
3. the state denoted by the adjective (the state of being sad- *sadness*)
4. an instance or example of the quality denoted by the adjective (an example of being kind- *kindness*)
5. an example of inability (*dumbness*- the inability to speak).

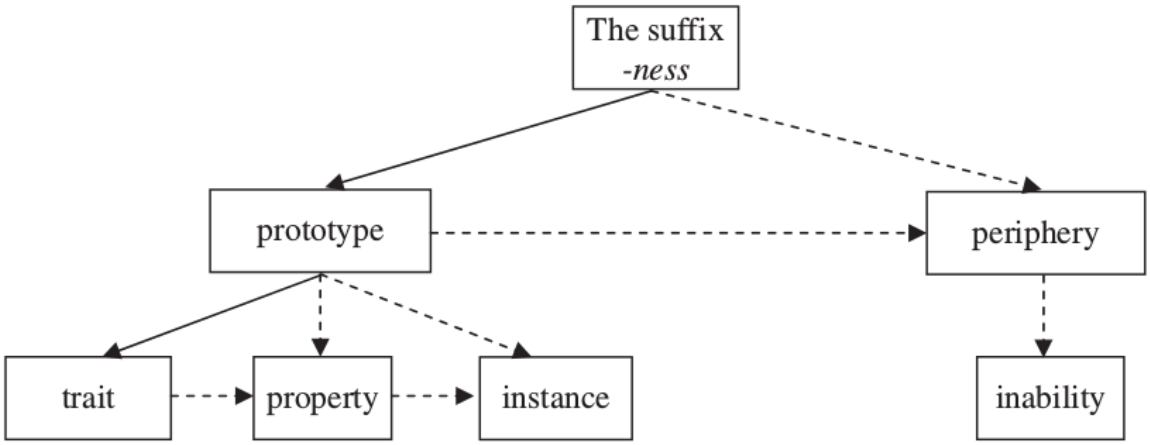

Figure 21. The semantic network of the de-adjectival suffix *-ness* (Hamawand 2008: 64)

13. THE ANALYSIS

We have already stated criteria by Tyler and Evans (2003) for finding the prototypical sense of a polysemous word. In establishing the central meanings of *-hood* and *-ness*, we followed their criteria, the ones proposed by Hamawad (2008) and the meanings given in the dictionaries and grammars that serve as confirmation of our examples, namely Webster's New World College Dictionary, Oxford Advanced Learner's Dictionary, Longman Dictionary of Contemporary English, Longman Grammar of Spoken and Written English, Collins COBUILD English Dictionary for Advanced Learners, Dictionary.com and The Free Dictionary.

In order to interpret a nominalization that ends in *-hood* or *-ness* or any other derived noun, one can apply either strictly or partially the compositionality principle (Taylor 2002: 589):

According to the compositionality principle, the properties of a complex expression can be fully computed from the properties of its component parts and the manner of their combination (= strict compositionality). Partial compositionality requires only that the component units contribute to the properties of the whole, without, however, fully determining the properties of the whole.

We will, of course, follow the partial compositionality principle, since different meanings of our nominalizations simply cannot be interpreted as the meaning of the base + the meaning of the suffix and since this principle is used in cognitive linguistics theories.

13.1. The suffix *-hood*

For the suffix *-hood*, as already exemplified, the meaning of 'state and condition' is taken as central due to the frequency of occurrence, but also considering other factors that Hamawad (2008: 83) explains:

The meaning of a de-nominal suffix, I argue, is modeled in terms of a network of senses, which language users intuitively organise with respect to a prototypical sense. The prototypical sense is the best example of the network; it exhibits the common properties of the category. It is the sense that comes to mind first or is the easiest to recall. The other, peripheral, senses build around the prototypical sense; they are assimilated to the category according to how closely they resemble the prototype. The relations between the senses resemble those between family members, which share some but not all of the features. Like members of a family, the peripheral senses share the general properties of the category, but they differ in specific details. Category refers to a cognitive ability which upholds the unity of a lexical item. It presents the senses in order by starting from a basic sense and linking all the other ones to it.

The majority of examples in our corpus confirm this. Contrary to Scalise and Guevara's statement (2005) that *-hood* is attached to common and animate nouns, we find

examples where *-hood* is attached to inanimate nouns as well, producing abstract nouns denoting states (*nounhood*, *adjectivehood*, *sentencehood*, *compoundhood, lexemehood*):

(1) *Workshop on the Syntax and Semantics of* ***Nounhood*** *and* ***Adjectivehood*** (http://filcat.uab.cat/clt/Adjectivehood/index.html)

(2) *What it means is that an arbitrary modifier cannot be inserted between elements of a compound and still maintain* ***compoundhood.*** (Lieber 2005: 377).

We will start our analysis with nouns as bases. Since the number of nouns ending in *-hood* is not infinite, or even that large (comparing it to nouns ending in *-ness*), we are going to give all those nouns that appear in the BNC list more than once. There are some examples of nouns ending in *-hood* we have encountered in the literature, as the above mentioned *nounhood* and *sentencehood* (presumably found only in registers dealing with language) and we believe there are more examples like these that are connected to specific registers, but they will not be included in our study. However, we believe that the sense of these unmentioned examples (so far not observed in the literature) is 'state of N' since it is a prototypical sense. This prototypical sense will be dealt with in the first part, with the majority of examples belonging to this group. Then we will analyse the meanings that are extended from the central meaning and we will try to establish metaphoric and/ or metonymic motivation for these extensions. We will then continue with adjectives as the basis and see whether these nominalizations denote something else apart from 'state of being A'.

13.1.1. Nominal roots

13.1.1.1. The state of what is being expressed by the base noun

A state is a physical or mental condition an animal or a person has. Hamawand (2008: 87) distinguishes between three types of states when dealing with the suffix *-hood*:

1. conditions of human life (in general)- *maidenhood*
2. social statuses- *nationhood*
3. legal rights-*statehood.*

The majority of examples in our corpus have this meaning, either as the only meaning or together with other meanings. Most of the examples belong to the first group of conditions,

that is, conditions of human life. We will expand this category and include conditions of non-human existence as well: some of the examples involve animals, some include inanimate nouns and some even super-human, or divine. Due to the lack of space, example sentences for this central sense will be given only for some nominalizations.

13.1.1.1.1. States of (non)-human life

Nouns belonging to this central group are numerous and are all paraphrazed as 'the state of being N'. They include the following: *adulthood*, *angelhood*, *animalhood*, *aunthood*, *babyhood*, *beggarhood*, *boyhood*, *brotherhood*, *childhood*, *cousinhood*, *creaturehood*, *cubhood*, *daughterhood*, *duckhood*, *fatherhood*, *girlhood*, *godhood*, *grandparenthood*, *humanhood*, *ladyhood*, *manhood*, *motherhood*, *neighbourhood*, *orphanhood*, *parenthood*, *peoplehood*, *personhood*, *puppyhood*, *sainthood*, *selfhood*, *servanthood*, *sisterhood*, *sonhood*, *toddlerhood*, *victimhood* and *womanhood*:

(3) *Greer, like the most chauvinist of traditional psychologists, sees women's psychology as characterized by frustration, dependency and* ***victimhood****, fear, passivity, inferiority, hatred for other women, mental disorders, and bodily pathology.* (BNC)

All the above nominalizations could be paraphrased as **being N:**

(4) *All investigations into the perpetuation of evil point ultimately to the conclusion that the human race has never placed anywhere near sufficient emphasis on the importance of training its members for* ***parenthood***. (BNC)

(4a) *All investigations into the perpetuation of evil point ultimately to the conclusion that the human race has never placed anywhere near sufficient emphasis on the importance of training its members for* ***being parents.***

In the case of 'sisterhood' a paraphrase **having N** is also possible:
(5) *For many,* ***sisterhood*** *means having a friend who will be there for life, and who was there in its beginning.* (http://www.keepinspiring.me/quotes-about-sisters/#ixzz3ovvj9aCQ)

The majority of examples belong to the domain of family, with family members as base words (*motherhood*, *fatherhood*, *brotherhood*, *parenthood*) and they all denote some qualities that are required by the society to be fulfilled. When it comes to *mother, father*, *parent*, *grandparent* they are connected to nurturance and responsibility. We will show this on the following examples:

motherhood

(6) *It is time society acknowledged the importance of* ***motherhood*** *and all the responsibility this entails* (…) (BNC)

fatherhood

(7) *Because apparently, society doesn't think* ***fatherhood*** *is a job as worthy of support and admiration as motherhood.* (WD)

'*The importance of motherhood'* implies the importance of taking care of one's family, providing for them, giving them support and attention they need. '*Fatherhood is a job'* entails that being a father brings certain responsibilities, just like any other job does. It is not just a state somebody is in, but rather a complex network of tasks and requirements, or, to put it short, a complex condition. In '*Training for parenthood', 'parenthood'* could be understood as a skill that can be taught and trained, which again, emphasizes the practical side of being a parent. Examples with *brother* and *sister* as basis, again, rely more on the relationship between siblings, which is expected to be the one of getting along and taking care of one another.

It is interesting to notice that, whereas *fatherhood* occurs in contexts other than the Bible (where it is spelled with capital F), *sonhood* in mainly found in relation to being a son, but the son of God, that is, Jesus Christ.

Examples containing bases other than family members express general notions of being human, or simply, belonging to the human race (from childhood to the old age): *adulthood*, *childhood*, *boyhood*, *creaturehood, girlhood*, *humanhood*, *ladyhood, manhood*, *peoplehood*, *personhood*, *selfhood*, *toddlerhood* and *womanhood.*

A detailed look at these examples reveals that they not only express conditions of what is being denoted by the noun, but also behaviour typical of the noun:

(8) *(...) to be schooled in the ways of* ***ladyhood*** (...)(OD)

This can be paraphrased as *to be schooled in the ways of how to behave like a lady.* There are certain dress codes and behavioural patterns that can be described as ladylike. Ladies are usually gentle and gracious, they speak properly and dress nicely. On the other hand,

(9) *These sports serve to define dominant masculinity, connecting* ***manhood*** *with violence and competitiveness and often marginalising girls and women.* (OD)

manhood has long been associated with physical strength, courage and superiority (in relation to a woman), although in today's world, this stereotypical characterization has changed and manhood also denotes a gentle character, rather than roughness.

Other examples that do not involve humans, exhibit bases denoting divine creatures (*angelhood*, *sainthood*, *godhood*) and states (*heavenhood*), or animals (*puppyhood*, *cubhood*, *animalhood*).

There are a few examples that do not include family membership or divine or animal character, but simply general notions of human life (*maidenhood*, *neighbourhood*, *orphanhood*, *servanthood* and *victimhood*). They all denote the state of what is being expressed by the N.

In all the examples that do have family members or animals as bases, as well as those that denote general notions of being human we can observe that the whole noun metonymically stands for the behaviour typical of the base noun via metonymy STATE OF N FOR BEHAVIOUR TYPICAL OF THAT N. We could not, however, find this interpretation with divine creatures as bases. This leads us to conclusion that metonymy here serves as a means of social stereotyping: all these base nouns (or better to say, their behaviour) is socially defined. There are certain social norms that dictate what is expected from them. [10]

Let us look at the example of *neighbourhood*, the definition of which is also 'neighbourly feeling' or 'exhibiting the qualities of a friendly neighbour':

10 cf. house-wife stereotype (Lakoff 1999).

(10) *Social interactions based on **neighbourhood** have been deteriorating for decades particularly in highly transitory urban areas.* (OD)

This means that 'neighbour' has positive connotations, or at least, that most people hope to have neighbours with positive values: helpfulness, friendliness and kindness. This is also something we have already mentioned in the examples with *mother* and *father,* meaning behaving the way that is expected form a mother or a father.

Sometimes examples belonging to this group have an additional meaning. *Maidenhood* is not only the state of being unmarried woman, it can also denote one's virginity, as well as freshness and newness:

(11) *Ruth was blushing, but it was the blush of **maidenhood** called upon for the first time to discuss the sacred things of life with a mother held equally sacred.* (WD)

Virginity is still, in many cultures, considered as uncontaminated state, especially in societies where religion plays an important role. The basis of this can be traced back to the Holy Bible, where the following has been made clear:

Flee from sexual immorality. Every other sin a person commits is outside the body, but the sexually immoral person sins against his own body. Or do you not know that your body is a temple of the Holy Spirit within you, whom you have from God? You are not your own, for you were bought with a price. So glorify God in your body. (Corinthians:6:18-20).

Thus, any woman that engages in a sexual intercourse before marriage is considered impure and sinful and every woman who enters marriage as a virgin is seen as 'pure' and 'innocent'. The meaning of 'freshness' is metonymically derived from 'virginity' via PHYSICAL ASPECT OF A PERSON FOR A MENTAL ASPECT. [11]

11 Not all examples like 'maidenhood' that have additional metaphorical meanings will be discussed here if the meaning still belongs to the domain of 'state' or 'condition' since we are mainly interested in the extensions of the base meaning.

13.1.1.1.2. Social statuses and legal rights

We will start this chapter with the following definitions:

Social status**,** also called status, the relative rank that an individual holds, with attendant rights, duties, and lifestyle, in a social hierarchy based upon honour or prestige. Status may be ascribed—that is, assigned to individuals at birth without reference to any innate abilities—or achieved, requiring special qualities and gained through competition and individual effort. Ascribed status is typically based on sex, age, race, family relationships, or birth, while achieved status may be based on education, occupation, marital status, accomplishments, or other factors. (https://www.britannica.com/topic/social-status)

Legal rights are, clearly, rights which exist under the rules of legal systems or by virtue of decisions of suitably authoritative bodies within them. (https://plato.stanford.edu/entries/legal-rights/)

Examples from this group include *bachelorhood*, *husbandhood*, *kinghood*, *knighthood*, *monkhood*, *nationhood*, *priesthood*, *prophethood*, *queenhood*, *spinsterhood*, *spousehood*, *statehood*, *widowhood*, *widowerhood* and *wifehood*. In the examples with animate bases the base word represents someone who holds a certain status in the society a role that one is supposed to fulfil.

bachelorhood

(12) ***Bachelorhood*** *suited him perfectly.* (BNC)

In this example it is clear that what suited the character is being unmarried adult male who obviously enjoys being unmarried and without attachments and obligations to others.
On the other hand, being a husband or a wife also brings certain enrichment in one's life, but obligations and expectations are present all the time. Being a spouse is not only living up to your spouse's expectations and fulfilling the promises you gave one another, but also the society as a whole also have a certain 'vision' of what an ideal husband or wife should be. In the example

(13) *Juggling fatherhood and* ***husbandhood*** *with editing and writing doubtless keeps you on your toes.* (OD)

it is represented as something you need to handle and perfect to keep it going. The example

(14) *People think women who do not want to marry unfeminine, people think women who do want to marry immodest — people combine both opinions by regarding it as unfeminine for women not to look forward longingly to* ***wifehood*** *as the hope and purpose of their lives, and ridiculing and condemning any individual woman of their acquaintance whom they suspect of entertaining such a longing.* (BNC)

shows that the expectations of others for woman of a certain age are to get married (*to look forward longingly*). Often women who simply do not want to get married are considered either selfish or egocentric or not having their purpose of life fulfilled. They seem to lead lonely, empty lives. But with the raise of feminism this is starting to change and wifehood is only one aspect of a woman, just the same as motherhood is.

Base words in this group usually contain pairs:

husband- wife

widow- widower

bachelor- spinster

king- queen

In the cases of *bachelorhood*, *husbandhood*, *knighthood*, *spousehood*, *widowhood*, *widowerhood* and *wifehood* we also encounter additional meaning of 'behaviour typical of N' via STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy.

A special subgroup is found with royal (*kinghood*, *knighthood*, *queenhood*) and clerical (*monkhood*, *prophethood*) conditions where we find additional meanings, such as 'the rank of N' or 'vocation of N' via STATE FOR RANK metonymy.

Kinghood, *queenhood* and *knighthood* are here seen as professions of N and as professions they include duties and rights, as well as activities connected with a certain position:

kinghood

state

(15) *In Louis, surely, if in any one, the majesty of* ***kinghood*** *is represented.* (WD)

rank

(16) *In the first battle Nuada, king of the Danaans, lost his hand; and, because a king must be blemishless, lost his* ***kinghood*** *too.* (WD)

queenhood

state

(17) *But Lincoln was now distracted by the French princes, who bowed to him but not too low, as befitted their royal birth, while Mary simply inclined her head, as befitted her Republican* ***Queenhood****.* (http://findwords.info/term/queenhood)

rank

(18) *They would typically have two routes to* ***queenhood*** *- either be the heir to the throne and reign in the own name, like QE II, or marry into it.* (WD)

knighthood

state

(19) *If he didn't understand before, he knew now:* ***knighthood*** *can be painful.* (BNC)

(20) *Although the significance of the terms knight and order will be fully realized only after initiation, you should remember that* ***knighthood*** *was originally the quality of being an armed and mounted warrior.*

(http://members.tripod.com/~Jesus_Christ_Saves4/KandC.htm)

rank

(21) *Henry III originated the practice of forcing landowners to take up* ***knighthood****, in order apparently to recruit cavalrymen for an overseas campaign.* (BNC)

Knighthood often appears as an object of the verbs *offer*, *receive*, *earn*, *be rewarded with*. Especially in the last sense, *knighthood* is also defined as an honour whereby one is made into a knight, and one can thereafter be called 'Sir' or 'Dame'. Here a 'knight' does no longer denote a servant of a king as in medieval times or of high birth, but rather as a recipient of the 'Most Excellent Order of the British Empire' or 'order of chivalry of British constitutional monarchy'. This order was established in 1917 by King George V and is given for major contribution to the arts, science, medicine, or government lasting over a long period of time. Honorary knighthood is appointed to citizens who live in the countries where Queen Elisabeth II does not rule:

(22) *The* ***knighthood*** *for Colonel David Stirling, founder of the SAS, who helped to try and set up a strike-breaking organisation called GB75 in the 1970s, may prove controversial.* (BNC)

(23) *He received his* ***knighthood*** *in the 1979 Birthday Honours List and in 1980 was*

elected an Elder Brother and a Member of the Court of Trinity House. (BNC)

(24) *It continued to be so through more than two decades, and then — in the mid-1980s — it seemed, almost inexplicably, to be secure no longer, despite his having only recently been honoured with a* ***knighthood*** *for services to literature.* (BNC)

When it comes to clerical professions, nouns ending in *-hood* typically collocate with 'enter':

monkhood

state

(25) *No hysteric visions, no madman's dreams, no clever conjurer's tricks, have ever shed a tawdry glory on the* ***monkhood*** *of the Buddha.* (DCT)

order

(26) *Pongruengrong, who is also a popular singer, entered* ***monkhood*** *after being released on bail last month.* (WD)

priesthood

state

(27) *It could have been a lot of things. His* ***priesthood****, maybe, or even his Irishness.* (BNC)

order

(28) *Thence he went to the English School at St. Omer before entering the* ***priesthood.*** (WD)

It is important to notice that all nominalizations belonging to this group, that is, the ones of royal and clerical conditions, appear with expressions typical of physical world: *enter*, *receive, lose*, *take up*, *routes to*..., which suggests that something non-physical (the state someone is in) is seen as a physical entity. Ontological metaphors allow us to view activities, emotions, ideas or states as something that is concrete, like substances, containers, persons or objects. Thus in *priesthood*, *monkhood* we encounter A STATE IS A CONTAINER, in *kinghood* and *knighthood* STATE IS A POSSESSED OBJECT and in *queenhood* STATES ARE LOCATIONS metaphors.

Nationhood and *statehood* are nouns derived from inanimate basis and also denote 'the state of N', paraphrasable by 'being a N':

(29) *Our drift out of* ***nationhood*** *— a collective, willed political identity — into a reality we could not shape nor even talk about began a long time ago.* (BNC)

(30) *But its anxiety on this occasion surely reflects the worries of Mr Gorbachev himself, who is to take part in this weekend's celebrations in Berlin of the 40th anniversary of East German* ***statehood****.* (BNC)

13.1.1.2. A group of people (or animals) sharing the thing referred to by the nominal root

In this section we will deal with another meaning of the suffix *-hood*, namely a group or a union of people denoted by the base. We will give cases where this also applies to animals. We will claim that the whole noun, the prototypical meaning of which is a condition or state, is used metonymically to denote a group of people (animals) sharing the same state and we will try to describe the type of that metonymic mapping.

This broader section of nouns can be subdivided into two groups according to the purpose of the group:

a) A general group of people or animals, a collectivity and

b) A group of people denoted by N that stands for a union with a specific purpose, goals of function, often a religious one.

13.1.1.2.1. A general group of people or animals, a collectivity

In the following examples what is denoted by the *-hood* nominalization is a plural of Ns or a group of Ns with behaviour typical of N. A 'group of Ns' in this sense is not gathered for a specific purpose or goal, the meaning is simply 'collectivity'. They sometimes do have a goal, but one apprehended only via specific examples:

(31) *Nightmarish stories about about the criminalizing of* ***motherhood*** *have been making headlines of late.*

(https://www.thenation.com/article/how-end-criminalization-americas-mothers)

In this example, *motherhood* denotes a group of working mothers who try to fight for more rights and understanding of their tasks in the society.

