Univerzita Karlova v Praze

Filozofická fakulta

ÚSTAV ANGLICKÉHO JAZYKA A DIDAKTIKY

DIPLOMOVÁ PRÁCE

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Antonymous adjectives in children's and adult literature

Antonymní adjektiva v dětské literatuře a beletrii pro dospělé

srpen, 2016

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V Praze dne Tereza Outratová

Poděkování

- paní doktorce Čermákové za cenné rady, trpělivost, pečlivou korekci a zachování chladné hlavy;
- skoro-manželovi Jakubovi za to, že se mnou vydržel po celou dobu studia a pomáhal s formátováním;
- rodině, kamarádům a spolužákům za veškerou podporu během studia;

Abstract

The topic of this thesis are adjectival antonyms in child-directed fiction. The primary aim of the thesis is to compare the usage of antonyms in adult fiction and child-directed fiction on the basis of a contextual co-occurrence of antonyms. The two areas of focus are the discourse functions of antonymy and the canonicity of antonyms. The thesis presents an analysis of antonyms identified in the context of 51 most frequent adjectives in a corpus of fiction written for children.

The thesis is structured into three major parts. The first part provides a theoretical framework which summarizes the research of the discourse functions of antonymy and reviews the methods of measuring antonym canonicity. The second, methodological part, explains the methodology and describes the data used for the purposes of this study. The selection of data relies mostly on manual classification of the concordance lines. The third, analytical part, analyses and classifies the antonyms found in the corpus of child-directed fiction and compares them with selective samples extracted from adult fiction. A comparison of the most frequent adjectives in both corpora is also provided.

Keywords: antonymy, discourse functions, antonym canonicity, ancillary antonymy, coordinated antonymy

Abstrakt

Diplomová práce se zabývá antonymními adjektivy v literatuře psané pro děti. Hlavním cílem práce je porovnat používání antonym v literatuře psané pro děti s literaturou pro dospělé na základě jejich kontextuálního výskytu. Práce se zaměřuje na dvě hlavní oblasti - diskursní funkce antonymie a kanonicitu antonym. Práce předkládá výsledky analýzy antonym vyskytujících se v kontextu 51 nejfrekventovanějších adjektiv korpusu dětské literatury.

Práce je rozdělena do tří hlavních částí. První část nastiňuje teoretický rámec, ve kterém jsou shrnuty dosavadní poznatky z výzkumu diskursních funkcí antonymie, a dále popisuje jednotlivé metody, které slouží k určení míry kanonicity antonym. Druhá část se věnuje metodologii práce a popisuje jednotlivé postupy a práci s daty, která byla použita k účelům této práce. Selekce relevantních příkladů vychází z manuální klasifikace konkordančních řádků. Třetí, analytická část práce, obsahuje analýzu a klasifikaci antonym, která byla nalezena v korpusu literatury psané pro děti a srovnává je se selektivními vzorky z korpusu literatury psané pro dospělé. Součástí této části je i srovnání nejfrekventovanějších adjektiv z obou korpusů.

Klíčová slova: antonymie, diskursní funkce antonymie, kanonicita antonym

Contents

Figures

Tables

List of abbreviations

SITWCH	Subcorpus of imaginative texts written for children
SITWA	Subcorpus of imaginative texts written for adults

1. INTRODUCTION

When children start attending elementary school, at some point they are going to learn about antonymy and probably righteously assume that there really is not that much to learn: *big* is the opposite of *small* and that is what we call 'antonymy'. What children are not aware of at this point is that they have already been using antonymy consistently since their early childhood and what is more, that antonymy constitutes one of the key linguistic concepts of their learning. Cruse (2000: 167) considers antonymy "cognitively primitive" and therefore allows children to sort and organize their world and lexicon into simple boxes that represent two opposing qualities. While antonymy occurring in children's speech has already been investigated (Murphy and Jones 2008), the literature that children are exposed to has not yet been researched.

This thesis aims at providing a comparison of antonym usage between literature written for adults and literature written for children. The research of antonymy in the present thesis stems mainly from the contextual perception of antonymy originally proposed by Charles and Miller (1989) and further supported by Fellbaum (1995). The so called co-occurrence hypothesis brought about a fundamental change of the perception of antonymy as one of the essential lexical relationships. Not only does contextual research of antonyms reveal a much larger variety of antonyms but also defines antonyms within the discourse functions they express which are to a large extent a main focus of the present thesis.