This group contains the following: *animalhood*, *aunthood*, *beggarhood*, *boyhood*, *childhood*, *cousinhood*, *cubhood*, *fatherhood*, *girlhood*, *ladyhood*, *manhood*, *motherhood*, *neighbourhood*, *sainthood* and *womanhood*. They all denote 'the state of N' and the collective meaning is an extension.

animalhood

state

(32) *Coriscus is both a man and an animal, but his manhood is nearer to his individual existence than is his* ***animalhood.*** (WD)

a group of animals

(33) *Earth belongs to Man, and in a lesser degree to the animals that man raised from* ***animalhood****.* (WD)

aunthood

state

(34) *Babies are born from the womb. Maternity is born from the soul. There are many ways to "mother" a child.* ***Aunthood*** *is as close as it gets.* (Huffington Post, Jul 25, 2014)

a group of aunts

(35) *Let's Hear It for* ***Aunthood****.* (New York Times, Sep 18, 2011)

beggarhood

state

(36) *The condition of peasant children, their sorrows and joys, their sports and bickerings -- the coarse insolence of the richer, the timid dispiritment of the needy, all stood in lively remembrance before his fancy, which liked to go back into that first and only period of his freedom, though, perhaps, also of his* ***beggarhood.*** (WD)

a group of beggars

(37) *Never was a form of rascally* ***beggarhood*** *more complete.* (WD)

boyhood

state

(38) *The glory of* ***boyhood*** *is all around him, embraces him: The manliness of his father, the great name of his grandfather, adorn him.* (BNC)

a group of boys

(39) *Although the remarkable oeuvre of Shirley Temple dominated what came to be regarded as the childstar era, films featuring American* ***boyhood*** *attracted audiences as well.* (Clement and Reinier 2001: 251)

childhood

state

(40) *What is clear in this exhibition are the changing attitudes towards and perceptions of* ***childhood*** *by adults who control and order where they can seem to have an aim of accurate recall.* (BNC)

children, taken collectively

(41) *(...) The well-governed* ***childhood*** *of this realm (...)*

(http://www.hyperdictionary.com/dictionary/childhood)

cousinhood

state

(42) *North Carolinians emphasize not just Scottish ancestry, but Cape Fear ancestry; not just the* ***cousinhood*** *of the clans, but the genealogical proximity of 'cousins.'* (OD)

(43) *'Some conditions that may lead to* ***cousinhood*** *include Tourette syndrome, hydrocephalus, Williams syndrome, and some learning disabilities.'* (OD)12

persons related by blood

(44) *In 1870 the lay leaders of the Ashkenazi congregations in London had established the United Synagogue, over which* ***'the cousinhood'****—and pre-eminently the Rothschilds — presided.* (BNC)

12 The base noun 'cousin' is sometimes found in connection with autism and denotes a person who is not neurotypical, but also not quite autistic, that is a person who is considered 'autistic-like' with respect to social skills.

cubhood

state

(45) *They were a brave group, but they were walking into the nightmares of their* ***cubhood****, and it shook the most stalwart among them.* (WD)

group

(46) *He was better fitted for the life than the other dogs, for he had the training of his* ***cubhood*** *to guide him.* (OD)

fatherhood

state

(47) *The joys of* ***fatherhood*** *had softened him.* (OD)

fathers collectively

(48) *Instead, the new attitude of* ***fatherhood*** *is hands-on and involved, but with a hint of playfulness.* (http://usatoday30.usatoday.com/news/nation/2009-06-16-dad-fathers-parenting_N.htm)

girlhood

state

(49) *I rejected womanhood, not because I preferred manhood, but because I preferred* ***girlhood.*** (BNC)

group

(50) *That Flaubert, still damp from skewering boys in Cairo bath-houses, should fall on the name of Nabokov's seducer of underage American* ***girlhood****?* (BNC)

ladyhood

state

(51) *But the effect of her voice, her* ***ladyhood****, and her command of this philosophy--those moved him.* (WS)

ladies collectively

(52) *After allowing my pocket to be filled with "notions" by the generous "Biddy," I took leave of Miss Kenjins, who is good, clever, and agreeable enough to redeem the*

*young-**ladyhood** of the island — nor was there enough of pleasant promise for the future to compensate for the regret I felt at leaving those who had received a stranger with such kindness and hospitality.* (WD)

motherhood

state

(53) *The capacity for **motherhood** is a capacity for transformation; by accepting new life within our bodies, allowing it to grow, giving birth to it and rearing it, we ourselves are irrevocably changed.* (BNC)

a group of mothers

(54) *However, it was **motherhood** rather than the needs of individual mothers which evoked concern and relatively little attention was paid to the conditions faced by working class wives in their daily lives.*

(https://www.thenation.com/article/how-end-criminalization-americas-mothers)

neighbourhood

state

(55) *'the importance of **neighbourhood** to old people'* (OD)

neighbours

(56) *The family had been odd she remembered; their accent was more up market, and they had formal, stiff manners, unlike the relaxed style and broad accents of the Glaswegian **neighbourhood**.* (BNC)

sainthood

state or status of being a saint

(57) *And I understand **sainthood** is achieved by avoiding the occasions of sin.* (BNC)

a group of saints

(58) *He then quitted the Congress membership, finding that **sainthood** is tarnished by too close contact with politicians.* (WD)

womanhood

state

(59) *Any woman who falls outside the boundaries of a family pattern of expectation*

*may feel she has failed or that her expression of **womanhood** is not valued, and when a woman believes she has failed at womanhood itself, she often abandons her root, the place of her failure.* (WD)

a group of women

(60) *Half of Britain's **womanhood** is dress size 14 and over.* (OD)

Manhood is an interesting example. Metonymy SPECIFIC FOR GENERIC operates on the base 'man'. 'Man' stands for 'human' in many cases and often covers both terms, which is never the case with 'woman'.

manhood

state of masculinity

(61) *We drank to prove our **manhood.*** (OD)

a group of men

(62) *Germany, too, had lost the best of her young **manhood**.* (OD)

people in general (in the sense of humanhood)

(63) *He feared the speedy decline of all **manhood**.* (WS)

The metonymy that enables the collectivity sense in these examples is DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY within Category-and-Property ICM. That is, the state of one member is understood as the whole category or a group of members.

13.1.1.2.2. A group of people denoted by N that stands for a union with a specific purpose, goals of function, often a religious one

Examples in this group are specific since the group is understood as having a certain goal or function in the society. These are: *brotherhood, sisterhood*, *monkhood*, *priesthood*, *prophethood* and *knighthood*. All of them denote 'a group of Ns connected by profession or business'. We have already given the examples where the state denotes one's rank or vocation. The collectivity sense is derived through DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY. In the cases of *monkhood* or *priesthood* state is understood as a vocation of one monk or one priest as a clerical function.

(64) *And therefore the **monkhood**, powerful as they were, left all politics alone.* (DC)

In this example, *monkhood* is in singular, but the pronoun and the verb following it are in plural (t*hey were*), which only emphasizes the collectivity sense of the noun and the fact that it denotes more than one monk.

For the *priesthood*, the folowing example illustrates its collective sense:

(65) *There was another important political factor affecting the south-eastern tribes which created serious problems for Rome; the insidious but powerful influence of the Druidic **priesthood**.* (BNC)

The same explanation can be given for *knighthood* and *prophethood*. The state of being a knight or a prophet is mapped onto the rank of a knight or 'vocation' of a prophet and then further mapped onto the whole group of knights and prophets.

(66) *But the white fury of the northmen burned the hotter, and more skilled was their **knighthood** with long spears and bitter.* (Tolkien 2012: 113)

(67) *There is no doubt whatever that such souls were prophets, for the mission of **prophethood** is education, and these wondrous souls trained and educated mankind.* (WS)

Brotherhood and *sisterhood* are a bit different from the above examples. Their bases are highly polysemous and we believe that metaphors and metonymies operate on these bases. The meaning of the whole is also a bit different than 'the group of Ns', still the sense is a collective one.

brotherhood

None of the meanings found in our corpus is 'brothers collectively' or 'a group of brothers as male siblings'. However we have found the following definitions with corresponding examples:

1. fellowship (an association of friends):

(68) *It is customary for young men who are attached to each other to swear eternal* ***brotherhood*** *(compare the Slavonic pobratimstvo); the contract is regarded as sacred, and no instance has been known of its violation.* (YD)

2. fraternity as an organization of people are linked or connected in several ways:
a) by the common interests (such as sports or free time activities):

(69) *But by and large rugby has much to be proud of as a vehicle for bringing nations together in a sporting* ***brotherhood*** *when political barriers threaten to keep them apart.* (YD)

b) by religious beliefs:

(70) *A fierce quarrel arose over his burial between the* ***brotherhood*** *of St Stephen, to which he had belonged, and the university professors, who desired to escort his corpse to the grave.* (YD)

c) by trade:

(71) *Not only did the railroad strike of 1894 lead to greater rights for workers, the lawmakers wrote, but the* ***Brotherhood*** *of Sleeping Car Porters — America's first African American union — also 'helped build the black middle class and laid the groundwork for the Civil Rights movement of the mid-20th century.'* (COCA)

Generally speaking, all of these express the same kind of a union of brothers, with the word *brother* having more meanings (in Oxford English Dictionary):
1. a male sibling
1.1. colleague, associate, companion, partner, comrade, comrade-in-arms, co-worker, fellow, friend
1.2. *North American Informal* a black man
1.3. A thing which resembles or is connected to another thing
2. A (male) fellow Christian
2.1. a monk
2.2. a member of a fundamentalist Protestant denomination

The first meaning of *brotherhood,* as fellowship or an association of friends and partners, is based on the meaning of *brother* as a friend, a companion or a partner. We believe

the reason why *brother* can be interpreted this way is both a metaphoric and a metonymic one, or to be more precise, we are dealing with the case of metaphor from metonymy in the sense of Goossens (1990), where metaphors are grounded in the metonymic relationship. In metaphors one domain, the source domain, is mapped onto the target domain. Here *brother* as a male sibling (in blood relation) is the part of the source domain, which is closeness between male siblings. Closeness between friends is the target domain. Both domains belong to the domain of humans, but one domain is a domain of physical functioning, whereas the other is a mental or psychological one. Within this metaphor PART FOR PART metonymy BLOOD LINE FOR PHYSICAL CLOSENESS enables us to define the term *brother* in the physical sense. Blood line stands for the kind of physical relation that makes one person your brother. Metaphor MENTAL (CLOSENESS) IS PHYSICAL (CLOSENESS) is the reason why we call our friends brothers. What is meant by mental closeness are all those behaviors that count when we talk about friends: a friend is person who hangs out with you, helps you, understands you and who you feel close to. This is understood via MENTAL CLOSENESS FOR FRIENDLY BEHAVIOUR. This relation can also be reversed: when a friend does all these things where he shows how much he cares for you, we say: *He is like a brother to me*. There is a saying: *Friends are family you choose.* This means that we cannot choose our blood family members, but we do chose people to spend our time with based on the interest, similarities or sometimes life circumstances and these are the people we trust.

Family is the nucleus of the society, a fundamental social group. Aristotle wrote: “The family is the association established by nature for the supply of men's everyday wants.” (http://classics.mit.edu/Aristotle/politics.1.one.html). There are also some political movements and organizations today that want to impose what 'a typical family' should look like and define a nuclear family as an organization consisting of a husband, a wife and children. Of course, things in our society are changing and to many people, family is more than a bloodline. Many people consider their godmother or godfather family, although they need not be in a blood relation.

Since metonymies work on the principle of highlighting of some aspects within the same domain matrix, we cannot exclude the possibility of dealing with metonymy here: Brother, as a whole domain matrix, consists of several subdomains: a person you share parents with, a person who might have lived with you in childhood, a person who helps you, etc. What gets activated here is the positive aspect of the domain 'brother' (helping, caring and spending time together) via WHOLE PERSON FOR ONE ASPECT OF THAT PERSON metonymy.

Other meanings of *brotherood*, such as 'an association of people connected by the same interests, trade or religious order', are also metaphoric and metonymic. In all these meanings the metaphor MENTAL (CLOSENESS) IS PHYSICAL (CLOSENESS) produces the connection between a brother as a male sibling and a fellow member of a fraternity. Physical closeness is the starting point, having the metonymic basis (BLOOD LINE FOR PHYSICAL CLOSENESS). We also find metonymy in the target domain. Mental closeness actually stands for similarity in the way of thinking or acting (CLOSENESS FOR SIMILARITY):

(72) *The **brotherhood** of international Jewry was, and still is, established in all large centers of Jewish concentration.* (BNC)

This is an organization of people united by the same religion.

sisterhood

This example is similar to the one of 'brotherhood' since it does not denote 'a group of sisters as female siblings' but rather a different kind of 'sisters' are taken here collectively. Again, as it is the case with 'a brother', 'a sister' has several meanings (taken from Oxford English Dictionary):

1. a female sibling
2. a female friend or associate, especially a female fellow member of a trade union or other organization (comrade, friend, partner, associate, colleague)
2.1. a fellow woman seen in relation to feminist issues
2.2. *Informal* a fellow black woman
3. often *Sister*: a member of a religious order of women (nun or novice)
4. a senior female nurse, typically in charge of a ward

Depending on which of these meanings becomes activated, *sisterhood* denotes several types of groups:

1. a religious society of women:

(73) *The order of the Sisters of Mercy is a religious **sisterhood** of the Roman Church.* (YD)

2. an association of women related by a profession of being a nurse:

(74) *The earliest forerunner of the great* ***sisterhood*** *of nurses of whom we have any record was Fabiola, a patrician Roman lady.* (YD)

3. an association of women that is formed to promote cooperation and unity of women:

(75) *When women bond together in a community in such a way that* ***sisterhood*** *is created, it gives them an accepting and intimate forum to tell their stories and have them heard and validated by others.* (WD)

We find that same metaphors and metonymies operate here as it is the case with *brotherhood*. First the metonymy BLOOD LINE FOR PHYSICAL CLOSENESS operates on the source domain of the metaphor MENTAL (CLOSENESS) IS PHYSICAL (CLOSENESS). What is meant by mental closeness is an emotional bond between sisters which can also be found between friends, co-workers and like-minded people. In *sisterhood* we are dealing with females, and they are, by nature, more emotional and have this nurturance aspect more emphasised than males. That is why all those groups do have this dimension of helping and understanding, they are formed with the goal of helping the ones who need help.

We will finish this section by claiming that metonymy found in these examples again fulfills the function of social stereotyping, both in examples that represent a group of Ns with specific goals and purposes and in those that simply denote collectivity or a body of Ns. Following Lakoff (1999: 398) in stating that

Social stereotypes are cases of metonymy—where a subcategory has a socially recognized status as standing for the category as a whole, usually for the purpose of making quick judgments about people.

We can observe that the state of one member of the category stands for the whole category in question.

13.1.1.3. A period of time during which one is N

The third group of are examples are the ones where *-hood* nominalization denotes a period or a length of time during which one is N, as in *childhood:*

(76) *Life is presented as a succession of 'ages': from birth, through babyhood, infancy,* ***childhood****, adolescence, adulthood, middle age and finally old age.* (BNC)

Time is something we cannot observe as such, since "it is not conceptualized on its own terms, but rather is conceptualized in significant part metaphorically and metonymically." (Lakoff and Johnson 1999: 136). What we can measure are concepts such as events, space and motion. When we measure time, we actually count iterations of events. In our examples, we measure the length of time during which one is in the state of N. This state metonymically stands for the period of time during which one is in that state. The metonymy THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N operates after the word has been formed. Since period is something that has its beginning and ending, nouns serving as basis denote 'roles' in humans' lives that are transient: children (toddlers) are boys and girls before they become men or women, widow is a woman who has become a widow after her husband's death. Transient stages can only be interpreted in relation to time, since the definition of transient is 'passing or disappearing with time'. We found the following examples that denote both the state of being N and the period of time: *adulthood*, *babyhood*, *bachelorhood*, *boyhood*, *childhood*, *cubhood*, *girlhood*, *grandparenthood*, *maidenhood*, *manhood* (as opposed to *boyhood*), *priesthood*, *puppyhood*, *queenhood*, *spinsterhood*, *toddlerhood*, *widowhood*, *widowerhood* and *womanhood* (as opposed to *girlhood*). All those states and conditions are not permanent, but usually follow or precede another stage (of human life and development).

They often collocate with 'early', 'young', 'since', 'outgrow', 'through', 'during' 'spend' and 'years of' and they also appear as premodifiers (of 'memories', 'days' and 'dreams') which is the reason why they have metonymic reading:

adulthood

state

(77) *But the emotional fracture cut through every aspect of his* ***adulthood****.* (BNC)

period of time

(78) *First of all, we can note that there is nowadays an increasing emphasis on the*

idea of 'life-long education'— that is to say education that continues through the whole of ***adulthood****.* (BNC)

babyhood

state

(79) *Other children might play, but the child who was to be queen of England must not be allowed to give even her* ***babyhood*** *to amusement.* (BNC)

period of time

(80) *This feeling of helplessness has been experienced before, ontogenetically, during the person's own* ***babyhood*** *and childhood, and phylogenetically, when human society began to evolve.* (BNC)

bachelorhood

state

(81) *Enforced* ***bachelorhood*** *had left him unkempt and ill-groomed.* (BNC)

period of time

(82) *He, like the Prince's detective John McLean and several other staff who served the Prince during his* ***bachelorhood****, knew that it was time to leave once he was safely married.* (BNC)

boyhood

state

(83) *Young males yearn to leave* ***boyhood*** *behind and to become men.* (OD)

period of time

(84) *Ramaciotti is not just one of Europe's finest car designers (the stunning Mythos concept car was the result of his* ***boyhood*** *dreams) but he is also considered one of the best analysts of design in the business.* (BNC)

childhood

state

(85) *Just as our concepts of* ***childhood*** *have changed, so have our concepts of childhood problems.* (OD)

period of time

This sense is found by far more frequently than other senses:

(86) *Mister Softee's iconic jingle serves up **childhood** memories with a side of ice cream.* (BNC)

(87) *Since **childhood** he'd had a recurring magical dream.* (BNC)

(88) *In this study, 215 early **childhood** educators in two states responded to a survey regarding early literacy curricula and assessment.* (BNC)

cubhood

state

(89) *His forgotten **cubhood**, all that was associated with that familiar snarl, rushed back to him.* (WD)

period of time

(90) *Why would the big cat attack the person who raised him from **cubhood,** the person who once snuggled with him on the couch?'* (OD)

girlhood

state

(91) *Until recently, the literature on adolescent girls has been scarce, lacking a serious professional review of the gender-specific issues unique to **girlhood.*** (OD)

time period, a girl's childhood

(92) *She asked what I had in mind, and I said an informal conversation about the principal events of her life from her **girlhood** at Glamis Castle to the present day.* (BNC)

grandparenthood

state

(93) *And what were the implications of these traditional roles for **grandparenthood**?* (BNC)

period of time

(94) *Basically, for 72 years researchers at Harvard have been following 268 men who entered college in the late 1930s -- following them through war, career, marriage and divorce, parenthood and **grandparenthood**, and old age.* (WD)

maidenhood

state

(95) *I have waited long enough; I have got tired of* ***maidenhood.*** (OD)

period of time

(96) *If the negotiations go off smoothly, the marriage contract is written, presents are exchanged between the engaged couple, through their respective parents, and all that is left the girl of her* ***maidenhood*** *is a period of busy preparation for the wedding.* (BNC)

manhood

state

(97) *Nor do Piaroa young men learn the self-regarding virtues of* ***manhood*** *that would set them as males against females, and, as such, superior to them.* (BNC)

period of time

(98) *This begins what becomes an obsessive quest, as Ronan - from adolescence to* ***manhood*** *- tracks the storyteller's whereabouts across the lanes of Ireland.* (OD)

priesthood

state or order

(99) *Women were admitted to the* ***priesthood*** *in the Church of England in 1996.* (OD)

period of time

(100) *Father Aguilar, who began his* ***priesthood*** *in Mexico in 1970, has shuffled from parish to parish ...* (BNC)

puppyhood

state

(101) *His* ***puppyhood*** *and the instinct of submission took charge of him.* (WD)

the time of being a puppy

(102) *We all realise* ***puppyhood*** *is the most important time in a dog's life.* (BNC)

queenhood

state

(103) *This queen, she found was very sad, and very longing, and very lonely, three things she thought* ***queenhood*** *exempt from, sadness, and longing and loneliness.* (WD)

period of time

(104) *During the first years of their marriage the couple lived in Kalmar in Sweden and Philippa was to spend much of her* ***queenhood*** *living in Sweden.* (https://www.alternatehistory.com/forum/threads/the-legacy-of-timur-the great.198552/)

spinsterhood

state

(105) *Elizabeth never married but used her* ***spinsterhood*** *as a diplomatic bate — Robert Dudley, the Earl of Leicester, was very close and, after his death, his stepson, the Earl of Essex, became close, but he was executed for treason when it was learned that he had entered into a conspiracy.* (BNC)

period of time

(106) *Her omnipotent Jewish mother valiantly works to end her daughter's* ***spinsterhood****, but to no avail.* (OD)

toddlerhood

state

(107) *But the 2,000 parents of toddlers surveyed said their children were losing the art of inventive, imaginative play which is what* ***toddlerhood*** *should ultimately be about.* (OD)

period of time

This sense is found more frequently than the 'state of being a toddler':

(108) *They were the sort of looks which at one time, if indulged in by children who'd outgrown* ***toddlerhood****, could be guaranteed to attract a resounding ding around the ear and the terse instruction: 'Take that look off your face'.* (BNC)

widowhood

state

(109) *But if* ***widowhood*** *is such a double shock for many women, why do widows survive much longer than widowers?* (BNC)

the period of being a widow

(110) *But for some, particularly in a generation whose men fought in the trenches, marriage was a short interval before* ***widowhood****.* (BNC)

widowerhood

state

(111) *By the end of this ploddingbook, we sense that Lynley will return to New Scotland Yard once he has completed the coastal walk whose ending will coincide with his acceptance of* ***widowerhood.*** (WD)

period of time

(112) *A silk hat with a crape band nearly to the top should be worn by widowers during the first year of their* ***widowerhood****.* (WD)

womanhood

state

(113) *All the wealth of her* ***womanhood*** *that she had treasured with such care she saw become as dust, worthless.* (Wright 2008: 187*)*

time period

(114) *When she was maturing into young* ***womanhood*** *Baldersdale was well populated with youngsters of equivalent age — that is to say eligible for Hannah.* (BNC)

Examples involving animals (*cubhood* and *puppyhood*) can sometimes be used to refer to humans via PEOPLE ARE ANIMALS metaphor and denote youth and adolescence, a period in person's life preceding *adulthood*. Here the base nouns, cub and puppy, are metaphorically seen as humans. The characteristic that is mapped onto humans is the one of immatureness and lack of experience, but also of playfulness.

13.1.1.4. An area of the thing referred to by N

The only example we could find for the meaning 'area' is *neighbourhood*, but this is a nominalization found more frequently than many previously mentioned ones. This locative meaning of it is also more frequent than is the meaning of 'condition of being a neighbour'. *Neighbourhood* can denote more concepts of location or area, namely the following:

1. a district within a town or city where people live (synonymous with 'district', 'area', 'locality'):

(115) *We are the people that God has equipped, for this time in history, in our city and* ***neighbourhood****, for the specific needs of the people around us.* (BNC)

(116) *Books were distributed in communities and* ***neighbourhoods****, and to family members and friends.* (OED)

2. the area surrounding a particular place, person, or object (in the sense of 'vicinity', 'proximity'):

(117) *Wait a while and a map of west London will open up showing the precise location of the shot and all the other photos taken in the surrounding* ***neighbourhood.*** (OD)

(118) *Taking heart, the exiled barons gathered together some troops, and war began in the* ***neighbourhood*** *of Rome.* (OD)

2.1. *In the neighbourhood* means 'about', or 'approximately', when one talks about the age or amount of something that is specified:

(119) *The average price at which shares sell during this period is somewhere* ***in the neighbourhood of*** *$55 (more or less depending on the shape of the time-price curve).* (BNC)

2.2. In mathematics, *a neighbourhood* is the set of all points whose distance from a given point is less than a specified value, it is a set containing the point where one can move that point some amount without leaving the set:

(120) *A few years later in 1914 Hausdorff defined* ***neighbourhoods*** *by four axioms so again there were no metric considerations.* (OD)

Sometimes it is difficult to decide which meaning of a word came into existence first and therefore is a prototypical sense and which meanings are extended from it. We have already listed *neighbourhood* in the 'condition' sense and 'group' sense, meaning that the 'area' sense, although the most frequent one, is not the protoypical one. One could assume that the collective meaning of *neighbourhood* (people living in the area) is derived metonymically from the sense 'area' via metonymy PLACE FOR PEOPLE IN THAT PLACE, thus neighbourhood as an area stands for people living in that area. This is something that Lieber (2004, 2005)

observed as a very common phenomenon (sense extensions commonly go from place meaning to collective meaning). She, however, notices, that this can go the other way round, which is the case with nouns ending in *-ery* (piggery: place sense is derived from collectivity sense). We will also follow Plag's statement (2003: 113) “As with other suffixes, metaphorical extensions can create new meanings, for example the sense ‘area’ in the highly frequent **neighbourhood**, which originates in the collectivity sense of the suffix.” and Trips' observation that notions like “‘time’ (childhood) and ‘surrounding area’ (neighbourhood)” (Trips, 2009: 77*)* are metonymically extended from the meanings found in the Early Modern English period *-hood* ('office' and 'state') and claim that the 'area' sense is the one that is derived from other sense(s) and not vice versa. Our aim is to establish which metaphor(s) and/ or metonymy/ies) enabled that extensions. According to the http://www.etymonline.com and http://www.dictionary.com the meaning 'community of people who live close together' was first recorded in 1620s and in 1857 the meaning of 'near, somewhere about' was first found.

The central meaning of *hood* is 'the state of being N', and for *neighbourhood* this means 'the state of being a neighbour'. From this sense the 'collectivity' sense is derived via STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY metonymy, where 'category' actually denotes a group. Collectivity sense can further be extended to mean location via PART FOR WHOLE LOCATION METONYMY[13]: a neighbourhood as a group of people who live near you metonymyically stands for the area that surrounds that group of people, that is, the whole setting: houses, flats, streets and other facilitities that operate within the area. This is the case of PEOPLE LIVING IN A PARTICULAR PLACE FOR PLACE metonymy. We believe this metonymy to be conditioned by transformation of multiplex image schema to mass image schema: “Imagine a group of several objects. Move away (in your mind) from the group until the cluster of individuals starts to become a single homogeneous mass.” (Johnson 1990: 26). It is our conceptual ability to view a group of objects as a homogenous mass that is situated in a certain area.

The first location sense is the one of 'living and dwelling' in a particular area, the second one is simply the one of 'being around at a given point'.

13 This type of metonymy for locative sense of *-išče* suffix in Croatian was argued for by Brdar and Brdar-Szabó (2014). Just as there is a metonymic relationship between a plant or a number of instances of plants as the metonymic source and an area covered by these plants as the target, we claim to have this relationship between neighbours and the area they live in.

Once the location sense has been established, other senses occur, with their own metaphorical motivation.
The meaning of 'about', or 'approximately' as in

(121) *SunSoft is spending **in the neighbourhood of** $5m on training and education, lead generation and promotion and user-oriented advertising.* (BNC)

is metaphorically conditioned via SIMILARITY IS PROXIMITY metaphor, in which SIMILARITY IS SPATIAL CLOSENESS and DIFFERENCE IS SPATIAL DISTANCE metaphors work. The source domain is being at a physical closeness/ distance from someone and that is mapped onto the targeted domain, which is being similar (close) or distant in amount.

In mathematical sense 'neighbourhood' is a set of all points which lie within a stated distance of a given point, that is, an area that surrounds a given point:

(122) *In the neighbourhood of a given probe, X, the most distant neighbour can be defined either as that probe whose own **neighbourhood** shares the smallest number of probes with X, or/and as that probe with the smallest number of clones connecting it with X. One can define the least distant neighbour of the probe X analogously.* (http://nar.oxfordjournals.org/content/21/8/1965.full.pdf)

Here points are viewed as neighbours via OBJECTS ARE PEOPLE metaphor "where the physical object is further specified as being a person. This allows us to comprehend a wide variety of experiences with nonhuman entities in terms of human motivations, characteristics, and activities*."* (Lakoff and Johnson 1980: 32). The area surrounding a certain point is an area surrounding a person.

13.1.1.5. A part of the body

In our corpus we have found two examples in which 'the state of being N' metonymically denotes parts of human's body, namely in *manhood* and *womanhood* where it also denotes 'genital organs':

(123) *He shifted on her, and she felt the hard thrust of his **manhood** against her thigh.* (BNC)

(124) (...) *finding the hard nub of her **womanhood** before slipping below to the hot, molten tightness at her center* (...) (BNC)

The example of 'manhood' is found in many medical articles on prostate cancer where men deal with the 'lose of their manhood' as a vital part of their masculinity. We believe it is possible to understand these nominalizations as body parts due to WHOLE FOR PART metonymy: all the physical and mental characteristics of a man and a woman are reduced to their physical dimension (WHOLE PERSON FOR PART OF THE BODY). We were able to find only one example with 'womanhood' in this sense, although some dictionaries give the definition of 'vulva' as one of the meanings for it (YD adds that it is used euphemistically).
Dictionary.com gives an additional meaning of *manhood*, which can be seen as an extension of this meaning, namely virility, potency:

(125) *As Patricia Simons has suggested, scholars should reorient their discussions of bodily **manhood** to consider more closely the centrality of semen as a marker of libido, vigour and strength.* (http://shm.oxfordjournals.org)

Potency again signals a state, a condition of being able to perform sexual intercourse. Although we have not been able to find more examples where *manhood* could stand for *potency*, we believe this meaning is metonymically derived from 'male genitalia' via INSTRUMENT FOR RESULT (INSTRUMENT USED TO PREFORM A CERTAIN ACTION FOR ABILITY TO PERFORM IT).

13.1.2. Extensions from the prototypical sense

All the nominalizations formed by the suffix *-hood* have the central meaning of 'state or condition of being N'. The following nominalizations have three meanings, namely the central meaning of 'state' + 'collectivity sense' + 'period of time' sense14:

boyhood

state

(126) *Somehow my father and I remained in **boyhood**, not developing, turning into big hairy ageing boys.* (BNC)

14 We will repeat some of the example sentences in this section since our corpora has not provided us with adequate examples.

a group of boys

(127) (...) *each in his creator's idealized version of American* ***boyhood*** *and, by the same token, a prototype of democratic character.* (MacLeod 1996: 77)

a period during which one is a boy

(128) *It was an evening of blissful happiness for Jack's brother, a return to* ***boyhood****, those beloved 'Malvern days when it was just the two of us against the P'daytabird'.* (BNC)

childhood

state

(129) *As she grows up and matures, you will notice many of these* ***childhood*** *traits develop into adult ones.* (OD)

a group of children

(130) *Ah, those far off days when* ***childhood*** *still retained the innocence that has been so sadly lost today.* (OD)

a period in one's life when one is a child

(131) *Toomey's* ***childhood*** *was dominated by 'constant worry about money', but it spurred him on.* (BNC)

cubhood

state

(45) *They were a brave group, but they were walking into the nightmares of their* ***cubhood,*** *and it shook the most stalwart among them.* (WD)

a group of cubs

(46) *He was better fitted for the life than the other dogs, for he had the training of his* ***cubhood*** *to guide him.* (OD)

a period of time during which one is a cub

(132) *Trace the growth of these beautiful and ferocious striped felines from* ***cubhood*** *through adulthood and learn how they hunt, raise their young, and get along with other tigers.* (OD)

girlhood

state

(49) *I rejected womanhood, not because I preferred manhood, but because I preferred*

girlhood. (BNC)

a group of girls

(133) *As I said in this presence last year, how can you expect complete independence for Egypt when, as shown by the last census, 95 percent of the people are still illiterate, and when the womanhood of Egypt and its* ***girlhood*** *is 99.3 percent illiterate?* (WD)

a girl's childhood

(134) *Sightless, she smiled thinly and inhumanly; she who had not seen a smile with which to compare since her* ***girlhood****, nor a mirror either.* (BNC)

priesthood

state

(135) *Our priest is a very prepared man of prayer who loves his* ***priesthood*** *and it shows.* (BNC)

a group of priests forming an order

(136) *But such a scheme finds no place in the monarchy; it presupposes a hierocracy under which the* ***priesthood*** *increased its rights by claiming the privileges which past kings had enjoyed* (...) (YD)

a period of time during which one has the function of a preist

(137) *With the other two books being completed during his* ***priesthood*** *from 391 to 395*. (BNC)

The collectivity sense is derived from the sense 'state of being N' via DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY. The period of time can be understood via THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N.

Two examples have all these senses + 'part of the body' sense, derived via STATE OF THE WHOLE PERSON FOR PART OF THE BODY Metonymy, namely *manhood* and *womanhood.* Metonymy INSTRUMENT FOR RESULT (INSTRUMENT USED TO PREFORM A CERTAIN ACTION FOR ABILITY TO PERFORM IT) enables us to understand manhood as 'potency':

manhood

state of being a man

(138) *He tended to be a little touchy about remarks concerning his* ***manhood.*** (BNC)

a group of men

(139) *'These institutions instil and cultivate in their cadets what were once commonly referred to as the virtues of southern* ***manhood*** *— honour, chivalry and devotion to God, state and family,' wrote one alumnus in a letter to a newspaper.* (BNC)

time of being an adult male

(140) *After having wooed her in the old high way for most of his young* ***manhood****, Yeats was horrified when she suddenly decided to marry the revolutionary hard- man John MacBride.* (BNC)

man's genitalia

(141) *CAR worker Dave Baxter nearly lost his* ***manhood*** *on the production line.* (BNC)

womanhood

state

(142) *But the things that belonged to her* ***womanhood****- the charm of her manner; the beauty of her face and form; the appeal of her sex; the quick intuitions of her soul- all these this world received and upon them put a price.* (Wright 2008: 44)

women collectively

(143) *There's also the racist Sharron Angle campaign ad that contrasts scary Hispanic gangsters with pure and innocent white children in much the same way that Bible Belt politicians used to speak of protecting the flower of young Southern* ***womanhood*** *from the "colored."* (WD)

time of being an adult female

(144) *So long you have been growing out of childhood, now you step into* ***womanhood****.* (BNC)

part of the body

(124) (...) *finding the hard nub of her* ***womanhood*** *before slipping below to the hot, molten tightness at her center* (...) (BNC)

The location sense is found only in *neighbourhood*:

neighbourhood

state of being a neighbour

(10) *Social interactions based on* ***neighbourhood*** *have been deteriorating for decades - particularly in highly transitory urban areas.* (OD)

group of neighbours

(145) *Entire **Neighbourhood** Secretly Learns Sign Language To Surprise Deaf Neighbor.* (https://www.boredpanda.com/)

a place, area where people live / an area surrounding a particular person, place or object

(146) *He was reluctant to leave the **neighbourhood** of London*. (OD)

The location sense is derived from the collective one via PEOPLE LIVING IN A PARTICULAR PLACE FOR PLACE metonymy, with the collective meaning being derived via STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY metonymy, where category actually denotes a group.

13.1.3. Adjectival roots

Nominalizations with adjectives as bases are not numerous. They prototypically denote 'the state of being A'. An extension from this sense is found only in one example, which will be shown below.

13.1.3.1. The state of being A

Nouns belonging to this group do not have nouns as basis, but rather adjectives.

falsehood

the state of being false or untrue

(147) *On this level of mere temperamental affinity (not considering its truth or **falsehood**) we feel Lewis to be a man who would be most happy in Christian garb.* (WD)

This meaning is the opposite of 'being true' and in many examples appears in collocation with 'truth'.

hardihood

the state of being hardy

All the definitions of *hardihood* in Oxford English Dictionariy (boldness, daring), Collins COBUILD English Dictionary for Advanced Learners (courage, daring or audacity) and Webster's New World College Dictionary (courage, fortitude and resolute and self-assured audacity often carried to the point of impudent insolence) express a mental state of a person, rather than a physical one, although the adjective *hardy* also expresses (among other meanings of bold, daring and courageous) physical qualities such as able to withstand fatigue and privation. Our examples show that the central meaning of hardihood is the state of being mentally fit, physical traits are found rarely:

(148) *Few nations have ever existed, who have evinced more indomitable courage or* ***hardihood****, or shown more devotion to the spirit of independence than the Iroquois.* (OD)

Physical endurance is found in the following examples:

(149) *Russian organization and training were poor, although her soldiers always showed great* ***hardihood*** *and endurance, and she had to find forces to defend a frontier from the Baltic to the Black Sea, as well as detachments for the Caucasus, central Asia and the Far East.* (BNC)

(150) *But even contacts between the most developed states of the West could on occasion, as in previous generations, demand from diplomats a good deal of physical* ***hardihood****.* (BNC)

But even in these examples the context is what makes us believe physical strength is what is meant here and only because it is followed by the noun *endurance,* or preceded by the adjective *physical*. Thus, *hardihood* can mean both mental and physical strength, i.e. the state of being mentally and physically fit.

In our corpus there are few examples in which the meaning of 'the state of being hardy' is extended to mean the nerve, self-assured audacity or insolence needed at a given moment for a specific situation:

(151) *The defective article might still be in the manufacturer's possession three years after the date of manufacture, and he might sell it later, but no one would have the* ***hardihood*** *to suggest that the three years' limitation had already cut off all right of action before he had sold it.* (BNC)

likelihood

the state of being likely or probable (probability, a chance)

(152) *In fact, as Lévi-Strauss has helped us to recognize in his distinction between 'nature' and 'culture', it is* ***in all likelihood*** *a universal human obsession.* (BNC)

'It is in all likelihood a universal human obsession' can be paraphrased as 'it is very likely a universal human obsession' and this paraphrases enable us to see this nominalization as a state or condition.

livelihood

the state of being lively, liveliness

The meaning 'state of being lively' as *liveliness* (energy, vigor) is obsolete now and replaced by the noun *liveliness*. The noun today has several meanings, which we will not discuss in detail since these meanings are not derived from lively + hood, but rather from Old English lifad 'course of life', from lif 'life' + lad 'way, course'. These other meanings are 'means of living or of supporting life', 'occupation', 'employment' or 'the source of income'. In the following two examples we can, however, find the meaning of *liveliness*:

(153) *Like many northern Colorado communities, the river gave Lyons its character, identity and* ***livelihood****, and then the river almost took it all away.* (BNC)

(154) *Patrick Michael Tovani, 75, said he has survived a harrowing motorcycle accident and a stroke that partially paralyzed him and robbed him of his* ***livelihood.*** (BNC)

unlikelihood

absence of likelihood, the state of being unlikely

(155) *The* ***unlikelihood*** *of the urban parish continuing to exhibit the features of a self-standing community has also been revealed by research showing the way in which kinship and friendship contacts are kept up over ever increasing geographical distances, largely because of mass car and telephone ownership.* (BNC)

lustihood

state of being lusty

(156) *We sympathize with James, a romantic, active, and accomplished prince, cut off in the* ***lustihood*** *of youth from all the enterprise, the noble uses, and vigorous delights of life; as we do with Milton, alive to all the beauties of nature and glories of art, when he breathes forth brief, but deep-toned lamentations over his perpetual blindness.* (WD)

13.1.3.2. An action of making something A

We have found one example in our corpus that has action reading, namely *falsehood*:

falsehood

action of lying and deceiving someone

(157) *Grappelli had to be content with an action for malicious* ***falsehood.*** (BNC)

(158) *The action for malicious* ***falsehood*** *is much less favourable to plaintiffs than defamation.* (BNC)

This action is the one that repeats itself, someone has been telling lies in order to hurt or someone's reputation. It usually collocates with *malicious*, which adds even more negative connotations.

Metonymy that is at work here is STATE (OF BEING FALSE) FOR ACTION (OF MAKING USE OF THAT STATE).

13.1.3.3. An instance or example of being A

There is one noun belonging to this group and it denotes the actual occurrence of the given state, namely *falsehood.* Apart from the meanings 'the state of being untrue or false' and 'lying', it also has the meaning of 'a false statement', which is the actual example of the given state, that is an instance of the quality referred to by the adjectival root.

a lie or a false statement

(159) *And some high priests have told* ***falsehoods****.* (BNC)

The action of lying leads to concrete utterances or false statements, which are seen as the result of lying. In this sense, the noun can become pluralized and usually appears with the verb *tell.* Here we are no longer dealing with the state of being untrue or repeated lying, but rather with the result of it, a statement or utterance given at a certain point in time. In our view this is the case of ACTION FOR RESULT metonymy. Telling lies is a mental activity which results in a false belief or idea that is conveyed.

Falsehood is thus an example of a double metonymy: the state of being false stands for the action of lying, which in turn stands for the result.

Here we also encounter CONDUIT METAPHOR since the result is put into words. This metaphor is discussed in Lakoff and Johnson (1980: 9) where they go back to Michael Reddy "who observes that our language about language is structured roughly by the following complex metaphor: IDEAS (OR MEANINGS) ARE OBJECTS."

13.1.4. Extensions from the prototypical sense

As already stated above, only one nominalization with adjective as basis has additional meaning and that is *falsehood*:

1) the state of being false:

(160) *These two quests ultimately lead us to the truth, and it is the gradual process of uncovering both* ***falsehood*** *and truth that provides the substance of this movie.* (OD)

2) action of making something false via STATE (OF BEING FALSE) FOR ACTION (OF MAKING USE OF THAT STATE) metonymy:

(161) *Federal law now makes it a felony to use* ***falsehood*** *and deception to hide the origin of the spam messages hawking your fraudulent wares*. (OD)

3) an instance or example of being false via ACTION FOR RESULT:

(162) *Lynch's parents read the story, laughed at the ludicrous* ***falsehoods****, but made no attempt to correct them*. (OD)

13.1.5. Concluding remarks on the suffix *-hood*

After completing our analysis, we can conclude that when the suffix *-hood* is attached to nouns, it can produce the following meanings, some of which were not mentioned in the theoretical part on the suffixes:

1. The state of what is being expressed by the base noun. This is the prototypical meaning of the suffix.

1.1. States of (non)-human life. We have encountered the following nominalizations that belong here:

adulthood, *angelhood*, *animalhood*, *aunthood*, *babyhood*, *beggarhood*, *boyhood*, *brotherhood*, *childhood*, *cousinhood*, *creaturehood*, *cubhood*, *daughterhood*, *fatherhood*, *girlhood*, *godhood*, *grandparenthood*, *humanhood*, *ladyhood*, *manhood*, *motherhood*, *neighbourhood*, *orphanhood*, *parenthood*, *peoplehood*, *personhood*, *puppyhood*, *sainthood*, *selfhood*, *servanthood*, *sisterhood*, *sonhood*, *toddlerhod*, *victimhood* and *womanhood.*

Nominalizations in this group often denote behaviour of N via STATE OF N FOR BEHAVIOUR TYPICAL OF N.