The thesis is structured into five major chapters. Chapter 2 provides the theoretical framework for the thesis and focuses on outlining the two major approaches of understanding antonymy represented by Jones (2002) and Cruse (2000). In addition to this, it also provides an overview of research focused on antonym canonicity and explains the importance of child-directed fiction in the context of antonymy. Chapter 3 consists of three parts which describe the data and methodology used in the analytical part of the thesis. Due to the nature of the research, data had to be sorted manually which required analysis of more than 17 000 examples. The analytical part of the thesis, Chapter 4, presents that data obtained from the analysis of the two corpora - a corpus of fiction written for adults and a corpus of fiction written for children. The two focal points are the discourse functions of antonymy as defined by Jones et al. (2012) and identification of antonymous pairs that emerged from the research. Chapter 5 summarizes the outcomes of the analysis.

2. THEORETICAL BACKGROUND

2.1 Antonymy

To a layman, antonymy might seem as a simple concept. Various researchers have noted that children are starting to understand antonymy already at three years of age and show good ability of applying the knowledge when they reach five years of age (Jones et al. 2012: 71-74). Cruse (2000: 167) points out that antonymy indeed is "cognitively primitive" as it allows for a very straightforward lexical recognition. Therefore, questions such as "What is the opposite of *bad*?" do not cause much trouble to a majority of speakers above five years of age. Antonymy is, however, a complex concept and antonyms range from conventionalized ('canonical') pairs to unconventional ('uncanonical') pairs. Thus a question like "What is the opposite of *pale*?" might cause more trouble.

The most narrowed down explanation of antonymy would perhaps define it as a relationship between two words which express the opposite meaning. Seemingly simple, yet even after the vast number of publications that have been written on the topic, researchers have not been able to provide a comprehensive definition that would be capable of encompassing all the categories and fuzzy lines in between them. The centrality of antonymy among lexical relations has been implied by many authors and researchers. Jones et al. (2012: 1) emphasize the significance of the binary nature of this relationship. While other lexical relationships can be represented by a many-to-many or many-to-one relationship, the uniqueness of antonymy lies in the fact that it is conceived as a one-to-one relationship. Murphy (2003: 169) considers antonymy the "archetypical lexical semantic relationship". Not only can its existence be supported by a number of existing studies but also by a general agreement amongst both linguists and general public. Cruse (1986: 197) provides further evidence by claiming that "most languages seem to have a non-learned term for it (oppositeness): Arabic: '*aksi*; Chinese: *tao-fan*; French: *contraire*; German: *gegensatz*; Hungarian: *ellentét*; Turkish: *karşt*, etc.".

More recently, antonymy has been also of interest in corpus linguistics. While antonymy itself represents one of the key paradigmatic lexical relationships, the importance of the research lies in the syntagmatic nature of the framework in which it operates. Antonyms are not perceived as enclosed semantic categories but as members of the lexicon that co-occur in context. The major shift in perception of antonymy has been brought about by Charles and Miller's (1989) co-occurrence hypothesis, which was later further supported by Fellbaum (1995) (see Section 2.2). While antonymy takes on various forms, in the present thesis only adjectival occurrences are in focus.

The following Section 2.2 will contrast the more traditional approach (represented by Cruse 1986, 2000) and the more recent contextual approach adopted by corpus linguists (represented by Jones et al. 2012). Besides their general definitions of antonymy, a more detailed classification is also provided. It is significant to note that even though Cruse (2000) distinguishes between the terms

'opposite' and 'antonym', in this thesis these terms will be used interchangeably except for Section 2 which contains references to Cruse's (2000) perception of antonymy. Section 2.3 is dedicated to a summary of research that has been done on antonym canonicity as it constitutes a significant starting point for the present research. The last section focuses on the significance of antonymy in child-directed literature (Section 2.4).

2.2 Approaches to antonymy

Constituting a primary lexical relationship, antonymy has been examined from the point of paradigmatic as well as syntagmatic perspective. In contrast to Jones's syntagmatic perception of antonymy, that is adopted as the theoretical framework for the present research, stands Cruse's approach that largely draws from the structuralist tradition. The structuralists distinguish between two essential types of relations that define the framework in which further analysis takes place: syntagmatic and paradigmatic relations. A paradigmatic relationship represents the option of substitution and is theoretically positioned on a vertical axis. Thus, in a sentence *The woman is running*. each lexical item could be possibly substituted for another word. For instance, *woman* can be substituted by *man*, *child*, or *elephant*, *running* can be substituted by a word of the same paradigm (verb in this case) and so on. The horizontal axis (i.e. syntagmatic relations), on the other hand, represents the relationship of association and focuses on the possible meaningful combinations of elements within the sentence. Cruse does not entirely leave out the importance of the syntagm; yet, his analysis of antonymy as well as the general lexicological perception of this phenomenon is predominantly viewed through a paradigmatic relationship. Thus in his work, antonymy is treated as "stable properties between words" (Jones et al. 2012: 8), whereas Jones's perspective, heavily based on syntagmatic relationships, mainly sheds light on how antonyms function within a certain context.

Cruse's paradigmatic approach to antonymy mainly draws on Lyons's concept of lexical semantics which essentially stems from the Saussurean linguistic tradition. Lyons (1995: 47) considers words as isolated, 'meaningful units' possessing two crucial attributes – form and meaning. In his terminology, a 'lexeme' represents the core semantic unit which is a part of a lexicon. Jones et al. (2012: 7) further add to Lyon's perception of word-meaning that "the central thesis of the approach is that every language is a unique relation system". Therefore, the meaning of a word is derived from its relationships to other words. The two most central paradigmatic relationships are synonymy and antonymy which, as Cruse (2000: 167) claims, is "the only sense relation to receive direct lexical recognition in everyday language. It is presumably, therefore, in some way cognitively primitive."

With the growing number of corpus-based research in linguistics, the perception of antonymy has changed its course from being perceived as a strictly paradigmatic relationship to being analysed

within its context. The early corpus-based research of antonymy (Justeson and Katz 1991, Fellbaum 1995, Willners 2001, Jones 2002) brought about the findings supporting the hypothesis that antonyms tend to co-occur in nearby context. The possible reasons for antonyms occurring contextually were outlined by Fellbaum (1995: 294-297) who offers these explanations:

- ☐ Antonyms occur in semi-fixed or fixed expressions formed by syntactic frames.
- ☐ Antonyms are used redundantly to emphasize speaker's point.
- ☐ The juxtaposition of complementaries generates strong effect such as humour or emphasis.
- ☐ Antonyms overtly express a change from state A to state B.

Evidence that supports this phenomenon has been also provided by Justeson and Katz (1991) who calculated that there is 8.6 times greater-than-chance ratio of co-occurring antonyms, and Jones (2002) who calculated 6.6 ratio after having examined a much larger corpus. Jones's classification of antonymy follows Mettinger's (1994) research of lexico-grammatical frames but applies the hypothesis of textual co-occurrence on a much larger amount of data (280-million-word corpus). His research is further supported by studies by Murphy and Jones (2008) and others who have examined antonymy cross-linguistically; Murphy et al. (2009), who have done the research on Swedish and Muehleisen and Isono (2009), who have done the research on Japanese.

These findings shifted the view towards a more syntagmatic approach to antonymy and raised questions as to what purpose do antonyms serve in discourse (Jones et al. 2012: 15). These findings then lead to a variety of corpus-based research much of which has been summarized by Jones et al. (2012) and analysed in *Antonyms in English: Construals, Constructions and Canonicity*. Jones et al.'s (2012) research of the discourse functions of antonymy which will serve as a reference point for Section 2.2.2 was based on six different corpora, see Table 1.

Table 1. Corpora used in studies of the discourse functions of antonymy (adapted from Jones et al. 2012: 27)

Mode-Language	Corpus	Study
Adult-Produced-Writing-English (APW-E)	The Independent newspaper	Jones 2002
Adult-Produced-Speech-English (APS-E)	British National Corpus	Jones 2006
Child-Produced-Speech-English (CPS-E)	CHILDES database/ TalkBank Project	Murphy and Jones 2008
Child-Directed-Speech-English (CDS-E)	CHILDES database/ TalkBank Project	Murphy and Jones 2008
Adult-Produced-Writing-Swedish (APW-S)	Swedish Parole Corpus	Murphy et al. 2009
Adult-Produced-Writing-Japanese (APW-J)	Leeds Collection of Internet Corpora	Muhleisen and Isono 2009

Not only has antonymy been examined from a syntagmatic point of view but it has also been attributed the property of being a scalar phenomenon. Rather than making a clear-cut distinction between

non-antonyms and antonyms, it has been argued that a continuum exists between them (Herrmann et al. 1986). This will be further discussed in Section 2.3.