1.2. Social statuses and legal rights: *bachelorhood*, *husbandhood*, *kinghood*, *knighthood*, *monkhood*, *nationhood*, *priesthood*, *prophethood*, *queenhood*, *spinsterhood*, *spousehood*, *statehood*, *widowhood*, *widowerhood* and *wifehood*.

2. A group of people (or animals) sharing the thing referred to by the nominal root. This meaning is derived via DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy. We have divided this into two subgroups:

2.1. A general group of people or animals, a collectivity:

animalhood, *aunthood*, *beggarhood*, *boyhood*, *childhood*, *cousinhood*, *cubhood*, *fatherhood*, *girlhood*, *ladyhood*, *manhood*, *motherhood*, *neighbourhood*, *sainthood* and *womanhood*.

2.2. A group of people denoted by N that stands for a union with a specific purpose, goals of function, often a religious one:

brotherhood, sisterhood, *monkhood*, *priesthood*, *prophethood* and *knighthood*.

We have found the activation of BLOOD LINE FOR PHYSICAL CLOSENESS and MENTAL CLOSENESS FOR FRIENDLY BEHAVIOUR/SIMILARITY metonymies within MENTAL (CLOSENESS) IS PHYSICAL (CLOSENESS) metaphor in the nominalizations *brotherhood* and *sisterhood.*

3. A period of time during which one is N. The state of being N is metonymically understood as the period of time during which one is in the state of N + *hood* via THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N metonymy. This extended meaning is found in the following nominalizations:
adulthood, *babyhood*, *bachelorhood*, *boyhood*, *childhood*, *cubhood*, *girlhood*, *grandparenthood*, *maidenhood*, *manhood* (as opposed to *boyhood*), *priesthood*, *puppyhood*, *queenhood*, *spinsterhood*, *toddlerhood*, *widowhood*, *widowerhood* and *womanhood* (as opposed to *girlhood*).

4. An area of the thing referred to by N. Metonymy responsible for this reading is PEOPLE LIVING IN A PARTICULAR PLACE FOR PLACE metonymy, which is found in *neighbourhood.* A group meaning of 'people' is derived by DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY. (the whole category meaning 'people').

5. A part of the body. STATE OF THE WHOLE PERSON FOR PART OF THE BODY metonymy produces this meaning in *manhood* and *womanhood.*

When *-hood* is attached to adjectives, it can denote the following:

1. The state of being A. This meaning is a central one: *falshood, hardihood, likelyhood, livelihood, unlikelyhood, lustihood.*

2. An action of making something A. This is metonymically derived via STATE (OF BEING FALSE) FOR ACTION (OF MAKING USE OF THAT STATE): *falsehood.*

3. An instance or example of being A. This reading is derived from the action reading via ACTION FOR RESULT metonymy in *falsehood.*

13.2. The suffix *-ness*

Examples ending in the suffix *-ness* are greater in number than those ending in *-hood*. As already stated, this suffix can freely be attached to almost any adjective, both native (*cleanness*) and non-native (*perfectness*), as well as adjectival compounds (*church-relatedness*). Bauer, Lieber and Plag (2013) add that *-ness* is frequently found on nouns and nominal compounds (*baseballness*, *nationness*, *couch-potatoness*), phrases (*every-girlness*, *take-it-for-grantedness*, *you-are-thereness*) and other categories, as they put it (*aboveness*, *beforeness*, *afterwardness*), to name just a few examples of what they give. They further state

(2013: 246) that "-ness seems in effect to serve as a sort of a default way of forming abstract nouns from non-verbal categories in contemporary English." In Old English, however, *-ness* was attached to infinitives and participles and had action meaning (Kastovsky 1985: 244-246): *gebregdness* meaning 'sudden movement' from the infinitive *gebregdan* 'to move suddenly'; *onfundenness* meaning 'experience, discovery' from *onfindan* 'to find out, discover'. Other functions of the suffix were to produce objective, factitive, instrumental or locative nouns (*foreset(ed)ness* meaning 'preposition', *setness* in the sense of 'ordinance, regulation', *gereordness* meaning 'food' and *wuneness* meaning 'dwelling'). In Modern English this action meaning is lost, the suffix is attached mostly to adjectives and denotes a passive state. The meaning of *state or quality of being A* is taken as a central meaning. Other meanings, in our view, equally central, are property, quality or trait. We will not make the same distinctions as the one made by Hamawand (2008) where he gives the meaning of *trait* as a central meaning found with human nouns only and sees the meaning of *property* (for non-humans) as an extension.[15] We believe that the distinction between quality, property, characteristic or trait is irrelevant here, that is, it does not matter whether the derived noun refers to humans or non-humans. We will treat all these notions under the common term *state.* We will use Hamawand's definition of state, as follows: "State is a condition of being that exists at a particular time, as with regard to circumstances. It is a condition that an entity is in at a given moment, which is subject to change." (2008: 67).

For Hamawand's terms 'trait' and 'property' we will use the more general term 'quality'. Another reason why we will not treat 'quality' or 'state' separately is the fact that the majority of our examples is defined in the dictionaries we used as 'quality or state of'. Both of these terms denote the basic essence or nature of the noun in question. The only difference we will argue for is the one given in Givón (1993: 62):

One may divide adjectives somewhat roughly according to those that are more prototypical, and thus code inherent, concrete, relatively stable qualities of entities; and those that are less prototypical, and thus code more temporary, less concrete states.

In this view, qualities are more stable and concrete properties of entities and denote size, colour, auditory qualities, shape, taste and tactile dimensions, whereas states denote different social and mental properties that are less concrete and more transitory. Thus, *sadness* would be characterized as a state and *sweetness* as a quality, since *sad* denotes someone's

15 It is interesting to notice that for the suffix *-ness*, the author does not give the meaning of 'state'.

mental state, and *sweet* a taste property. Furthermore, we view state as something one finds themselves being in, and quality as something that one possesses. But again, we will not treat them as distinct senses in our analysis, but only acknowledge that there is a difference.

Furthermore, we will not use 'inability' as a separate, distinct meaning of the suffix *-ness* since we believe it to belong under the meaning of 'ability', that is quality, only in the opposite sense. So, in our view, *blindness* will not have the meaning 'inability to see' but rather 'state of being blind', *deafness* is the inability to hear, but we will treat it as 'state of being deaf' and so on.

When it comes to derivatives with bases other than adjectives, we will not analyze them since they all denote the same: the suffix here "highlights or picks out the significant characteristics that make that entitiy what it is, denoting the abstract quality or state of those characteristics." (Bauer, Lieber and Plag 2013: 261). That makes them semantically less interesting for our analysis. This is also the case with all the other, adjective-based derivatives that mean *the state of being A*. They are numerous and very predictable in meaning. That is, if one understands the meaning of a certain adjective, one can assume the meaning of the noun derived from this adjective by means of the suffix *-ness* (Carstairs-McCarthy 2002). As already explained in the methodology section, in deciding which examples to provide, we chose the criterion of frequency.

Due to the great number of nominalizations ending in *-ness*, when compared to those ending in *-hood*, we will organize this section a bit differently than we did with the suffix *-hood* where we divided the meanings and listed all the examples for each meaning. That is, we will not have the separate section called 'the state or quality of being A' with the corresponding nominalizations and their examples, such as *arbitrariness*, *fondness*, *homelessness* or *cheerfulness,* since they do not have any extended meanings apart from the central meaning and since it would take up too much space, but rather start our analysis with the extended meanings of *-ness*, providing in each section the example(s) of a prototypical meaning followed by example(s) of other, less prototypical meanings. Sometimes, the central meaning of a state or quality is itself polysemous and all the meanings will be provided. Our analysis will be based on those derivatives that have other, metaphorically or metonymically, extended meanings.

13.2.1. An instance or example of the quality or state denoted by the adjectival root (by A)

As is the case with the suffix *-hood*, the suffix *-ness* can also denote an instance or an example of the quality or state in question. Instance is seen as a single occurrence or a manifestation of a state, in a specific context and in certain time period. This is why most of the *-ness* nominalizations can behave as count nouns: they can be pluralized or appear with the indefinite article. In the dictionaries we used, however, not many examples are given as being able to take indefinite article and become a count noun, but our analysis shows that this is possible for the majority of examples. Langacker (2008) states that this is especially true for emotion terms, which can be used as either a proper noun16, a common count noun and a mass noun. The usage of each of them is connected with the domain of instantiation.17 The noun being count or mass depends on the presence or absence of bounding within this domain. A count noun refers to a bounded region in space, a mass noun, on the other hand, to an unbounded region. Many examples in our analysis refer to emotive states such as *happiness*, *sadness* or *loneliness* and their domain of instantiation is the combination of both space and time, "a patch of emotive "substance" occurs wherever and whenever somebody experiences the emotion in question. Numerous discontinuous patches of this sort may constitute a single instance of this abstract type of substance." (Langacker, 2008: 146). We have divided the instances into acts that show A + ness, causes of A + ness, special types of A + ness and objects exemplifying A + ness.

13.2.1.1. An act of being A

The nominalizations belonging to this group can be paraphrased as 'a A act' as in 'a kindness- a kind act' or 'an act in which one shows A-ness' as in 'a meanness- an act in which one shows meanness'. Most of the examples are count nouns. In this sense, an act is something that someone (an agent) has done and it will be termed as 'event'. We will give one example of the central meaning and one example of the extension. We will claim that the

16 The term 'proper noun' is used here to denote its unique reference (Langacker, 2008, 2013).

17 Langacker (1991, 2008, 2009) distinguishes between a type and an instance of a noun phrase. Noun specifies a type of thing and an instance occupies a particular location, which, for physical entities, is most commonly space:
If (at a given moment) two things of the same type occupy exactly the same location, they are (in our naive conception) the same instance. If they are different instances, they occupy different locations. A type conception represents the abstracted commonality of its instances. (2009: 86).

extension is caused by STATE OR QUALITY FOR EVENT DEMONSTRATING THAT STATE OR QUALITY metonymy. Nominalizations belonging to this group are *blindness, darkness, foolishness, kindness, madness, meanness, politeness, reasonableness, righteousness, rudeness, selfishness, ugliness, unfairness, unkindness* and *wickedness*. In all these examples we are dealing with situations in which one shows the state in question, but the emphasis is on the act of doing so. All the adjectives in bases are typical of person's behaviour and denote how a person treats others so all our nominalizations are seen as results of somebody's quality. We metonymically perceive the quality as somebody's behaviour via QUALITY FOR BEHAVIOUR metonymy.

blindness

This is one of the examples where we find polysemy already in the central meaning, 'the state or quality of being blind':

-the state of being unable to see because of injury, disease, or a congenital condition

(163) *It is useless against all other forms of meningitis which cause deafness,* ***blindness****, and brain damage as well as death.* (BNC)

-the state of not being able to understand things, ignorance

(164) *The row that followed had left her deeply shaken, as much at her own* ***blindness*** *to the kind of man he really was as by the dreadful things he had done.* (BNC)

This is the case of BEING IGNORANT IS BEING UNABLE TO SEE metaphor, a submetaphor of UNDERSTANDING IS SEEING metaphor.

-the acts of keeping something secret, concealment

(165) *Of course, there were and are risks in doing that. From the vantage point of so-called post-liberation, we know only too well the political* ***blindnesses*** *of sexual desire, and how disastrous it can be to make sexuality the prime mover of a political vision.* (BNC)

In this case, the metaphorical *blindness* of not being able to understand is not deliberate. Here we are dealing with deliberate actions of keeping something secret from others or being ignorant on purpose. An expression that often appears in this sense is *wilful blindness,* a term used in law for a situation where a person, in trying to avoid civil or criminal liability for a wrongful act, makes herself or himself ignorant of the facts connected to the act.

(166) *Nor is it enough if the accused acted with **wilful blindness,** even though in some areas of criminal law wilful blindness is treated as knowledge.* (BNC)

darkness

This nominalization is very rich in meanings due to metaphorical processes. As a state or quality, it denotes the following (starting with literal meanings):

-the state of being dark, without light

(167) *The **darkness** of the room made it difficult to see.* (WS)

-the quality of being dark in colour

(168) *Her hair was pulled back into a tight high ponytail; her hair was also streaked with blond and red over the **darkness** of her natural dark brown.* (OD)

Metaphorically, it can denote:

-unhappiness or gloom, the state of trouble

(169) *Not all elements of Tent City life are shrouded in gloom and **darkness,** however.* (OD)

This is the case of SAD IS DARK metaphor.

-the state of being intellectually or spiritually ignorant

(170) *As the conventional story goes, once upon a time the West slumbered in intellectual **darkness.*** (OD)

The reason for this meaning lies in the IGNORANT IS DARK metaphor and IMPEDIMENTS TO AWARENESS ARE IMPEDIMENTS TO SEEING metaphor.

-secrecy or mystery:

(171) *They drew a veil of **darkness** across the proceedings.* (OD)

(172) *His arrival was shrouded in **darkness** and secrecy*. (OD)

Similar to the previous example, this meaning of something unknown is connected to KNOWING IS SEEING metaphor: when we are unable to see something, we cannot understand it and that is why it is secret and mysterious to us.

-the state of being dark as wicked

(173) *It scared her the way she would crave that **darkness**, the wickedness, the evil forces.* (OD)

This is derived via BADNESS IS DARKNESS metaphor.

This state of being wicked further produces act of wickedness:

-an act in which one shows their wickedness

(174) *Corruption in working units and other **darknesses** are major barriers which constrain directly people's initiatives.* (COCA)

foolishness

-the quality of acting stupidly or rashly

(175) *I did not need to go on about Jean-Claude's obstinacy, **foolishness** and arrogance.* (BNC)

-a foolish act , an absurdity, a wrong act attributable to bad judgment or ignorance or inattention

(176) *It was just **foolishness**, the kind of thing people do at your age.* (BNC)

(177) *We talk no more of this **foolishness**.* (BNC)

kindness

-the quality of being kind, considerate and sympathetic

(178) *I believe in acting with **kindness** and compassion.* (The Guardian, May 9, 2016)

-an act of kindness, a manifestation of kind feeling, an instance of kind behaviour

(179) (...) *and so I take this opportunity to thank you again for all your **kindnesses** to me and for the way you made me welcome when I arrived 5 years ago.* (BNC)

madness

The polysemy of the adjective *mad* (as mentally ill, angry, excited) can be explained through various metaphorical processes:

-the state of having a serious mental illness or disorder impairing a person's capacity to function normally and safely

(180) *In any case, my mental state bordered on **madness**, and twenty-four hours of Paris sufficed to restore me to my equilibrium.* (OD)

-the state of chaos and wild activity

(181) *The same **madness** is spreading everywhere as the small business crisis deepens.* (BNC)

This meaning is a case of WILD ACTIVITY IS MADNESS metaphor. In this state of chaos people behave as if they were mad, they are unstable and unreliable, which is often metaphorized as *madness*.

Madness can also denote excitement or enthusiasm, as well as fury or rage. These meanings are seen as very strong emotions derived by STRONG EMOTIONS ARE MADNESS metaphor:

-the state of enthusiasm or excitement

(182) *The **madness** of Mardi Gras had crept into her veins.*

(https://ahdictionary.com/word/search.html?q=madness)

-the state of rage and fury

(183) *In a moment of **madness** Rosenoir kicked Alan Kernaghan as he lay on the ground.* (BNC)

-the quality of being rash or foolish

When we deal with *madness* as a type of person's character, we encounter a case of FOOLISHNESS IS MADNESS metaphor.

(184) *The duo have been entertaining audiences all over the world for more than a decade with their musical **madness** and bizarre antics.* (OD)

-an extremely foolish act

In this sense we find both count and non-count nouns:

(185) *To introduce this sentiment into modern society would be **madness.*** (OD)

(186) *The new laws are **a madness.*** (OD)

This often collocates with *sheer*:

(187) *It was **sheer madness** to attempt the drive during a blizzard*. (WD)

meanness

-the quality of being deliberately mean, a desire to harm others or to see others suffer

(188) *(...) just so Mr Evans could live here and fill it with his **meanness** and greed.* (BNC)

-a mean act, the one in which one deliberately hurts someone

(189) *Taking an aunt's gift from a little girl is **meanness** that swallows the cause.* (Seattle Times, Nov 25, 2014)

politeness

-the quality of being respectful and considerate of other people

(190) ***Politeness** alone made her go back to see the doctor, and listen to her almost stern advice.* (BNC)

-the act of showing regard for others

In this sense it can be used both as a count and a non-count noun:

(191) *That is real **politeness**, then, to stay for two and a half hours, in an old woman's bedroom, listening and asking questions. That is courtesy of a rare kind.* (BNC)

(192) *But this was no more than **a politeness** with little political meaning, and one which disappeared, though slowly, during the seventeenth and eighteenth centuries.* (BNC)

reasonableness

This is a characteristic found in both human and non-human entities. When we talk about reasonableness of a person, it means the person has a good sense and sound judgment. When ideas, actions or emotions are reasonable, it means they are plausible or acceptable to a reasonable person. We often talk about reasonableness of prices, meaning prices are affordable and moderate. The following examples illustrate this:

(193) *The home secretary's warrants will be reviewed by judges, who will check them for lawfulness and **reasonableness**.* (Economist, Jan 21, 2016)

(194) *When he got hold of an idea it obsessed him, he could think of nothing else, and he had a more than common power to persuade himself of the **reasonableness** of what he wished to do.* (Maugham: 1999: 301)

(195) *Paul, despite his **reasonableness**, hasn't energized the libertarian wing of the party.* (Salon, Jan 4, 2016)

(196) *The store is famous for the **reasonableness** of its prices.* (VCB)

-a reasonable act

When a person engages in an activity reasonably and they show the quality of reasonableness, the meaning of a nominalization is changed from QUALITY into ACT:

(197) *You say, 'A reasonable attitude towards mankind is also to my profit'; but what if I find all these **reasonablenesses** unreasonable, all these barracks and phalansteries?* (BNC)

(198) *Miss Bruce went upstairs again, much more nearly disposed to wonder at such **reasonableness** than to admire it.* (Delafield 2015: 88)

righteousness

-the quality of being morally right or justifiable

(199) *He is so convinced of the **righteousness** of the fight that he compares it to the*

Royal Navy's campaign against slavery two centuries ago. (The Guardian, Mar 9, 2016)

-the act or conduct of one who is righteous

(200) *Kings led them into battle for the land (e.g. 2 Kings 8) and prophets pointed them to* ***a righteousness*** *that would bring them to a new highway, a land where mountains would be levelled, rough places smoothed (Is. 40.4), and the Prince of Peace would establish his kingdom.* (BNC)

rudeness

-the quality of being rude

(201) *Yet Mr. Marot's* ***rudeness****, bad temper and propensity for violence were an open secret.*(New York Times, March 11, 2016)

-a rude act

(202) *Mr. Hayes had been thoroughly cross all day, and had not forgiven Reynold's* ***rudeness*** *of the evening before.* (Veley 2012: 141)

selfishness

-the quality of being selfish; stinginess resulting from a concern for your own welfare and a disregard of others

(203) *Another symptom of paedomorphosis is child-like* ***selfishness*** *and self-absorption, and Bill has shown he has that.* (BNC)

-an example of selfish behaviour

(204) *The mess of my life, the* ***selfishnesses*** *and false turnings and the treacheries, all these things could fall into place.* (BNC)

ugliness

-the quality of being repulsive in appearance

(205) *Breeze was struck by the uncompromising* ***ugliness*** *of her home.* (BNC)

-the quality of being unpleasant or immoral by nature

(206) *I knew the* ***ugliness*** *of Heine's nature: his revengefulness, and malice, and cruelty, and treachery, and uncleanness; and yet he was supremely charming among the poets I have read.* (FD)

Here the physical property of an object is transferred onto someone's character, that is outer appearance is reflected in the character of the person through the metaphor MENTAL CHARACTERISTICS IS PHYSICAL APPEARANCE. When *ugliness* is seen as a personality trait, it can metonymically denote an act in which one shows this trait:

-an objectionable act

(207) *Mr. Trump's latest* ***ugliness*** *was to mock the disability of a newspaper reporter who had displeased him.* (Washington Post, Nov 27, 2015)

unfairness

-the state of being unfair or unjust

(208) *The striker then looks as if he's going to burst into tears at the cruel* ***unfairness*** *of it all.* (The Guardian, Nov 14, 2015)

-an unfair or unjust act, an unfair or inadequate treatment of someone or something

(209) *But, as the complaint illustrates, there's no shortage of other legal principles designed to prevent* ***unfairness*** *to consumers that could be applicable in this case.* (Slate, Oct 13, 2015)

unkindness

-the quality of being unkind and insensitive

(210) *And too many patients have stories of how* ***unkindness*** *or the sheer obliviousness of doctors can be devastating and indelible.* (Washington Post, Aug 11, 2016)

-an act in which one displays lack of sympathy

(211) *All his faults, all his* ***unkindnesses****, were forgotten now: only his beauty, his vigour, his great passion, his courage were remembered.* (Weyman 2012: 139)

wickedness

-the quality of being wicked as behaving morally objectionable

(212) *A left-handed preschooler was allegedly forced by his teacher to write with his right hand because left-handedness is "associated with* ***wickedness****."* (Washington Times, Sep 23, 2015)

-the quality of being estranged from God

(213) *This obedience resulted in death because of the* ***wickedness*** *and sin of humanity.* (BNC)

-a wicked act, an act in which one shows their wickedness

(214) *Always before, after similar* ***wickednesses,*** *she had felt almost gleeful triumph, but this time, although she was not truly sorry for what she had done to Mrs Darrell, she felt something like remorse.* (BNC)

(215) *This was* ***a wickedness*** *far outdoing Snowball's destruction of the windmill.* (VCB)

13.2.1.2. An event, a person or a situation that brings about A + ness

The nominalizations belonging to this group can be paraphrased as something (a thing, an event, a situation) or someone that makes you A or makes you feel A. These include *happiness*, *sadness*, *ugliness*, *unpleasantness* and *weakness.* They are all instances of EFFECT FOR CAUSE metonymy. The state actually stands for a thing, an event or a situation that has produced a certain state or that which has caused a certain state.

happiness

-the state of well-being characterized by emotions ranging from contentment to intense joy

(216) *They want to share their* ***happiness*** *with everyone they know in a big celebration.* (BNC)

-a thing, an event or a situation that makes you happy

(217) *He afterwards regarded making friends with Lord Halifax as one of the* ***happinesses*** *of the York years.* (BNC)

(218) *For the people of Delhi this partridge fighting has always been* ***a happiness.*** (BNC)

sadness

-the state of being sad

(219) *In actual fact our children have feelings of joy and happiness and* ***sadness*** *just as we do.* (BNC)

-an event in one's life that causes sadness

(220) *'The only* ***sadness*** *is that Patrick Steptoe has not lived to see this day because it was always a joint team effort,' Ledger said.* (WD)

ugliness

Apart from being defined as a quality of being repulsive or unpleasant (exemplified above) and an unpleasant act, ugliness can also denote an unpleasant situation, something that occurs and creates the state of unpleasantness:

(221) *The photo reflects the situation really well — the differences that exist here and all the* ***ugliness*** *that is happening here.* (Time, Oct 23, 2014)

unpleasantness

-the state of emotional distress

(222) *Women reported less* ***unpleasantness*** *while holding their husband's hand and even slightly lower stress levels while holding the hand of a stranger.* (Time, Aug 16, 2016)

-the quality of giving displeasure

(223) *Nothing wrong with acknowledging the* ***unpleasantness*** *of the job market, especially for someone over 50.* (Slate, Mar 1, 2016)

-an unpleasant experience, situation or event

(224) *It said that "China welcomes anyone with friendly intentions and it bears no grudge for past* ***unpleasantness****."* (New York Times, Jun 11, 2015)

weakness

-the state of lacking strength, either physical or mental

(225) *In a small number of horses, muscle* ***weakness*** *may progress to paralysis.* (WS)

(226) *Nor do I accept that such feelings are a sign of* ***weakness****, provided that they are accompanied by an inner toughness where necessary and justified.* (BNC)

When used with an indefinite article, *weakness* has two readings: one of them is the meaning of a disadvantage, a personal defect or a failing, that which makes a person weak.

-the quality or feature that prevents someone or something from being effective or useful

(227) *Those* ***weaknesses*** *just helped her office win a public records case with the software company Oracle.* (Washington Times, Aug 29, 2016)

(228) *His inability to speak in front of an audience was his* ***weakness****.* (WS)

The other meaning is a strong or habitual liking for something, a special desire; it can also have the meaning of something or someone you like like so much that you are often unable to resist it, and it is often not good for you:

-a special desire

(229) *To tell you the truth I've always had **a weakness** for pictures ever since I was a boy.* (BNC)

(230) *You're his **one weakness**—he should never have met you.* (OD)

Again we have the meaning of a mental weakness, or rather inability to resist someone or something.

13.2.1.3. A specific type of A + ness

Two examples belonging to this group are specific since they are lexicalized in the language as instances of the state and therefore used as count nouns. They are also often premodified. The two examples of this group are *illness* and *sickness*. The instance sense is derived via GENERIC FOR SPECIFIC metonymy.

illness

-the state of being unhealthy in your body or mind

(231) *Working with adults who have suffered or are suffering from mental **illness** using drawing and slide photography.* (BNC)

(232) *Her body was not able to defend itself against **illness**.* (MW)

-an instance of a disease or poor health:

(233) *Stop feeling sorry for yourself. I have patients with real **illnesses** -patients who are dying from cancer.* (BNC)

When used in a sense of an instance, the usual premodifications are *terminal*, *tropical*, *mental*, *chronic*, *intestinal*, *life-threatening*, *heat-related*, *viral* and others.

sickness

This nominalization can denote two types of states:

-the unhealthy state of body or mind

(234) *There are grounds for the belief that the blacks even suffered from an infectious disease similar to influenza, which they described as* ***sickness*** *of the mouth and nose.* (WD)

(235) *She was plagued by* ***sickness*** *most of her adult life.* (MW)

-the feeling you have in your stomach when you think you are going to vomit, nause; a state that usually precedes vomiting

(236) *Nor will he ever suffer from post-natal depression, morning* ***sickness*** *and the list goes on.* (BNC)

-a particular type of illness or disease

(237) *He died from an unknown* ***sickness.*** (MW)

13.2.1.4. An object exemplifying A + ness

Several nominalizations belonging to this group are also examples of the state seen as representations or objects exemplifying the state. *Emptinesses* are words that have no meaning and they are treated as objects of communication (WORDS ARE CONTAINERS FOR IDEAS). *Likeness* is not only the quality of being similar to somebody else, it is also a pictorial, graphic, or sculptured representation of something or someone, that is a two-dimensional design intended to look like a person or thing. Another meaning of it is a copy or a doppel-ganger of somebody. We claim this and other examples to be cases of STATE FOR OBJECT EXEMPLIFYING THE STATE metonymy. It is important to notice that the term object refers here to both physical objects such as persons as well as non-physical objects like situations or ideas. Apart from *emptiness* and *likeness*, other nominalizations in this section are *foolishness*, *goodness*, *highness*, *holiness* and *thickness.*

emptiness

-the state of containing nothing (of space an object)

(238) *In spite of the hush and* ***emptiness*** *of the house, the two women smuggled the habit in like thieves (...)* (BNC)

Metaphorical meaning of *emptiness* is seen in the following examples:

(239) *Contempt for the **emptiness** of the 'caring' rhetoric of people like Chris Patten (...)* (BNC)

(240) *He had talked wildly about the meaning of life, the **emptiness** of it all, the lack of scope offered by the Guardian Building Society.* (BNC)

(241) *Lennis had stressed the **emptiness** of his life in having a daughter who had little to do with him.* (BNC)

(242) *I could drink, he thought for a moment, and that would fill the **emptiness** and ease the hunger.* (BNC)

(243) *Now it was an ache, an **emptiness** that made him think as well as well as act.* (VCB)

In all these examples we are dealing with CONTAINER metaphor. The postmodification of *emptiness* is seen as a container that is empty (LINGUISTIC EXPRESSIONS ARE CONTAINERS FOR MEANING, LIFE IS A CONTAINER). In the last two examples is the body that is conceptualized as a container.

When used as a count noun, it refers to the actual utterances that contain no meaning:

(244) *Despite Leon's words, despite my certain knowledge that the spirit of Francis had sailed after its living son away, down the drive, out of Sleet to freedom, I entered Leon's room determined to winnow some vestige of that poor ghost, Francis's ghost, from what I would find in there; and, having found it, perhaps my intention was to sit with it awhile uttering such **emptinesses** as, I'm sorry and, Forgive me.* (BNC)

Here the nominalization stands for words in the state of emptiness, that is, having no meaning.

foolishness

Apart from the quality of being foolish, this nominalization denotes the following:

<u>-ideas that are foolish</u>

(245) *"I don't want to hear none of her **foolishness**," Ms. Jones said.* (New York Times, May 24, 2016)

Here *foolishness* stands for a foolish idea, which is enabled by IDEAS ARE PEOPLE metaphor.

goodness

-the quality of being moral and good

(246) *But along with my innocent childhood belief in the resurrection of rock music and the essential* ***goodness*** *of mankind, this myth was shattered too.* (OD)

In the sense of morality, we can talk about the *goodness* of character, of disposition or conduct, but *goodness* can also refer to physical objects, especially to food in the sense of having nutritional values:

(247) *Even the busiest people have a chance to cook mouth-watering food that is full of* ***goodness*** *and at the same time is low in fat.* (BNC)

Goodness can also be used as a euphemism for God. According to Online Etymology Dictionary, it is used "from 1610s as a term of emphasis, first recorded in for goodnesse sake, i.e. "as you trust in the divine goodness" (i.e., God)":

(248) *For* ***goodness sake*** *stop panicking!* (BNC)

In the given example it expresses annoyance and impatience, but it can also express anger or surprise:

(249) ***My goodness****, you gave me quite a fright!* (BNC)

Goodness substitutes *God* in exclamations and fixed expressions not only to show one's annoyance or anger, but also to display one's gratitude, relief or happiness that something good has happened or something bad has been avoided, as a substitution for *thank God:*

(250) *She did not go on to express the next thought in her mind:* ***thank goodness*** *Annabel was going away to school, and very soon the association would be closed.* (BNC)

Since God in Christianity is seen as an example of virtue and divine character and goodness is one of His characteristics, we believe the usage of goodness for God is due to STATE FOR PERSON EXEMPLIFYING THAT STATE metonymy.

highness

-the quality of being high or elevated

(251) *Her wide dark brown eyes and her thick coarse hair that she keeps styled in a professional bob accent the* ***highness*** *of her cheekbones.* (OD)

Through EUPHORIC STATES ARE UP and HAPPY IS UP metaphor, highness can also denote happiness and euphoria:

(252) *Hunger and sleeplessness seemed strangers to him, yet it was anxiety, not* ***highness*** *of spirits, that kept him awake.* (BNC)

(253) *Many signs of* ***highness*** *are the same as drunkenness: poor balance, slurred speech, watery eyes.* (Time, Feb 11, 2014)

Metonymically, *highness* is used for person of a high rank. First we have the activation of HIGH STATUS IS UP metaphor in the nominalization *highness* and then this state of having a high rank stands for the person of a high rank:

-a title given to a person of royal rank, or used in addressing them:

(254) *Therefore I would like to propose that her Royal* ***Highness*** *be re-elected with acclaim.* (BNC)

In this sense, the metonym is capitalized.

This metonym is not used only for person of a high royal rank, but also for any person that has a high status in a society, as a celebrity etc.:

(255) *Late last night, her* ***highness*** *Beyoncé shocked the Internet by dropping an entire full-length album complete with videos for every single song.* (Time, Dec 13, 2013)

holiness

-the quality of being holy, that is spiritually pure or virtuous

(256) *The right use of freedom leads to the Christian discipline that we call* ***'holiness'****.* (BNC)

-a title or form of address given to high religious officials as the Pope, Orthodox

Patriarchs and the Dalai Lama

(257) *For Tibetan freedom and for thousands of years of long life for His **Holiness** the Dalai Lama -- and because the Chinese should leave Tibet.* (BNC)

(258) *I suppose His **Holiness** Pope Breakspear told you about the senator's offer.* (BNC)

In cases of QUALITY FOR PERSON EMBODYING THE QUALITY, the nominalization is capitalized to show respect for the person in question.

likeness

-the quality of being alike, resemblance, similarity

(259) *Given the bodily **likeness of** the great apes to ourselves* (...) (BNC)

(260) *The display was sad enough — due to its petty **likeness** to an infomercial — before it was reported that the steaks weren't even Trump Steaks.* (Salon, Mar 9, 2016)

-depiction or portrait, a pictorial, graphic, or sculptured representation of something

In this sense the metonym is a count noun. This representation is actually characterized by the likeness of it with the real person:

(261) *Few would argue that **likenesses** of American forefather George Washington should be removed from public spaces, although he, too, owned hundreds of slaves.* (Washington Post, May 8, 2016)

(262) *Throughout the weekend, fans could be spotted in T-shirts with Prince's **likeness**, while others just wore purple.* (Los Angeles Times, April 25, 2016)

-a copy, a doppel-ganger of someone:

(263) *The German term for a GHOST which is actually the' double' or identical **likeness** of someone who is about to die.* (BNC)

In this sense the metonym is a person resembling someone else.

thickness

This nominalization can refer to different types of qualities:

-the quality of being thick

-as great, heavy in form:

(264) *Only five per cent of the staves were of the correct **thickness** but the rest were nearly all less than nine-sixteenths of an inch thick.* (BNC)

-as dense (for solid state)

(265) *Luke's shoulders strayed eagerly to the back of his neck and up into the* ***thickness*** *of his dark hair.* (BNC)

-as smoky, foul, or foggy (for gas state)

(266) *He turned up his coat collar and gave his eyes time to adjust to the* ***thickness*** *of the night fog.* (BNC)

-as viscous, resistant to flow (for liquid state)

(267) *Boiled to the* ***thickness*** *of honey* (OD)

It can also be used metaphorically for person's speech in the meaning of incoherent speech:

-as inarticulate (for person's speech)

(268) *Judging from the* ***thickness*** *of his speech he had been drinking heavily.*

(VCB)

(269) *The* ***thickness*** *of the actors' regional accents may make "Toast" initially incomprehensible to a New York theatergoer. (*New York Times, May 2, 2016)

Here we find SPEECH DIFFICULTY IS THICKNESS metaphor, within which there is SPEECH ORGAN (TONGUE) FOR SPEAKING metonymy. In order to produce articulate language, tongue needs to move freely and be flexible. In the case of drunkenness or some illnesses, tongue becomes stiff and thick and cannot move freely, which results in inarticulation.

Another metaphorical usage of thickness is found in the sense of stupidity and dullness:

-the quality of being slow to understand

(270) *When I was at school, most children with dyslexia (...) were patronized and considered to be 'slow' or even referred to as 'thick' by their teachers, and were even given a clip around the ear to encourage them to deal with their '****thickness****' or 'stupidity.'* (Prosser 2010: 67)

This sense emerges through STUPIDITY IS CLOSE TEXTURE metaphor. When person's mind (and mind is a metonymy for intelligence) is thick, it means the ideas cannot get in easily. The same is true for skull: when we cannot *get through one's thick skull*, it means that the person is not very clever and it takes time to explain something to them.

When *thickness* is used as a count noun, its meaning is connected with the literal meaning describing a physical object:

-a layer, sheet, stratum, or ply:

(271) *Each floor is a single* ***thickness*** *of concrete.* (OD)

(272) *Trent didn't expect the twelve* ***thicknesses*** *of cotton sheet to last* (...) (BNC)

It refers to a physical object (a layer) which is thick.

13.2.1.5. Other examples of A + ness in the meaning of manifestation or instance of a state in a certain time period

In this section we are dealing with nominalizations that cannot be treated the act of being A or the cause of A + ness, but rather only a display of the state in question in a certain time period.

This group is relatively large and almost all our examples can be used in this sense. When used as instances they are often postmodified, which means it is a specific manifestation of the state. These are: *aggressiveness*, *attractiveness*, *awareness*, *blackness, bitterness, brightness, calmness, carefulness, carelessness, casualness, cleverness, coldness, completeness, consciousness, darkness, eagerness, fitness, firmness, freshness, friendliness, fullness, gentleness, hardness, harshness, lightness, likeness, loneliness, openness, powerlessness, recklessness, responsiveness, restlessness, richness, sharpness, shyness, slowness, smoothness, softness, stiffness, stillness, sweetness, tenderness, tiredness, toughness, uniqueness, unwillingness, warmness, weariness, whiteness* and *willingness.*

Here we can assume that the reason why we can use both definite and indefinite article lies in the GENERIC FOR SPECIFIC metonymy. Since the manifestation of a state is not a rich soil for further investigation, we will not discuss it in detail and give all the examples, especially since the meaning of all the given nominalizations is the same. They can be paraphrased as 'a kind of A + ness':

awareness

-the state of being aware or conscious, the quality of having knowledge and perception of a situation or a fact

(273) *The town center bombings raised **awareness** of the need for a scanner in Warrington* (…) (BNC)

-a manifestation of the state

(274) *There, **an awareness** exists that the critical attitude is fundamental to the growth of academic knowledge.* (BNC)

carelessness

-the quality of not being careful

(275) *Most road accidents are caused by **carelessness** on the part of motorists.* (OD)

-a manifestation of the quality

(276) *'And none suspects?' asked Forest with **a carelessness** that in no measure deceived the constable.* (BNC)

weariness

-tiredness, extreme fatigue

(277) *Coach Luke Walton said it's part of their goal to minimize travel **weariness**.* (Washington Times, Jan 6, 2016)

-a manifestation of the quality

(278) *Her hair was thin and fair and long, caught back with an elastic band, and her face was thin and long too, wizened and pinched. **A weariness** that was as much chronic boredom as physical tiredness seemed the most dominant thing about her.* (BNC)

13.2.2. An activity one is engaged in

There are few nominalizations in our corpus that have action reading. Some of them are similar to act nominalizations, but we have decided to separate those nominalizations referring to the act of A + ness since those denote a single event and therefore can be seen as examples or instances of the state. This group is different since the nominalizations belonging here denote a process or an unbounded activity.

One of the most frequent examples of nominalizations ending in *-ness* in general is *business*, and its central meaning is the activity one is engaged in, but it will not be included in our study due to the simple reason of being replaced by *busyness* as 'state of being busy'. Diachronically looking, the origin of the word is Old English *bisignes* meaning 'care, anxiety,

occupation' from bisig 'careful, anxious, busy, occupied, diligent', but since the sense 'state of being much occupied or engaged' was abondened in the Middle English period, we feel it does not serve our purposes to be included in our analysis.

Other examples in this group are *cleanliness*, *drunkenness, fitness and forgiveness.* They are caused by the STATE FOR ACTION metonymy.

cleanliness

-the state of being clean

(279) *Mr Dinkins expressed an envy of Tokyo's* ***cleanliness*** *and low crime rate, but said conditions in his city were improving (...)* (BNC)

(280) *Washing and shaving ensure outward* ***cleanliness.*** (BNC)

-the quality of keeping something clean

(281) *Wombles are fictitious animals from a TV series noted for their* ***cleanliness****, and for cleaning up litter and putting it to good use.* (BNC)

-the habit or the process of keeping something clean

(282) *In the U.S., the company is also trying* ***cleanliness*** *and service.* (Los Angeles Times, Nov 17, 2015)

(283) *Need an economic booster? Try* ***cleanliness.***

(http://www.cleaneuropenetwork.eu)[18]

In the last two examples we are dealing with services that do the job of keeping something clean. It is the activity they perform in order to achieve the state of being clean. This is the case of the EFFECT FOR CAUSE metonymy.

drunkenness

-a temporary state of being drunk resulting from excessive consumption of alcohol

(284) *Possibly there are similarities between the neurological state in sleep and* ***drunkenness*** *which provide the substrate for this experience.* (BNC)

(285) *One of the factors, according to investigators, was that the pilot became disorientated as a result of his* ***drunkenness****.* (Seattle Times, Aug 30, 2016)

-habitual intoxication; prolonged and excessive intake of alcoholic drinks

Due to the verbal origin of the base, *drunkenness* can also denote the process of consuming alcoholic drinks, which leads to the state of being drunk.

18 litter prevention organization

(286) *In 1850* ***drunkenness*** *was a huge problem in Darlington town center.* (BNC)

(287) *A post-Games review found a "toxic culture" had been allowed to develop in the team and reported allegations of bullying and* ***drunkenness*** *among other problems.* (Reuters, Jun 21, 2016)

In this sense, it often collocates with *public*, meaning drinking alcoholic beverages in public places:

(288) *Over the years, people complained about traffic congestion, trash, noise and* ***public drunkenness****.* (Los Angeles Times, Jul 11, 2016)

fitness

Fitness as state or quality can have several meanings:

-the state of being fit and healthy, attractive or fanciable

(289) *The aim of exercise is to achieve a beneficial level of* ***fitness*** *and health, physically and mentally.* (OD)

-the quality of being suitable: suitability, appropriateness

(290) *To gain an idea of the overall* ***fitness*** *for work, a physiotherapist needs to evaluate the employee's job (…)* (BNC)

-an organism's ability to survive and reproduce in a particular environment:

(291) *Successful light harvest is probably one of the major determinants of plant* ***fitness****, and other plants are likely the most important impediment to light-foraging success.* (BNC)

As an action nominalization, it is used as a premodifier and in expressions connected to healthy life and sports (a fitness center, fitness equipment, fitness training):

-the cultivation of an attractive and/or healthy physique

(292) *There's even a* ***fitness center*** *and two gyms.* (BNC)

(293) *Amenities include health and* ***fitness center*** *with squash courts and indoor pool.* (BNC)

In this sense, action that is denoted by *-ness* nominalization is such that is causes the state due to the EFFECT FOR CAUSE metonymy: fitness is a state, effect or result brought about by doing certain activities.

forgiveness

This nominalization is made up of participle + *ness* and is actually contracted from *forgiven* + *ness*. Due to its verbal origin, its meaning is also more 'active' and denotes both the process of forgiving and of being forgiven.