2.2.1 Classification of antonymy by Cruse

As opposed to the contextual research of antonymy, Cruse's classification represents a more traditional approach in which categories are created on the basis of an internal semantic relationship between the opposites. The most relevant properties defining oppositeness are (Cruse 2000: 167):

- **binarity**: opposites are incompatible - *X is long* entails *X is not short*
- **inherentness**: general binarity is accidental and pragmatic, satisfactory opposites possess inherent binarity such as *up-down*
- **patency**: opposites must be patent (*Monday-Wednesday* could be considered two poles since they are divided by *Tuesday* but the oppositeness is latent as opposed to *yesterday-tomorrow*)

Cruse (2000) distinguishes the following categories: 'complementaries', 'antonyms' (including three subcategories – 'polar', 'equipollent' and 'overlapping' antonyms), 'reversives', and 'converses'. Only categories relevant to the analysis of adjectives are considered below.

Complementaries

'Complementaries', according to Cruse (2000: 181) "constitute a very basic form of oppositeness and display inherent binarity in perhaps its purest form." Their opposition represents two enclosed categories with no ground in between them. Prototypical examples of complementary opposites include pairs such as *alive-dead*, *closed-open* or *true-false* (Jones et al. 2012: 7). Looking at the examples, it is clear that being *alive* or *dead* semantically excludes any continuum in between these two categories. One simply cannot be *more dead*. There are, however, rare cases in which these opposites can be graded due to contextual information. Consider the idiom *to be more dead than alive*.

Antonyms

'Contraries' or 'antonyms' are a class of opposites which are further divided into several categories. The most central category, 'polar' antonymy, possesses the following characteristics (Cruse 2000: 169-170):

- They are fully gradable and are frequently preceded by a range of modifiers *very/slightly/rather/quite/a bit/too/long.*

- They occur in comparative and superlative form; generally, these require a point of reference in context, such as *My Goodness! Isn't Tom tall?* which would be likely linked to a reference in context, for example "tall for his age".
- They indicate degrees of some objective physical property, which can be presented on a standardized scale such as centimetres, kilograms etc.
- They are incompatible but not complementary, thus *It's neither short nor long*. likely means that it is of average length (it does not create a contradiction).
- Comparative forms are positioned in a converse relationship (*A is heavier than B* entails *B is lighter than A*).
- Comparative forms are impartial (*A is longer than B* does not mean that A is *long*).
- One of the members of the antonymous pair yields an impartial question; for instance, *How long is it?* is impartial, while *How short is it?* presupposes that it is *short*; generally, the impartial question is formed with the use of the antonym that indicates more of the given property (*How long/strong/big/fast/ is it?).*

Typical examples of contraries are pairs such as *long-short, slow-fast, easy-difficult, good-bad, hot-cold* etc. Other categories that Cruse (2000) defines are

- 'Equipollent' antonyms, which include pairs of antonyms in which none of the members yields an impartial question, e.g. *hot-cold, bitter-sweet, painful-pleasurable.*
- 'Overlapping' antonyms, where only one member yields an impartial question, e.g. *good-bad, kind-cruel, clever-dull.*

Directional opposites

'Directional opposites' denote the motion in the opposite direction. Typical examples are pairs such as *north-south, up-down, fall-rise.* The main subtypes of directional opposites are 'antipodals', 'counterparts', 'reversives' and 'relational opposites'. These typically concern other parts of speech than adjectives.

Converses

'Converses' can be also regarded as 'directional opposites' because they denote a binary relationship in which members stand in opposite directions, e.g. *buy-sell, husband-wife*.

2.2.2 Classification of antonymy by Jones

Jones's syntagmatic approach to antonymy does not rely on arbitrary categories but reflects contextual research of antonymy. The categories themselves then reflect the discourse functions of antonyms found within close contextual search. Regarding the categories themselves, Jones distinguishes between three main domains: (1) major, (2) minor and (3) residual discourse functions of antonymy. The following section offers the definition and exemplification of the categories as listed in *Antonyms in English: Construals, Construction, Canonicity* (Jones et al. 2012: 28-41). Section 2.2.2.1 focuses on the major discourse functions of antonymy, which is further subclassified as 'ancillary' and 'coordinated' antonymy, section 2.2.2.2 focuses on the 'minor' functions of antonymy, which includes 'transitional', 'negated', 'interrogative', 'comparative' and 'distinguished' antonymy, and section 2.2.2.3 focuses on the 'residual' functions of antonymy, i.e. 'idiomaticity', 'extremity' and 'simultaneity'. All sentences that were used to exemplify the usage of different discourse functions of antonymy in Section 2.2.2 have been copied from Jones et al.'s (2012) research and are followed by original reference to their corpus (see Table 1).

2.2.2.1 Major discourse functions of antonymy

Jones identifies two major discourse functions of antonymy: ancillary and coordinated antonymy. It is worth noting that, according to the aforementioned research, these categories ranged in their frequency of occurrence from 77.1 % in adult-produced-writing to 51.4% in child-directed-speech.

Ancillary antonymy

The key characteristic of ancillary antonymy is the binary opposition accentuated by the presence of two pairs. The function of pair A is to draw attention to the opposition of pair B as in the following examples:

(1) *As the old adage puts it,* ***oppositions*** *do not* ***win*** *elections;* ***governments lose*** *them.* (APW-E)

(2) *The* ***teacher*** *is* ***active*** *and the* ***student passive***. (APW-S)

(3) *how can it be* ***right*** *to limit the hours worked by* ***lorry drivers and airline pilots****, but* ***wrong*** *to limit the hours of* ***junior hospital doctors under taking complex medical treatment*** (APW-E)

In example (1), the conventional opposition of the A-pair *win-lose* serves to highlight the less apparent opposition between the members of the B-pair *oppositions-governments*. The same discourse function can be inferred from the opposition in (2), where *active-passive* act as the ancillary pair that brings out the difference between *teacher-student*. As opposed to the conventionalized A-pairs, B-pairs can be

realized by single words but also longer stretches of word as in example (3). Table 2 shows the percentage of ancillary antonyms found across the six investigated corpora. In general, ancillary antonymy was the most frequent discourse function found in all corpora except for adult-produced speech.

According to Jones et al. (2012: 28), the frequent occurrence of ancillary antonymy across various contexts and text types points to the fact that "the most common function of antonymy is to flag up nearby contrast". Apart from its general importance, Jones et al. also emphasize that this discourse function is the key one in language acquisition as it allows children to categorize their experience into binary oppositions.

Table 2. Ancillary antonymy across corpora (adapted from Jones et al. 2012: 30).

Text type	%
Adult-Produced-Writing-English	38.7
Adult-Produced-Speech-English	28.8
Child-Produced-Speech-English	36.7
Child-Directed-Speech-English	31.9
Adult-Produced-Writing-Swedish	44.9
Adult-Produced-Writing-Japanese	54.8

Coordinated antonymy

The discourse function of coordinated antonymy is essentially not to bring out contrast between the members of the antonymous pair but to create "a sense of inclusiveness, exhausting the domain that the antonyms describe" (Jones et al. 2012: 30). This salient feature can be demonstrated by the following examples. In example (4) below, the author does not intend to emphasize the contrast between *succeed-fail* but rather aims at including every possible outcome of the action – succeeding and failing. The same intention can be observed in (5) – the shoes can be worn everywhere, *outside* and *inside*. In example (6), the list of opposing adjectives points to the fact that everyone can wear the latest fashion. To a certain extent, coordinated antonymy represents an opposite to ancillary antonymy.

(4) *We may **succeed**, we may **fail** – but we will at least give it a whirl.* (APW-E)

(5) *They're winter shoes that you can wear **outside** or **inside**.* (CDS-E)

(6) *It doesn't matter if one is **tall**, **short**, **old**, **young** or if one doesn't wear the latest fashions.* (APW-S)

Recent corpus linguistics studies (Justeson and Katz 1991; Jones 2002, 2006, 2007; Murphy et al. 2009) have shown that the coordinative factor is mostly found within the lexico-semantic frames. The

frequency of co-occurrence of these antonyms within the frames has been also used as an indicator of antonym canonicity. So far, the following frames have been identified (Jones et al. 2007: 134):

- ☐ X *and* Y *alike*
- ☐ *both* X *and* Y
- ☐ *either* X *or* Y
- ☐ *whether* X *or* Y
- ☐ *neither* X *nor* Y

Similar frames have also been identified crosslinguistically in Swedish (Murphy et al. 2009) and Japanese (Muehleisen and Isono 2009).