-the readiness to forgive (a quality)

(294) *We need to create a culture of tolerance and* ***forgiveness*** *and join hands together as one nation*. (OD)

-the action or process of forgiving

(295) *This isn't a person who deserves your* ***forgiveness*** *or your friendship.* (Slate, April 27, 2016)

Here the subject /agent is the person who does the forgiving.

-the action or process of being forgiven

(296) *Politicians seem able to gain* ***forgiveness*** *from the public and come back after just about anything.* (WD)

(297) *'I want to ask for* ***forgiveness*** *to the family of the woman who lost her family,' Sanchez said.* (Washington Post, May 9, 2016)

In these examples forgiving is 'performed' on the patient.

13.2.3. A period of time during which one is in the state of A + ness

Nouns ending in suffix *-ness* can also denote period of time during which one is in the certain state. The metonymy STATE OF BEING A FOR THE PERIOD OF TIME DURING WHICH ONE IS A is responsible for such a reading. The central meaning of state has already been exemplified so only examples for the meaning of a period will be provided. This group inludes *darkness*, *illness* and *sickness*.

darkness

-night, period of time containing no daylight

(298) *(...) so that all or part of the backdown procedure is carried out during* ***darkness***. (BNC)

(299) *(...) and passing it on to other parts of the plant during* ***darkness*** *(...)* (BNC)

illness

-the time period during which one is ill

(300) *I wish to thank all my friends for the lovely flowers, cards and letters sent to me during my* ***illness.*** (BNC)

(301) *In a state of health, individuals will be self-caring, but during* ***illness****, injury or disease, additional self-care needs may be present.* (BNC)

sickness

-the time period during which one is sick

(302) *Selenium is believed to help combat oxidative stress during* ***sickness****.* (COCA)

(303) *Parents needed children to work farms and fields and to support them during* ***sickness*** *and old age.* (COCA)

13.2.4. An area characterized by being A

There are few nominalizations belonging to this group that denote space or area which is characterized by the state of being A. We believe that STATES ARE LOCATIONS metaphor enables such a reading. For the nominalizations already mentioned above only the extended sense of area will be given. This group includes *blackness*, *darkness*, *emptiness*, *lightness*, *whiteness* and *wilderness*.

blackness

This nominalization denotes following states and qualities:

-the quality of being black in colour

(304) *The disparity seems further exaggerated by the size and* ***blackness*** *of the soldier's hat.* (OD)

-the state of complete darkness, absence of light

(305) *Clouds which made the* ***blackness*** *all the more impenetrable.* (BNC)

-the state of belonging to any human group with dark-coloured skin

(306) *Black kids, at a stage during their latter secondary-school years, begin to feel different because of their* ***blackness****.* (BNC)

This nominalization also has a metaphorical meaning:

-the state characterized with depression and despair

(307) *As their words evoke the McCarthy era, we are reminded of the* ***blackness*** *of the postwar period.* (OD)

Through metaphor, BADNESS IS BLACK, *blackness* denotes something negative. Black is often associated with something immoral, often found in expressions such as *black market*, *black economy* or *black-souled*. The reason why black denotes depression and feelings of sadness can be also be found in the humoral theory, according to which the four chief fluids of the body (blood, phlegm, yellow bile (choler), and black bile (melancholy)) determine person's physical and mental qualities by the relative proportions in which they were present (as stated in Oxford Living English Dictionary). Even the origin of the word *melancholy* is the following:

c. 1300, "condition characterized by sullenness, gloom, irritability," from Old French melancolie "black bile, ill disposition, anger, annoyance" (13c.), from Late Latin melancholia, from Greek melankholia "sadness," literally (excess of) "black bile," from melas (genitive melanos) "black" + khole "bile". Medieval physiology attributed depression to excess of "black bile," a secretion of the spleen and one of the body's four "humors." (http://www.etymonline.com/).

Therefore, within this metaphor (BADNESS IS BLACK) we find BADNESS FOR DEPRESSION metonymy.

The locative meaning of it is derived through the literal meaning of *blackness* as having a black colour:

-<u>place or area of little or no light</u>

(308) *She looked down it: all she could see was* ***blackness.*** (BNC)

(309) *Dust showers from the ceiling. You don't see it in the* ***blackness****, but feel it on the face.* (BNC)

darkness

-<u>an unilluminated area or a place with no or very little light</u>

(310) *The bottomless pit is the earth in total* ***darkness*** *with no light from the sun, every island destroyed, the earth's surface broken up.* (OD)

(311) *Then the train roared away into the* ***darkness****, and was gone.* (VCB)

emptiness

-an empty area or space

(312) *I drove for a while across this fearsome* ***emptiness.*** (CCED)

(313) *There's* ***an emptiness*** *there. An unfilled, unfulfilled space deep inside them.* (BNC)

lightness

Like many other nominalizations, this one can denote several types of states of qualities due to the polysemy of the base adjective *light*. It is a physical property of things, objects or people.

-the quality of having a light colour

(314) *Mid-century modern interiors tend to explore darker hues and work just fine in low light, whereas Scandinavian interiors aim to maximize* ***lightness*** *in a room.* (Washington Post, Jan 25, 2016)

-the quality of having little weight

(315) *We've long passed the point of diminishing returns with thinness and* ***lightness*** *of personal tech devices, but we can't resist pushing further.* (The Verge, Jan 6, 2016)

-of food: lacking density or richness (as opposed to spicy)

(316) *In the glass this wine is pristine, bright and almost translucent in its* ***lightness****, with aromas to match: light, high-toned and savory.* (Los Angeles Times, Feb 19, 2016)

-of a person or animal: the gracefulness of movement

(317) *'Work on the* ***lightness****,' he said, as she practiced a pirouette at the far end of the barn.* (The New Yorker, Aug 1, 2016)

It can also have other meanings, metaphorically conditioned:

-lack of depth and seriousness, requiring little mental effort to comprehend or to do

(318) *Last month, BirthMoviesDeath reported that reshoots on Suicide Squad were happening in an effort to add "more humor and* ***lightness*** *to the film."* (Time, Apr 11, 2016)

(319) *While "Strolling" is a serious show, it does have moments of* ***lightness****.* (The New Yorker, Mar 11, 2016)

(320) *The* ***lightness*** *of Courtney's sentence is obvious when it is compared to other recent sentences.* (BNC)

IMPORTANT IS WEIGHT and DIFFICULTY IS HEAVINESS metaphor are combined here and enable lightness to be a property of ideas, tasks and mental products.

-joy, pride and cheerfulness, freedom from worry or trouble

(321) *And a sudden **lightness** of heart took her.* (BNC)

(322) *Her mood had changed, it seemed, and she was all **lightness** and joy.* (BNC)

This is the case of HAPPINESS IS LIGHT metaphor.

Metaphorically, the state of being light can stand for the illuminated area, but this is not very frequent:

(323) *Two minutes is the most time they spend in the **lightness**, and four to six minutes in the darkness.* (BNC)

whiteness

Similar to its antonym *blackness*, this nominalization has more than one literal reading:

-the quality of having a white colour

(324) *The structure which gives the beetle Cyphochilus its extraordinary **whiteness** is contributing to the development of a type of super light white paper.* (BBC, Jul 8, 2014)

-the quality of being pale

(325) *The **whiteness** of her face was intensified by crimson lipstick and heavy eyeliner.* (The New Yorker, May 23, 2016)

Metonymically the meaning of *whiteness* is extended to mean cleanliness and purity:

-the quality of being clean and pure, innocence

(326) *In private life and public station there is not a shadow to stain the **whiteness** of his fame.* (VCB)

The metonymic chain WHITENESS FOR PURITY and PURITY FOR INNOCENCE allow this nominalization to be used with notions other than physical objects.

Whiteness is also found in the meaning other than a state of being white:

-an area of light surface

(327) *We were surrounded by a* ***whiteness*** *as vast as a frozen ocean.* (Wall Street Journal, Jan 7, 2016)

In this case it is used as a count noun.

wilderness

The most frequent meaning of this nominalization is area, uncultivated and uninhabited by human beings. It can refer to a forest, a barren plain or a desert. Etymologically, however, it used to denote a state and there are still some examples of it found in present day English.

-wildness, the state of being uncultivated, uncivilized or lacking moral restraint

(328) *Moore's only guiding principle is, as Costello told me, 'the* ***wilderness*** *of her mind.'* (The New Yorker, Apr 2016)

(329) *Her credit should be good. Her* ***wilderness*** *years were over. She wasn't hallucinating any more, she knew.* (BNC)

Another meaning of state, found more frequently, is commonly used in a political context:

-the state of disfavor or decline

(330) *He led the Democratic party back from the* ***wilderness.*** (OD)

(331) *Serious infighting resulted, and the Democratic Party entered a* ***wilderness*** *period that it hasn't recovered from.* (OD)

In politics, the expression that is used to denote lack of influence and state of inactivity is *in the wilderness*:

(332) *..a party released from 12 years in the* ***wilderness.*** (CCED)

Another meaning of *wilderness* is a great amount of something, often a confusing one:

(333) *The duties of citizenship are lost sight of in the* ***wilderness*** *of interests of individuals and groups.* (VCB)

(334) *'a* ***wilderness*** *of masts in the harbor'* (VCB)

However, most frequently it denotes an area:

-a wild and uninhabited area left in its natural condition

(335) *Mrs. Bush, do you and your husband ever get out into the* ***wilderness*** *for a hike or a picnic?* (Time, May 10, 2016)

(336) *The city is surrounded by* ***wilderness****, and there are essentially only two ways out via road.* (US News, May 7, 2016)

13.2.5. A group of animals

Three nominalizations we have encountered in our corpus denote collective nouns, namely a group of animals. A *busyness* is a group of ferrets, a*n unkindness* is a group of ravens and *a whiteness* is a flock of swans. For the last two nominalizations we have already given the example of state or quality of being A, therefore only the example for the group meaning:

busyness

-the state of being or appearing to be actively engaged in an activity

(337) ***Busyness*** *increases stress and tension, and errors and accidents are more likely to occur.* (BNC)

-a group of ferrets

(338) *A group of ferrets is called* ***'a busyness'*** *of ferrets. Spend some time playing with ferrets and you'll soon understand where the word* ***'busyness'*** *came from!* (http://sciencemattersnow.com/wp-content/uploads/2013/07/SS_Writing-Exciting_Nonfiction_Handout.pdf)

unkindness

(339) *A skull rests on the threshold as a reminder of the wages of sin, and, above,* ***an unkindness*** *of ravens presides.* (OD)

whiteness

(340) *We stopped by the river, as we had spotted* ***a whiteness*** *of swans waddling ashore to be fed by delighted tourists.* (http://nesling.blogspot.hr)

Busyness as group name associated with the characteristics of the animal. Ferrets tend to live in groups and when awake, they are very lively and active. They were also used in hunting, due to their build and nature and are very skillful at hunting rodents and rabbits.

While the reason for the group reading in *whiteness* is more obvious and lies in the white color of swans, *unkindness* is, like many other collective nouns in English, a bit more peculiar. Many interesting examples of collective naming were discussed by Chloe Rhodes in her book *The Unkindness of Ravens: A Book of Collective Nouns* (2014). She claims that the reason for this, and many other labellings, has origins in the Middle Ages, the period of poor health and diseases, superstition and legends. Ravens were connected to death or were believed to be the mediators between life and death because they often circle around animals that are about to die. "As carrion birds, ravens often circled when an animal was close to its end. This behaviour, combined with their black feathers, gave them a sinister reputation." (2014: 137). Rhodes also gives further reasons found in other studies of animals and their names: ravens expel their youngs too early from the nest and leave them to take care of themselves. When they are older, they die of famine, often attacked by their young ones. This behaviour is thought to be unkind and unkindness became a personality trait associated with ravens. Therefore the name used to denote a group of them is based on the personality trait they hold.

Again we hold metonymy responsible for this phenomenon of using a property typical of an animal to refer to the whole group of animals. DEFINING QUALITY OF ONE MEMBER FOR THE WHOLE CATEGORY OF MEMBERS WITH THE SAME QUALITY within Category-and-Property ICM. That is, the quality of one member is understood as the whole category or a group of members. It is worth mentioning that, at least in the examples we have extracted, all nominalizations are postmodified with the exact name of the animal they denote.

13.2.6. Extensions from the prototypical sense

All the nominalizations ending in suffix *-ness* we have analyzed here have more than one meaning. Apart from the prototypical meaning of 'the state or quality of being A', they can denote the following: an act of being A; an event, a person or a situation that brings about A + ness; a specific type of A + ness; an object exemplifying A + ness; a manifestation or an instance of a state in a certain time period; an activity one is engaged in; a period of time

during which one is in the state of A + ness; an area characterized by being A and a group of animals.

Most of them denote a state or quality of being A and a manifestation or an instance of the state or quality in a certain time period, which enables them to be used with the indefinite article (*an agressiveness*, *a toughness*).

We will give a list of those nominalizations that have more than one extended meaning. Two extended meanings are found with the following:

blackness: an area characterized by being A + an instance of a state in a certain time period

emptiness: an object exemplifying A + ness + an area characterized by being A

fitness: an instance of a state in a certain time period + an activity one is engaged in

foolishness: an act of being A + an object exemplifying A + ness

illness: a specific type of A + ness + a period of time

lightness: an instance of a state a certain time period + an area characterized by being A

likeness: an object exemplifying A + ness + an instance of a state a certain time period

sickness: a specific type of A + ness + a period of time

ugliness: an act of being A + an event, a person or a situation that brings about A + ness

unkindness: an act of being A + a group of animals.

This is shown in the following example sentences:

blackness

state

(341) *But not necessarily in a negative way: he had used his* ***blackness*** *to become a better boxer.* (BNC)

area

(342) *They have another sense to help them find their way through the* ***blackness.*** (BNC)

manifestation of a state in a certain time period

(343) *The abortion industry is trying to make it sound like abortion is a joyful experience," he said. "But even women who say it was necessary say it was not joyful. It is a grief and* ***a blackness****, and it changes you.* (New York Times, Feb 29, 2016)

emptiness

quality/state

(344) *The **emptiness** of the big shimmering pool in the artificial light galled her.* (BNC)

object exemplifying A + ness

(244) *Despite Leon's words, despite my certain knowledge that the spirit of Francis had sailed after its living son away, down the drive, out of Sleet to freedom, I entered Leon's room determined to winnow some vestige of that poor ghost, Francis's ghost, from what I would find in there; and, having found it, perhaps my intention was to sit with it awhile uttering such **emptinesses** as, I'm sorry and, Forgive me.* (BNC)

area

(345) *On my left, there are several yards of **emptiness**, then trees.* (OD)

fitness

state

(346) *I like watching doubles but believed singles was the superior game, requiring more **fitness**, skill and strategy.* (New York Times, Aug 6, 2016)

an instance of a state in a certain time period or a specific situation

(347) *Moreover, fitness too is a phenotype and varies from environment to environment, both because other aspects of the phenotype develop differently in different environments, and because a given shape or behaviour or physiology will confer different **fitnesses** in different environments.* (Bendall: 1986: 227)

an activity one is engaged in

(348) *If you're an exercise newbie, fall — crisp and finally free of summer's humidity — is the perfect time to start a **fitness** routine.* (Seattle Times, Sep 6, 2017)

foolishness

state

(349) *But that doesn't mean I'm going to add to your **foolishness** by tying that filthy rag over the wound.* (BNC)

an act of being foolish

(350) *After one of Ralph's more painful **foolishnesses**, she had once persuaded a lover to telephone Grunte pretending he had a message from Downing Street.* (BNC)

an object exemplifying A + ness

(351) *Why'd I have to go up there, listen to all that **foolishness**, get excited about it like a little kid?* (VCB)

illness

state

(352) *When in July of that year Rockingham gave place to Chatham, Conway retained his office; and when Chatham became incapacitated by **illness** he tamely acquiesced in Townshend's reversal of the American policy which he himself had so actively furthered in the previous administration.* (YD)

a specific type of A + ness

(353) *With 300 people each day dying from tobacco-related **illness** insurance firms know a risk when they see one.* (BNC)

a period of time

(354) *There were two other letters that she thought might interest John, one on the subject of salary being paid during **illness**, and suggesting a code of employment, and the other about National Health Insurance.* (BNC)

lightness

quality

(355) *The noticeable interior **lightness** is thanks to the Teflon panels of the movable roof structure.* (OD)

an instance of a state a certain time period

(356) *The translucent polycarbonate ceiling gives the corridor **a lightness** it would not otherwise have.* (OD)

an area characterized by being A

(323) *Two minutes is the most time they spend in the **lightness**, and four to six minutes in the darkness.* (BNC)

likeness

quality

(357) *Her **likeness** to him was astonishing.* (OD)

an object exemplifying A + ness

(358) *He made **a likeness** of Helen of Troy which convinced all who came to sacrifice*

there that the Trojan War had been well fought; and for this famous portrait, Zeuxis had lined up the young women of Croton, and taking an ear from one, the set of chin from another, the legs, the arms and stomach and so forth of others, he had assembled his divine beauty. (BNC)

an instance of a quality in a certain time period

(359) *Breeze studied it anew, trying to trace* ***a likeness*** *to the fierce old invalid.* (BNC)

sickness

state

(360) *You have a severe headache with fever,* ***sickness*** *and possibly a rash.* (OD)

a specific type of A + ness

(361) (…) *contagious* ***sicknesses*** *like chickenpox, measles, and mumps, even diphtheria, swept through the drafty filthy dormitories.* (COCA)

a period of time

(362) *John looked deep into Anne's eyes as he promised to remain true through* ***sickness*** *and health*. (OD)

ugliness

quality

(363) *Her spirits rose as they left the* ***ugliness*** *of London behind.* (BNC)

an act of being A

(207) *Mr. Trump's latest* ***ugliness*** *was to mock the disability of a newspaper reporter who had displeased him.* (Washington Post, Nov 27, 2015)

an event, a person or a situation that brings about A + ness

(364) *The* ***ugliness*** *that followed culminated in a weeklong teachers strike.* (Chicago Tribune, Aug 30, 2014)

unkindness

quality

(365) *In 2009, he threatened to leave the site because there was "too much aggression and* ***unkindness*** *around"*. (BBC, Mar 30, 2015)

an act of being A

(366) *And never a reproach to me, never an* ***unkindness****, never an angry word!* (VCB)

a group of animals

(367) *The **unkindness** of ravens at the Tower of London is about to enjoy the kindness of taxpayers, in a move designed to improve the birds' accommodation.* (OD)

Whiteness has even three extended meanings: an instance of a state in a certain time period + an area characterized by being A + a group of animals, and *darkness* even four: an act of being A + an instance of a state in a certain time period + a period of time + an area characterized by being A.
The examples are as follows:

whiteness

quality

(368) *The unremitting **whiteness** of the walls is anchored by a black marble floor.* (OD)

an instance of a quality in a certain time period

(369) *He was fighting savagely: his blade had a **whiteness** about it I couldn't understand.* (Bartlett 2007: 533)

an area characterized by being A

(370) *I should have been worried for them, but instead I watched the ambulance fade into **whiteness**, until all I could see were the red lights, spinning, and after a while, not even them.* (COCA)

a group of animals

(340) *We stopped by the river, as we had spotted **a whiteness** of swans waddling ashore to be fed by delighted tourists.* (http://nesling.blogspot.hr)

darkness

quality/ state

(371) *The **darkness** of her skin betrayed her Mediterranean heritage.* (WS)

an act of being A

(174) *Corruption in working units and other **darknesses** are major barriers which constrain directly people's initiatives.* (COCA)

an instance of a state in a certain time period

(372) *There's **a darkness** in his palette in the stares of the people he paints.* (BNC)

a period of time

(373) *Melatonin increases during **darkness** and decreases during periods of light* (...) (COCA)

an area characterized by being A

(374) *An hour later, the building plunged into **darkness**, causing many people to gasp.* (Washington Post, Sep 10, 2017)

The meaning of 'area characterized by being A' is derived via STATES ARE LOCATIONS metaphor. Some nominalizations denote an instance of a state in a certain time period or specific situations, which is enabled by the GENERIC FOR SPECIFIC metonymy. The same metonymy is found in the meaning of 'a specific type of A + ness'. 'An object exemplifying certain state or quality' is another extended meaning metonymically derived via STATE FOR OBJECT EXEMPLIFYING THE STATE. 'An activity one is engaged in' as one of the meanings of *-ness* nominalizations is made possible via STATE FOR ACTION metonymy. STATE OR QUALITY FOR EVENT DEMONSTRATING THAT STATE OR QUALITY operates on nominalizations that denote 'an act of being A'. The metonymy STATE OF BEING A FOR THE PERIOD OF TIME DURING WHICH ONE IS A is responsible for the reading of 'a period of time during which one is in the state of A + ness'. The metonymy EFFECT FOR CAUSE produces the meaning of an event, a person or a situation that brings about A + ness. Finally, some nominalizations denote a group of animals via DEFINING QUALITY OF ONE MEMBER FOR THE WHOLE CATEGORY OF MEMBERS WITH THE SAME QUALITY metonymy.

13.2.7. Concluding remarks on the suffix *-ness*

The analysis of the suffix *-ness* has shown that it can have the following meanings, again, some of which were introduced in the theoretical part and some have appeared during our investigation:

1. The state or quality of being A. This is the prototypical meaning of the suffix, found in all examples.

2. An instance or example of the quality or state denoted by the adjectival root (by A). Many nominalizations denote a manifestation of the state or quality in question. We have subdivided this group into following:

2.1. An act of being A. This meaning is derived via STATE OR QUALITY FOR EVENT DEMONSTRATING THAT STATE OR QUALITY metonymy and here state or quality metonymically represents behaviour via QUALITY FOR BEHAVIOUR metonymy. It is found in

the following nominalizations: *blindness, darkness, foolishness, kindness, madness, meanness, politeness, reasonableness, righteousness, rudeness, selfishness, ugliness, unfairness, unkindness* and *wickedness.*

Within this subgroup there are three examples in which metaphors create basis for the reading of 'an act' (*blindness*, *darkness* and *ugliness*). For *blindness* it is UNDERSTANDING IS SEEING metaphor (BEING IGNORANT IS BEING UNABLE TO SEE), for *darkness* BADNESS IS DARKNESS metaphor and in *ugliness* the metaphor MENTAL CHARACTERISTICS IS PHYSICAL APPEARANCE is activated.

2.2. An event, a person or a situation that brings about A + ness. Nominalizations from this group denote the cause of the state, that which has brought certain state via EFFECT FOR CAUSE metonymy: *happiness*, *sadness*, *ugliness, unpleasantness* and *weakness.*

2.3. A specific type of A + ness: *illness* and *sickness*. These two nominalizations represent specific instances of the state via GENERIC FOR SPECIFIC metonymy.

2.4. An object exemplifying A + ness. The state or quality in question is represented as object (a person, a situation or an idea) in *emptiness*, *foolishness*, *goodness*, *highness*, *holiness*, *likeness* and *thickness* via STATE FOR OBJECT EXEMPLIFYING THE STATE metonymy. In this group the example is *highness* is a bit different: it is necessary to have the metaphorical reading of *highness* via HIGH STATUS IS UP first in order to be able to interpret it as a person.

2.5. Other examples of A + ness in the meaning of manifestation or instance of a state in a certain time period. This is a relatively large group of nominalizations. Their appearance with the indefinite article makes their meaning a bit different from simply being 'state' or 'quality'. Rather they are representation of it in a certain time period and in specific situations, which is why they are often postmodified: *aggressiveness*, *attractiveness*, *awareness*, *blackness, bitterness, brightness, calmness, carefulness, carelessness, casualness, cleverness, coldness, completeness, consciousness, darkness, eagerness, fitness, firmness, freshness, friendliness, fullness, gentleness, hardness, harshness, lightness, likeness, loneliness, openness, powerlessness, recklessness, responsiveness, restlessness, richness, sharpness, shyness, slowness, smoothness, softness, stiffness, stillness, sweetness, tenderness, tiredness, toughness, uniqueness, unwillingness, warmness, weariness, whiteness* and *willingness.* Metonymy GENERIC FOR SPECIFIC enables such a reading.

3. An activity one is engaged in. STATE FOR ACTION metonymy allows 'action' reading in the following nominalizations: *cleanliness*, *drunkenness, fitness and forgiveness.*

4. A period of time during which one is in the state of A + ness. We have encoutered three nominalizations with the meaning 'period of time', namely *darkness, illness* and *sickness*. STATE OF BEING A FOR THE PERIOD OF TIME DURING WHICH ONE IS A metonymy operates on them.

5. An area characterized by being A. Nominalizations ending in *-ness* can also denote area or space that is characterized by being in a certain state, as in *blackness*, *darkness*, *emptiness*, *lightness*, *whiteness* and *wilderness*. Since states are viewed as locations, we hold STATES ARE LOCATIONS metaphor responsible for such a reading.

6. A group of animals. Marginally, the suffix *-ness* can express a group of animals with the characteristics of being A via DEFINING QUALITY OF ONE MEMBER FOR THE WHOLE CATEGORY OF MEMBERS WITH THE SAME QUALITY metonymy in *busyness*, *unkindness* and *whiteness*.

14. THE PLACEMENT OF METAPHORICAL AND/ OR METONYMIC PROCESSES

Our next goal is to determine the placement of metaphorical and metonymic operations that are responsible for making nominalizations ending in *-ness* and *-hood* polysemous, that is, to investigate whether they operate on the base word prior to suffixation, or on the output. The possibility for metaphor and metonymy to work simultaneously with the process of suffixation is also left open. Discussing examples from other authors, Brdar and Brdar-Szabó (2013) claim that metonymic processes that are involved in the word-formation are lexical in nature and that metonymic shifts in the majority of cases occur either prior to, or after word-formation, and not in the course of word-formation. As examples of metonymy operating on the output, they give Croatian nominalizations ending in suffixes *-ina, -etina and -evina/-ovina* ('puretina' meaning 'turkey meat' and 'dish made with turkey meat') and other examples where different metonymic senses occur after the word has been formed. Cases of metonymy operating prior to word-formation are found in compounds such as 'concentration camp' and suffixations such as 'Wall Streeter'. They also suggest that metonymic shifts occur simultaneously with word-formation processes only in non-concatenative morphology, that is, processes such as conversion, blending, reduplication, clipping and shortening.

We will start with the suffix *-hood* and the extension from the 'state' sense into 'collectivity' sense. The following nominalizations belong here:
animalhood, *aunthood*, *beggarhood*, *boyhood*, *childhood*, *cousinhood*, *cubhood*, *fatherhood*, *girlhood*, *ladyhood*, *manhood*, *motherhood*, *neighbourhood*, *sainthood*, *womanhood*, *brotherhood, sisterhood*, *monkhood*, *priesthood*, *prophethood* and *knighthood*.

As already discussed, some of them have bases that are highly polysemous, but we will argue that this polysemy does not produce polysemy of the whole nominalization in the sense of the extension from the prototypical meaning. Let us again turn to the example of 'fatherhood' to clarify this. If we take 'father' to mean 'a man in relation to his child' then the group meaning of 'fatherhood' is 'men in relation to their children'; if we take it to mean 'priest' then the collective sense is 'a group of priests' etc. This does not mean, however, that the polysemy of the base produces 'collectivity' sense from the 'state' sense in nominazations. Collectivity sense is derived via DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy that operates on the whole nominalization after suffixation.

There are, however, two exceptions in this group, as already discussed in the analytical part. *Brotherhood* and *sisterhood* are not group of Ns connected by bloodline, but rather a group of Ns gathered for specific purposes, Ns having metonymically and metaphorically extended meanings. In both cases we are dealing with BLOOD LINE FOR PHYSICAL CLOSENESS and MENTAL CLOSENESS FOR FRIENDLY BEHAVIOUR/SIMILARITY metonymies within MENTAL (CLOSENESS) IS PHYSICAL (CLOSENESS) metaphor operating on the base.

Another meaning of *-hood* nominalizations in the period of time during which one is N and is found in the following examples: *adulthood*, *babyhood*, *bachelorhood*, *boyhood*, *childhood*, *cubhood*, *girlhood*, *grandparenthood*, *maidenhood*, *manhood*, *priesthood*, *puppyhood*, *queenhood*, *spinsterhood*, *toddlerhood*, *widowhood*, *widowerhood* and *womanhood*. We will again claim that THE CONDITION (OR STATE) OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N metonymy operates on the whole noun, that is on the output of word formation process. There are, again, cases where metaphors operate on the base nouns, as in *cubhood* and *puppyhood* and therefore produce the meaning of 'a period of being young and inexperienced', with the metaphor PEOPLE ARE ANIMALS, but it is the above mentioned metonymy that extends the prototypical meaning of the suffix *-hood.*

Locative sense of 'area of the thing referred to by N' is found in one example only, but is important due to the frequency of usage. *Neighbourhood as* 'area in town or city where people live' and 'area surrounding someone or something' is found more frequently than

'neighbourly feeling' and 'state of being a neighbor', but as already stated this extended, locative sense is derived from a collective one and not vice versa. We will claim that metonymy PEOPLE LIVING IN A PARTICULAR PLACE FOR PLACE operates again on the output. The group meaning of 'people' is enabled by DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy. Further metaphorization is found in the expression 'in the neighborhood of' meaning 'about' or 'approximately' with the help of SIMILARITY IS PROXIMITY metaphor, in which SIMILARITY IS SPATIAL CLOSENESS AND DIFFERENCE IS SPATIAL DISTANCE metaphors appear.

The meaning 'state of being N' is extended in two nominalizations into 'part of the body', namely in *manhood* and *womanhood.* STATE OF THE WHOLE PERSON FOR PART OF THE BODY metonymy operates on the whole nominalization, making this reading possible. After establishing this sense, another sense appears in *manhood*, namely 'potency' (INSTRUMENT FOR RESULT (INSTRUMENT USED TO PREFORM A CERTAIN ACTION FOR ABILITY TO PERFORM IT metonymy being responsible for it)).

When *-hood* nominalizations are formed on adjectives, the prototypical sense is still 'state of being A'. Apart from this stative meaning, one example has active reading, found very frequently during our analysis. *Falsehood* in the meaning of 'deliberately deceiving someone by lying' is understood as action that repeats itself in the course of time. Again, we believe that metonymy STATE (OF BEING FALSE) FOR ACTION (OF MAKING USE OF THAT STATE) works after the word has been formed. This action reading produces another meaning, the one of the result of lying, via ACTION FOR RESULT.

To conclude this discussion on the placement of the metaphorical/ metonymic operations, we follow the above mentioned observations in claiming that these operations work posterior to suffixation, that is, they take place after the nominalization has been formed.

Observing *-ness* nominalizations, our analysis has shown that they can denote not only the state or quality of being A (since we are interested in the adjectives as basis), but also an example or an instance of the that quality or state: some of them denote an act of being A (e.g. *kindness*), some can be used as events, persons or a situation that cause A + ness (e.g. *happiness*), sometimes they refer to objects that are exemplifying the state or quality (e.g. *highness*), some are specific instances of the state (e.g. *sickness*) and many of them are used as count nouns since they denote the appearance of the quality or state in a certain time period (e.g. *awareness*). These are all the meanings that are extended from the prototypical meaning via metonymies.

STATE OR QUALITY FOR EVENT DEMONSTRATING THAT STATE OR QUALITY metonymy operates on all these nominalizations where the whole noun is taken to denote an actual act in which this quality is exemplified. The following nominalizations belong here: *blindness, darkness, foolishness, kindness, madness, meanness, politeness, reasonableness, righteousness, rudeness, selfishness, ugliness, unfairness, unkindness* and *wickedness.* Since acts are situations in which one demonstrates certain type of behaviour, the quality in question stands for that behaviour via QUALITY FOR BEHAVIOUR metonymy. Nominalizations that usually have stative reading, become active here.

EFFECT FOR CAUSE metonymy is also found after suffixation has taken place on those nouns that denote someone or something that causes a certain state: *happiness*, *sadness*, *ugliness, unpleasantness* and *weakness.*

GENERIC FOR SPECIFIC metonymy on *illness* and *sickness* produce specific instances of poor health from the state of being unhealthy.

Instances of specific qualities or states can also be seen as objects, again someone or something that exemplifies the quality. Metonymy STATE FOR OBJECT (PERSON) EXEMPLIFYING THE STATE operates on these nominalizations: *emptiness*, *foolishness*, *goodness*, *highness*, *holiness*, *likeness* and *thickness*.

In many cases nominalizations ending in *-ness* are used as count nouns since they denote an instance of the state or quality in a certain time period and in specific situations and they are often postmodified. GENERIC FOR SPECIFIC metonymy is responsible for such a reading and again appears posterior to word formation in the following examples from our corpus: *aggressiveness*, *attractiveness*, *awareness*, *blackness, bitterness, brightness, calmness, carefulness, carelessness, casualness, cleverness, coldness, completeness, consciousness, darkness, eagerness, fitness, firmness, freshness, friendliness, fullness, gentleness, hardness, harshness, lightness, likeness, loneliness, openness, powerlessness, recklessness, responsiveness, restlessness, richness, sharpness, shyness, slowness, smoothness, softness, stiffness, stillness, sweetness, tenderness, tiredness, toughness, uniqueness, unwillingness, warmness, weariness, whiteness* and *willingness*.

Apart from the extension in the meaning 'example of the state or quality' nominalizations ending in *-ness* can also denote an activity one is engaged in over a larger period of time. In comparison to he meaning 'the act of being A', they refer to the repeated

behavioural patterns a person does. STATE FOR ACTION metonymy enables such a reading in *cleanliness*, *drunkenness, fitness and forgiveness.* This metonymy operates on the whole nominalization.

Occasionally state denoted by *-ness* nominalization can refer to a period of time during which one is in the given state. The expression 'during + ness nominalization' as in

(375) (...) *Nowadays nurses are faced with complex situations, not only to take account of psychological and sociocultural factors* ***during illness*** *but also as promoters of health, and in helping patients and families to become involved in their own health care.* (...) (BNC)

signals that we are dealing with a time period, which is enabled by the STATE OF BEING A FOR THE PERIOD OF TIME DURING WHICH ONE IS A metonymy operating on the whole nominalization. Other examples belonging to this group are *darkness* and *sickness*.

Not only metonymies but also metaphors activate different readings in *-ness* nominalizations. STATES ARE LOCATIONS metaphor provides 'area' and 'location' reading in *blackness*, *darkness*, *emptiness*, *lightness*, *whiteness* and *wilderness* since it operates on the whole.

Marginally, *-ness* indicates a group of animals. The DEFINING QUALITY OF ONE MEMBER FOR THE WHOLE CATEGORY OF MEMBERS WITH THE SAME QUALITY metonymy activates this reading in *busyness*, *unkindness* and *whiteness*. These three are group of animals that have this property of being busy, unkind and white, as already explained in the analysis.

As a conclusion, we can state the polysemy of *-hood* and *-ness* nominalization can be explained by various metaphorical and metonymic processes that operate post suffixation. There are, of course, cases where metaphors and metonymies work prior to word formation, that is, on the bases, but in these cases there is no extension of base meaning from 'state' into something else and this is not the topics of our analysis (e.g. *blackness* as a property of being black in color and as a state of despair and depression).

15. OVERVIEW OF NOMINALIZATIONS AND THEIR METAPHORICAL AND METONYMIC EXTENSIONS

suffix *-hood*

adulthood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N+ THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N metonymy
angelhood	state
animalhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy + DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy
aunthood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy + DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy
babyhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy+ THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N metonymy
bachelorhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy+ THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N metonymy
beggarhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy+ DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy
boyhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy + DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy +

	THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N metonymy
brotherhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy + DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy+ BLOOD LINE FOR PHYSICAL CLOSENESS and MENTAL CLOSENESS FOR FRIENDLY BEHAVIOUR/ SIMILARITY metonymies within MENTAL (CLOSENESS) IS PHYSICAL (CLOSENESS) metaphor
childhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy + DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy + THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N metonymy
cousinhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy + DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy
creaturehood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy
cubhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy + DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy + THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N metonymy
daughterhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy
falsehood	state STATE (OF BEING FALSE) FOR ACTION (OF MAKING USE OF

	THAT STATE) metonymy + ACTION FOR RESULT metonymy
fatherhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy + DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy
girlhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy + DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy + THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N metonymy
godhood	state
grandparenthood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy + THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N metonymy
hardihood	state
humanhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy
husbandhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy
kinghood	state STATE FOR RANK metonymy
knighthood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy + STATE FOR RANK metonymy + DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy

ladyhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy + DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy
likelihood	state
livelihood	state
lustihood	state
maidenhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy + THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N metonymy
manhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy + DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy + THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N metonymy + STATE OF THE WHOLE PERSON FOR PART OF THE BODY metonymy + INSTRUMENT FOR RESULT (INSTRUMENT USED TO PREFORM A CERTAIN ACTION FOR ABILITY TO PERFORM IT) metonymy
monkhood	state STATE FOR RANK metonymy + DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy + THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N metonymy
motherhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy+ DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy
nationhood	state

neighbourhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy + DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy + PEOPLE LIVING IN A PARTICULAR PLACE FOR PLACE metonymy
orphanhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy
parenthood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy
peoplehood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy
personhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy
priesthood	state STATE FOR RANK metonymy + DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy + THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N metonymy
prophethood	state STATE FOR RANK metonymy + DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy
puppyhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy + THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N metonymy

queenhood	state STATE FOR RANK metonymy + THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N metonymy
sainthood	state DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy
selfhood	state STATE OF THE PERSON (THING) FOR BEHAVIOUR TYPICAL OF THAT PERSON (OR A THING) metonymy
servanthood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy
sisterhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy + DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy + BLOOD LINE FOR PHYSICAL CLOSENESS and MENTAL CLOSENESS FOR FRIENDLY BEHAVIOUR/ SIMILARITY Metonymies within MENTAL (CLOSENESS) IS PHYSICAL (CLOSENESS) metaphor
sonhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy
spinsterhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy + THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N metonymy
spousehood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy
statehood	state

toddlerhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy + THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N metonymy
unlikelihood	state
victimhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy
widowhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy + THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N metonymy
widowerhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy + THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N metonymy
wifehood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy
womanhood	state STATE OF N FOR BEHAVIOUR TYPICAL OF N metonymy + DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy + THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N metonymy + STATE OF THE WHOLE PERSON FOR PART OF THE BODY metonymy

suffix *-ness*

aggressiveness	quality GENERIC FOR SPECIFIC metonymy
attractiveness	quality GENERIC FOR SPECIFIC metonymy
awareness	quality GENERIC FOR SPECIFIC metonymy
bitterness	quality GENERIC FOR SPECIFIC metonymy
blackness	quality GENERIC FOR SPECIFIC metonymy + STATES ARE LOCATIONS metaphor + BADNESS IS BLACK metaphor
blindness	state BEING IGNORANT IS BEING UNABLE TO SEE metaphor + STATE OR QUALITY FOR EVENT DEMONSTRATING THAT STATE OR QUALITY metonymy + QUALITY FOR BEHAVIOUR metonymy
brightness	quality GENERIC FOR SPECIFIC metonymy
busyness	quality DEFINING QUALITY OF ONE MEMBER FOR THE WHOLE CATEGORY OF MEMBERS WITH THE SAME QUALITY metonymy
calmness	state GENERIC FOR SPECIFIC metonymy
carefulness	quality GENERIC FOR SPECIFIC metonymy
carelessness	quality GENERIC FOR SPECIFIC metonymy

casualness	quality GENERIC FOR SPECIFIC metonymy
cleanliness	quality STATE FOR ACTION metonymy + EFFECT FOR CAUSE metonymy
cleverness	quality GENERIC FOR SPECIFIC metonymy
coldness	quality GENERIC FOR SPECIFIC metonymy
completeness	quality GENERIC FOR SPECIFIC metonymy
consciousness	quality GENERIC FOR SPECIFIC metonymy
darkness	state BADNESS IS DARKNESS metaphor + STATE OR QUALITY FOR EVENT DEMONSTRATING THAT STATE OR QUALITY metonymy + QUALITY FOR BEHAVIOUR metonymy + STATE OF BEING A FOR THE PERIOD OF TIME DURING WHICH ONE IS A metonymy + STATES ARE LOCATIONS metaphor + GENERIC FOR SPECIFIC metonymy
drunkenness	state STATE FOR ACTION metonymy
eagerness	quality GENERIC FOR SPECIFIC metonymy
emptiness	state STATE FOR OBJECT EXEMPLIFYING THE STATE metonymy + STATES ARE LOCATIONS metaphor

firmness	quality GENERIC FOR SPECIFIC metonymy
fitness	quality GENERIC FOR SPECIFIC metonymy + STATE FOR ACTION metonymy + EFFECT FOR CAUSE metonymy
foolishness	quality STATE OR QUALITY FOR EVENT DEMONSTRATING THAT STATE OR QUALITY metonymy + QUALITY FOR BEHAVIOUR metonymy + STATE FOR OBJECT EXEMPLIFYING THE STATE metonymy
forgiveness	quality STATE FOR ACTION metonymy
freshness	quality GENERIC FOR SPECIFIC metonymy
friendliness	quality GENERIC FOR SPECIFIC metonymy
fullness	state GENERIC FOR SPECIFIC metonymy
gentleness	quality GENERIC FOR SPECIFIC metonymy
goodness	quality STATE FOR OBJECT (PERSON) EXEMPLIFYING THE STATE metonymy
happiness	state EFFECT FOR CAUSE metonymy
hardness	quality GENERIC FOR SPECIFIC metonymy
harshness	quality GENERIC FOR SPECIFIC metonymy

highness	state HIGH STATUS IS UP metaphor + STATE FOR OBJECT (PERSON) EXEMPLIFYING THE STATE metonymy
holiness	state STATE FOR OBJECT (PERSON) EXEMPLIFYING THE STATE metonymy
illness	state GENERIC FOR SPECIFIC metonymy + STATE OF BEING A FOR THE PERIOD OF TIME DURING WHICH ONE IS A metonymy
kindness	quality STATE OR QUALITY FOR EVENT DEMONSTRATING THAT STATE OR QUALITY metonymy + QUALITY FOR BEHAVIOUR metonymy
lightness	quality GENERIC FOR SPECIFIC metonymy + STATES ARE LOCATIONS metaphor
likeness	quality STATE FOR OBJECT EXEMPLIFYING THE STATE metonymy + GENERIC FOR SPECIFIC metonymy
loneliness	state GENERIC FOR SPECIFIC metonymy
madness	state STATE OR QUALITY FOR EVENT DEMONSTRATING THAT STATE OR QUALITY metonymy + QUALITY FOR BEHAVIOUR metonymy
meanness	quality STATE OR QUALITY FOR EVENT DEMONSTRATING THAT STATE OR QUALITY metonymy + QUALITY FOR BEHAVIOUR metonymy