Coordinated antonymy also represents the second most frequently occurring discourse function. Generally speaking, it usually accounts for about 30% of all cases of antonymy. Table 3 shows the proportional distribution of coordinated antonyms across corpora.

Table 3. Coordinated antonymy across corpora (adapted from Jones et al. 2012: 32).

Text type	%
Adult-Produced-Writing-English	38.4
Adult-Produced-Speech-English	31.3
Child-Produced-Speech-English	29.9
Child-Directed-Speech-English	19.5
Adult-Produced-Writing-Swedish	25.4
Adult-Produced-Writing-Japanese	13.0

2.2.2.2 Minor discourse functions of antonymy

Despite their lower frequency, the following discourse functions of antonymy have been found in all the studies mentioned previously. Altogether they constitute about one third of all the cases of antonymy found in Jones et al.'s collected data. The following section defines five minor discourse functions described by Jones et al. (2012: 32-37).

Transitional antonymy

Transitional antonymy denotes a change of state. The prototypical frame which indicates transitional antonymy is '*from* X *to* Y'. In example (7) the author wants to emphasize the fluctuation of the varying diagnosis thus indicating a transition from *optimistic* to *pessimistic*.

(7) *The diagnosis of Oti's knee injury has lurched daily from* ***optimistic*** *to* ***pessimistic*** *and back again…* (APW-E)

The frequency of occurrence of transitional antonymy ranged from 3% in adult-produced writing to 8.7% in child-produced speech. Jones et al. (2012: 33) further explain that the reason for higher occurrence of transitional antonymy in child-produced-speech reflects the fact that it helps children describe natural progression, such as in example (8).

(8) *First my batteries were* ***new*** *and then they were* ***old****.* (CPS-E)

Negated antonymy

Negated antonymy is primarily used in speech to express emphasis. The prototypical frame which indicates this discourse function is 'X, *not* Y'. The speaker usually negates one antonym in order to highlight the other. The negated antonym can precede the positive antonym as in example (9) or follow the positive one as in example (10).

(9) *Now that is a good story for the press. It's not a* ***bad*** *one it's a* ***good*** *one*. (APS-E)

(10) *The manager of one of the bars taking part in the teach-in said all his boys were* ***straight****, not* ***gay***. (APW-E)

Negated antonymy accounted only for 2.1% in adult-produced-writing but was much more prevalent in child-directed-speech (11%). Jones et al. (2012: 34) note that "it may be used as a device for clarifying antonym meanings and polarities."

Interrogative antonymy

Interrogative antonymy represents one of the discourse functions that are mostly found in spoken discourse. In Jones et al.'s research (2012: 35), there were no instances of interrogative antonymy in adult-produced-writing; yet, it seemed to be very substantial in child-directed-speech (12.8%). The antonyms are very often connected by the conjunction *or*, yet as opposed to coordinated antonymy, here

it does not denote semantic exhaustiveness but a strong opposition. For this reason, it has also been labelled as 'disjunctive antonymy'. The primary functions of interrogative antonymy include requesting information as in example (11), confirmation of hearer's preference or it is simply used by parents as a pedagogical tool as in (12) (as such it commonly appears in corpora of child-directed speech).

(11) *Should I behave **strongly** or should I behave **weakly**?* (APW-J)

(12) *Is she a **big** girl or a **little** girl*? (CDS-E)

Comparative antonymy

Comparative antonymy is more frequent in written rather than spoken language. In adult-produced-writing it accounted for 6.8% while in child-produced-speech for only 0.3% occurrences (Jones et al. 2012: 36). This is mostly caused by its complexity.

(13) *It is a temporary, I would say it's more **temporary** than **permanent**.* (APS-E)

(14) *Because **boy** kitties are easier to hold than **girl** kitties.* (CPS-E)

Comparative antonymy is more frequent in written rather than spoken language. In adult-produced-writing it accounted for 6.8% while in child-produced-speech only in 0.3% (Jones et al. 2012: 36). This is mostly caused by its complexity.