openness	quality GENERIC FOR SPECIFIC metonymy
politeness	quality STATE OR QUALITY FOR EVENT DEMONSTRATING THAT STATE OR QUALITY metonymy + QUALITY FOR BEHAVIOUR metonymy
powerlessness	state GENERIC FOR SPECIFIC metonymy
reasonableness	quality STATE OR QUALITY FOR EVENT DEMONSTRATING THAT STATE OR QUALITY metonymy + QUALITY FOR BEHAVIOUR metonymy +
recklessness	quality GENERIC FOR SPECIFIC metonymy
responsiveness	quality GENERIC FOR SPECIFIC metonymy
restlessness	quality GENERIC FOR SPECIFIC metonymy
richness	state GENERIC FOR SPECIFIC metonymy
righteousness	quality STATE OR QUALITY FOR EVENT DEMONSTRATING THAT STATE OR QUALITY metonymy + QUALITY FOR BEHAVIOUR metonymy
rudeness	quality STATE OR QUALITY FOR EVENT DEMONSTRATING THAT STATE OR QUALITY metonymy + QUALITY FOR BEHAVIOUR metonymy
sadness	state EFFECT FOR CAUSE metonymy

selfishness	quality STATE OR QUALITY FOR EVENT DEMONSTRATING THAT STATE OR QUALITY metonymy + QUALITY FOR BEHAVIOUR metonymy
sharpness	quality GENERIC FOR SPECIFIC metonymy
shyness	quality GENERIC FOR SPECIFIC metonymy
sickness	state GENERIC FOR SPECIFIC metonymy + STATE OF BEING A FOR THE PERIOD OF TIME DURING WHICH ONE IS A metonymy
slowness	quality GENERIC FOR SPECIFIC metonymy
smoothness	quality GENERIC FOR SPECIFIC metonymy
softness	quality GENERIC FOR SPECIFIC metonymy
stiffness	quality GENERIC FOR SPECIFIC metonymy
stillness	quality GENERIC FOR SPECIFIC metonymy
sweetness	quality GENERIC FOR SPECIFIC metonymy
tenderness	quality GENERIC FOR SPECIFIC metonymy
thickness	quality STATE FOR OBJECT EXEMPLIFYING THE STATE metonymy
tiredness	state GENERIC FOR SPECIFIC metonymy

toughness	quality GENERIC FOR SPECIFIC metonymy
ugliness	quality MENTAL CHARACTERISTICS IS PHYSICAL APPEARANCE metaphor + STATE OR QUALITY FOR EVENT DEMONSTRATING THAT STATE OR QUALITY metonymy + QUALITY FOR BEHAVIOUR metonymy EFFECT FOR CAUSE metonymy
unfairness	state STATE OR QUALITY FOR EVENT DEMONSTRATING THAT STATE OR QUALITY metonymy + QUALITY FOR BEHAVIOUR metonymy
uniqueness	quality GENERIC FOR SPECIFIC metonymy
unkindness	quality STATE OR QUALITY FOR EVENT DEMONSTRATING THAT STATE OR QUALITY metonymy + QUALITY FOR BEHAVIOUR metonymy + DEFINING QUALITY OF ONE MEMBER FOR THE WHOLE CATEGORY OF MEMBERS WITH THE SAME QUALITY metonymy
unpleasantness	quality EFFECT FOR CAUSE metonymy
unwillingness	quality GENERIC FOR SPECIFIC metonymy
warmness	quality GENERIC FOR SPECIFIC metonymy
weakness	state EFFECT FOR CAUSE metonymy
weariness	state GENERIC FOR SPECIFIC metonymy

whiteness	quality GENERIC FOR SPECIFIC metonymy + STATES ARE LOCATIONS metaphor + DEFINING QUALITY OF ONE MEMBER FOR THE WHOLE CATEGORY OF MEMBERS WITH THE SAME QUALITY metonymy
wickedness	quality STATE OR QUALITY FOR EVENT DEMONSTRATING THAT STATE OR QUALITY metonymy + QUALITY FOR BEHAVIOUR metonymy
wilderness	state STATES ARE LOCATIONS Metaphor
willingness	quality GENERIC FOR SPECIFIC metonymy

16. CONCLUSION

The aim of our paper was to determine whether the suffixes *-hood* and *-ness* have other meanings apart from the central meaning, to specify those other meanings and to investigate which mechanisms are responsible for them. Our corpus has confirmed that the central meaning of both suffixes is 'the state or quality of being N/ A', as it is given in the grammars and dictionaries we used (Webster's New World College Dictionary, Oxford Advanced Learner's Dictionary, Longman Dictionary of Contemporary English, Longman Grammar of Spoken and Written English, Collins COBUILD English Dictionary for Advanced Learners, Dictionary.com and The Free Dictionary). The same meaning is taken in Hamawand (2008) as central.

The examples we extracted have confirmed other meanings provided by some of the above mentioned sources and for the suffix *-hood* these are the following:

- a group of people sharing the thing referred to by N
- a period of time during which one is N
- an instance of the quality referred to by the adjectival base
- an area of the thing referred to by N.

We have, however, found some meanings that are not mentioned in our sources and that do appear with the analyzed examples, namely:
- a part of the body (as in *manhood* or *womanhood*) and
- and an action of making something A, as found in *falsehood*.

The suffix *-ness*, apart from having the meaning of 'the state or quality of being A' as a prototypical meaning, exhibits other meanings as well, one of them being 'an instance or example of the quality or state denoted by the adjectival root'. These two meanings are given in the above mentioned grammars and dictionaries, but our corpus has shown that the suffix *-ness* produces more meanings:
-an activity one is engaged in
-a period of time during which one is in the state of A + ness
-an area characterized by being A and
-a group of animals.

This shows that the suffix is by far richer than described in the literature.

Our next goal was to determine what conditiones such a rich polysemy of these two suffixes. Guided by the cognitive linguistics assumption that "Cognitive Grammar, as developed by Langacker, does not distinguish between lexical and grammatical units in the traditional sense of the term" (Ungerer 2007: 652), we assumed that metaphoric and/ or metonymyc processes operate on the grammatical units (traditionally speaking), just as they do on the lexical ones. We therefore agree with Booij (2005: 225) in stating that

Polysemy of affixes and of individual complex words is a pervasive phenomenon in the realm of complex words. It is the effect of semantic extension mechanisms such as metaphor and metonymy, and can be understood more generally in terms of domain shift chains.

Metonymyic extensions from the protypical sense of the *-hood* suffix is found far more frequently than metaphorical ones. STATE OF N FOR BEHAVIOUR TYPICAL OF N is a very frequent metonymy found in nominalizations with family members (*fatherhood*, *sisterhood*) or animals (*cubhood*, *puppyhood*) as bases, or those that denote general notions of being human (*maidenhood*, *orphanhood*). Here metonymy is used as a means for social stereotyping.

The metonymy that produces the collective meaning of the suffix, which is the one given in grammars and dictionaries, is DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP). This is exemplified in *animalhood*, *manhood*, *sainthood* and other nominalizations that simply represent a body of Ns, but also in nominalizations that denote a group of Ns gathered for specific goals or purposes, such as *monkhood* or *priesthood*. Here a state of one member metonymyically represents the whole group with the same state, which again produces the effect of making conclusions about the whole group based on the knowledge about one member of it, that is, stereotyping is also present here.

18 nominalizations from our corpus, the most representative example being *childhood*, can also denote a period of time during which one is in the state of N (childhood is a time in person's life during which they are a child). This meaning is also metonimically conditioned via THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N.

PEOPLE LIVING IN A PARTICULAR PLACE FOR PLACE metonymy is found in one example only, namely *neighbourhood*, but the sense of 'area' or 'place' is a central one for this nominalization and found more frequently than other senses. DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy has produced the collective sense as basis for the metonymy mentioned above.

STATE OF THE WHOLE PERSON FOR PART OF THE BODY metonymy, as a subcase of WHOLE FOR PART operates on *manhood* and *womanhood* producing the meaning of 'part of the body'.

The suffix *-hood*, when attached to adjectives, can produce active meaning. STATE (OF BEING FALSE) FOR ACTION (OF MAKING USE OF THAT STATE) is found in the example of *falsehood* where it produces the meaning of deliberate making of false statements. From this, the sense 'the result of telling lies' is produced via ACTION FOR RESULT metonymy.

Metaphors can operate on both base nouns and nominalizations as a whole, but they usually do not extend the prototypical meaning of the suffix and to detect them all is not the topics of our discussion. Here we will mention MENTAL (CLOSENESS) IS PHYSICAL (CLOSENESS) metaphor, which operates on the base nouns in *brotherhood* and *sisterhood.* These two examples have the meaning of 'people engaged in a particular occupation' or 'woman who are brought together by a common religion, trade or interest', and not 'a group of siblings, that is, a group of Ns (with the protoypical meaning of N being a person connected by bloodline'). The 'group' sense, however, is caused by metonymy in these examples.

Metonymic extensions are also found in the nominalizations ending in suffix *-ness*. An instance of the state or quality denoted by the adjectival root is the meaning of the suffix found very frequently, but we believe that the term 'instance' or 'example' is too vague to describe the rich semantics of the suffix. Therefore we have tried to specify this meaning a bit more precisely. We have termed examples such as *foolishness* or *kindness* as 'an act of being A'. Here we are dealing with actual events in which one displays a certain quality. This is made possible by STATE OR QUALITY FOR EVENT DEMONSTRATING THAT STATE OR QUALITY metonymy. Within this metonymy we find QUALITY FOR BEHAVIOUR since acts are by definition situations in which one behaves in a certain way (e.g. kindly or foolishly).

Some nominalizations represent physical and nonphysical causes of the state, that is, someone or something that has brought about certain state. EFFECT FOR CAUSE metonymy enables such a reading, with example of this being *happiness* (someone or something that makes you happy).

Specific instances of the quality are *illness* and *sickness*. Simply speaking, their dictionary definitions are 'instances of N' and their grammatical decription defines them as count nouns, which is not the case with many other examples. Metonymy GENERIC FOR SPECIFIC makes them specific instances of the state.

The same metonymy is responsible for the meaning of 'manifestation of the state or quality in a certain time period and specific situations', such as *recklessness* or *tiredness.* The grammatical behaviour of these examples is such that they are used as count nouns (which, again, is not given in dictionaries) and they are often postmodified:

(376) *(...) and she made no protest when his arms went round her and he kissed her with a force and a* ***recklessness*** *that she met with equal need.* (BNC)

The state or quality of being A can also be extended to mean 'object exemplifying the state or quality' via STATE FOR OBJECT EXEMPLIFYING THE STATE. What is meant under 'object' is a person or idea. Thus *likeness* can denote both the quality of being alike, but also a portrait a graphical or pictorial representation of someone.

Just as it is the case with the suffix *-hood*, the sufix *-ness* can also have 'active' reading. Metonymy STATE FOR ACTION operates on examples such as *drunkenness* or *forgiveness*.

Occasionally we encounter the meaning of 'a period of time during which one is in the state of A' (as in *darkness* or *illness*). This reading is enabled by STATE OF BEING A FOR THE PERIOD OF TIME DURING WHICH ONE IS A metonymy.

DEFINING QUALITY OF ONE MEMBER FOR THE WHOLE CATEGORY OF MEMBERS WITH THE SAME QUALITY metonymy is found with the examples that denote a group of animals, as is *unkindness*.

During our investigation we have found that metaphors can also produce extended meanings: *darkness* is a quality of having dark colour, but also an area without light. The location sense is found in other nominalizations, such as *whiteness* and *wilderness*. We believe this to be the case of STATES ARE LOCATIONS metaphor.

Metaphors BADNESS IS BLACK (in *blackness*), BEING IGNORANT IS BEING UNABLE TO SEE (in *darkness*), HIGH STATUS IS UP (in *highness*) and MENTAL CHARACTERISTICS IS PHYSICAL APPEARANCE (in *ugliness*) produce meanings that serve as basis for the metonymically derived meaning of 'an act in which one displays the quality in question' and 'a person of a high rank'.

There are many examples that lend themselves to metaphorical interpretation. For example, *lightness* can have several meanings and if we take it to mean 'the state of lacking depth or seriousness', we are dealing with IMPORTANT IS WEIGHT and DIFFICULTY IS HEAVINESS metaphors. They enable lightness to be not only a physical property, but rather a mental one. But as already stated, the investigation of metaphors operating on nominalizations, but producing no extended meanings was not the aim of this study and that is why we have given only a limited amount of examples like this one.

Our examples show that metaphors and to a greater extent, metonymies 'have the ability' to turn inherently mass nouns into count ones (especially with the suffix *-ness*), as well as to produce the features 'concrete', 'perceivable' and 'physical' in inherently abstract nouns.

The last aim of our analysis was to determine the placement of metaphoric and metonymic operations. Metaphors and metonymies can work prior to or posterior to the derivational processes and sometimes it is even possible to have them operate simultaneously with word formation processes, as discussed above. Our analysis has shown that, when it comes to the suffixes under study, they create the new meanings after the suffixation has taken place. Only the metaphor MENTAL (CLOSENESS) IS PHYSICAL (CLOSENESS) operates on the base nouns in *brotherhood* and *sisterhood,* which can then be defined as 'a group of Ns'.

Taking into account cognitive linguistics' assumption that grammar and lexicon form a continnum, we can conclude that suffixes can be described and analyzed in a way any other

lexical item can. Following prototype theory, the meanings of suffixes *-hood* and *-ness* can be viewed as categories with a protoype (central meaning) and peripheral members (with some meanings being closer to the center than the others). These other meanings are extensions from the prototype and they are not arbitrary, but highly motivated. The motivation can be explained through metonymic and occasionally metaphorical processes. We hope that this paper would be a small, but noticable contribution to the field of cognitive approaches to word formation.

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19. ABSTRACT

The aim of this paper is to give the overview and analysis of English nominalizations ending in suffixes *-hood* and *-ness* within the framework of cognitive linguistics. Cognitive approaches to word formation treat the meaning of affixes as a category with a prototype and its extensions. We have assumed that cognitive processes of metaphors and metonymies are responsible for the extensions.

Our corpus consists of examples that display the central meaning (the state or quality of being A/ N) and of those showing other senses. For the suffix *-hood* these are: a group of people sharing the thing referred to by N; a period of time during which one is N; an instance of the quality referred to by the adjectival base; an area of the thing referred to by N; a part of the body and an action of making something A. These meanings are metonymically and metaphorically derived. DEFINING STATE OR PROPERTY OF ONE MEMBER FOR THE WHOLE CATEGORY (GROUP) metonymy creates the 'group' meaning; from this metonymy the activation of PEOPLE LIVING IN A PARTICULAR PLACE FOR PLACE metonymy produces 'area' meaning; the sense 'period of time' can be explained via THE STATE OF BEING N FOR THE PERIOD OF TIME DURING WHICH ONE IS N; the meaning of 'part of the body' is enabled by STATE OF THE WHOLE PERSON FOR PART OF THE BODY; STATE FOR ACTION metonymy is found in the example where we percieve state as an action in which one makes use of that state. This metonymy produces ACTION FOR RESULT metonymy which creates the meaning of 'an instance or example of being A'.

A great number of nominalizations ending in *-ness* have the meaning of an instance or example of the quality or state denoted by the adjectival root. Within this meaning the following metonymies and metaphors create the following meanings: STATE OR QUALITY FOR EVENT DEMONSTRATING THAT STATE OR QUALITY metonymy produces the meaning of an act of being A; EFFECT FOR CAUSE metonymy enables us to see certain state as a cause of that state (an event, a person or a situation that brings about A + ness); GENERIC FOR SPECIFIC metonymy allows nominalizations to be used with the indefinite article and become pluralized when they denote 'a manifestation or an instance of a state in a certain time period' or 'a specific type of A + ness'; STATE FOR OBJECT EXEMPLIFYING THE STATE metonymy can even produce the meanings that can be characterized as physical objects. The suffix *-ness* can have 'action' reading via STATE FOR ACTION and 'a period of time' meaning via STATE OF BEING A FOR THE PERIOD OF TIME DURING WHICH ONE IS A. Metaphor STATES ARE LOCATIONS creates locative meaning of some *-ness* nominalizations. Finally, similar to the suffix *-hood*, *-ness* can also denote 'a collectivity', to be more precise, 'a group of animals', via DEFINING QUALITY OF ONE MEMBER FOR THE WHOLE CATEGORY OF MEMBERS WITH THE SAME QUALITY metonymy.

The mentioned metonymies and metaphors operate posterior to suffixation and can serve to show that the richness of suffixal meanings is not random, but highly motivated.

This paper can be used as a study of other affixes within cognitive linguistics paradigm. The better understanding of connection between word formation processes and cognitive operations such as metaphors and metonymies is also possible.

KEY WORDS: word formation, suffixation, cognitive linguistics, metaphor, metonymy.

20. SAŽETAK

Cilj je ovog rada dati prikaz i analizu nominalizacije u engleskom jeziku koje završavaju sufiksima *-hood* i *-ness* u okviru kognitivne lingvistike. Kognitivni pristupi tvorbi riječi značenja sufikasa promatraju kao kategoriju koja ima prototipno značenje i proširenja. Pretpostavili smo da su proširenja uvjetovana metaforama i metonimijama.

Naš se korpus sastoji od primjera koji pokazuju središnje značenje (stanje ili svojstvo) i ostala značenja. Za suffix *-hood* to su: skupina ljudi koja dijeli svojstvo na koje upućuje osnova; vremenski period u kojem netko posjeduje svojstvo; primjer svojstva na koje upućuje pridjevska osnova; mjesto koje se odnosi na osnovu; dio tijela i radnja. Ova su značenja izvedena metaforama i metonimijama.

Metonimija STANJE ILI SVOJSTVO JEDNOG ČLANA ZA CIJELU KATEGORIJU (GRUPU) donosi značnje 'skupina'; iz ove metonimije aktivira se metonimija LJUDI KOJI ŽIVE NA ODREĐENOM MJESTU ZA MJESTO koja proizvodi značenje 'mjesto'; značenje 'vrijeme' objašnjava se metonimijom STANJE ZA VRIJEME TIJEKOM KOJEG JE NETKO U ODREĐENOM STANJU; 'dio tijela' omogućuje metonimija STANJE (SVOJSTVO) CIJELE OSOBE ZA DIO TIJELA; metonimiju STANJE ZA RADNJU nalazimo u primjeru u kojem stanje promatramo kao radnju u kojoj se koristi to stanje. Ova metonimija proizvodi metonimiju RADNJA ZA REZULTAT odgovornu za značenje 'primjer svojstva'.

Veliki broj nominalizacija koje završavaju sufiksom *-ness* imaju značenje 'primjer svojstva ili stanja kojega označuje pridjevska osnova'. Unutar tog značenja pronalazimo sljedeće metonimije i metafore koje proizvode ova značenja: metonimija STANJE ILI SVOJSTVO ZA ČIN KOJI PRIKAZUJE TO STANJE ILI SVOJSTVO proizvodi značenje 'čin'; metonimija POSLJEDICA ZA UZROK omogućuje promatranje nekog stanja kao uzroka za to isto stanje (događaj, osoba ili situacija koja uzrokuje određeno stanje); metonimija OPĆENITO ZA SPECIFIČNO omogućuje upotrebu neodređenog člana i množine kod nominalizacija u slučajevima kada one imaju značenje 'pojava ili primjer stanja u određenom vremenskom razdoblju' ili 'specifična vrsta stanja'; metonimija STANJE ZA PREDMET KOJI SLUŽI KAO PRIMJER STANJA može proizvesti značenja koja mogu biti opisana kao fizički predmeti. Sufiks *-ness* može imati i 'aktivno' značenje kroz metonimiju STANJE ZA RADNJU, a može značiti i 'vremenski period' kroz STANJE ZA VREMENSKI PERIOD U KOJEM JE NETKO U ODREĐENOM STANJU. Metafora STANJE JE LOKACIJA stvara značenje mjesta kod nekih nominalizacija. Konačno, kao i sufiks *-hood*, sufiks *-ness* može imati značenje 'skupina', odnosno preciznije 'skupina životinja' uz pomoć metonimije SVOJSTVO JEDNOG ČLANA ZA CIJELU KATEGORIJU ČLANOVA S ISTIM SVOJSTVOM.

Spomenute metonimije i metafore djeluju nakon sufiksacije i pokazuju da bogatsvo sufiksalnih značenja nije proizvoljno, već velikim dijelom motivirano.

Ovaj rad može poslužiti u proučavanju ostalih afikasa u okviru kognitivne lingvistike. Također je moguće ostvariti bolje razumijevanje povezanosti procesa tvorbe riječi i kognitivnih operacija poput metafore i metonimije.

KLJUČNE RIJEČI: tvorba riječi, sufiksacija, kognitivna lingvistika, metafora, metonimija.