Distinguished antonymy

The prototypical frame that defines distinguished antonymy is 'Z *between* X *and* Y' where Z commonly stands for the word *difference*. As such it is frequently used to denote semantic opposition within one concept. Similarly to comparative antonymy, distinguished antonyms tend to be absent in child-produced speech due to their complexity and mostly occur in adult-produced-writing (5.4%) and adult-produced-speech (4.4%) (Jones et al. 2012: 37), see examples (15) and (16).

(15) *He still doesn't know the difference between **right** and **wrong**.* (APW-E)

(16) *When I accused Greenbaum of being pedantically non-prescriptive, he denied the charge, maintaining that the book clearly differentiates between **correct** and **incorrect**.* (APW-E)

2.2.2.3 Residual discourse functions of antonymy

The following section briefly summarizes the remaining categories of discourse functions of antonymy. These occur very rarely and tend to be context-specific. Table 4 illustrates the proportion of residual antonyms across corpora.

Table 4. Residual antonyms across corpora (adapted from Jones et al. 2012: 38).

Text type	%
Adult-Produced-Writing-English	5.6
Adult-Produced-Speech-English	16.1
Child-Produced-Speech-English	10.7
Child-Directed-Speech-English	14.8
Adult-Produced-Writing-Swedish	12.9
Adult-Produced-Writing-Japanese	11.5

Some antonyms, Jones et al. (2012: 37) point out, "are functioning in a creative or non-standard fashion". The following three categories represent the three most commonly observed 'residual' discourse functions (Jones et al. 2012: 37- 41).

Idiomaticity

This category includes all the antonyms that occur within a fixed phrase, a well-known saying, a proverb or a cliché. The primary function of this category is to avoid subsuming such phrases under coordinated antonymy even though they generally take on their attributes, consider example (17).

(17) *We will search **high** and **low**.* (CDS-E)

Extremity

As it has been suggested by previous research (Jones et al. 2012: 39), indicating extremity is a feature of adult-produced speech rather than child-produced speech. The hyperbole is usually structured in this frame '[ADV] *X (n) or* [ADV] *Y'*. As opposed to coordinated antonymy, the semantic context is different here for the reason that "instead of encompassing an entire domain, only two end-points are united", see example (18).

(18) *human nature is...neither erm, perfectly **good**, nor perfectly **bad**, it's a, it's a mixture of both.* (APW-E)

Simultaneity

Similarly to the discourse function of extremity, simultaneity resembles coordinated antonymy; yet, the semantic context differs. While simultaneous antonyms tend to express two opposite properties that co-exist together, coordinated antonyms express an exhaustiveness of a scale. Example (19) demonstrates the co-existence of two antonymous adjectives which stand for two opposite emotions *happy-sad*. Jones et al. (2012: 40) depict it as "referent's ability to simultaneously hold the dual properties of X and Y".

(19) *She looked both **happy** and **sad** at the same time.* (APW-E)

2.3 Antonym Canonicity

When considering the nature of lexical relationships, one must account for a certain degree of subjectivity. Most of us would probably agree that antonymous pairs like *old-young* or *hot-cold* are fairly evident representations of antonymy but if asked to explain antonymy to a class of primary school children, we would probably not reach for pairs such as *aged-youthful* or *hot-cool*. How is it possible that we seem to be quite capable of categorizing adjectival pairings as good, better or bad examples of antonymy? Obviously, if we intend to explain the nature of this dichotomous relationship to someone who has not yet heard of antonymy, we might want to stick to a set of prototypical antonymous pairs such as *good-bad, big-small,* or *strong-weak*. The question then arises as to whether these really can be considered prototypical and if so, how they achieve the status. This so called "goodness of opposability" has been defined as 'antonym canonicity' which ranks more conventionalized pairings in the language as canonical and less conventionalized pairings as non-canonical (Paradis 2010: 388). Jones et al. (2012: 43) note that the main aspect of antonym canonicity lies in "which word pairs are conventionalized and to what degree they are conventionalized, and the semantic aspect relates to why some pairs might be considered better opposites than others." The criteria that indicate the level of canonicity will be discussed in Section 2.3.1.

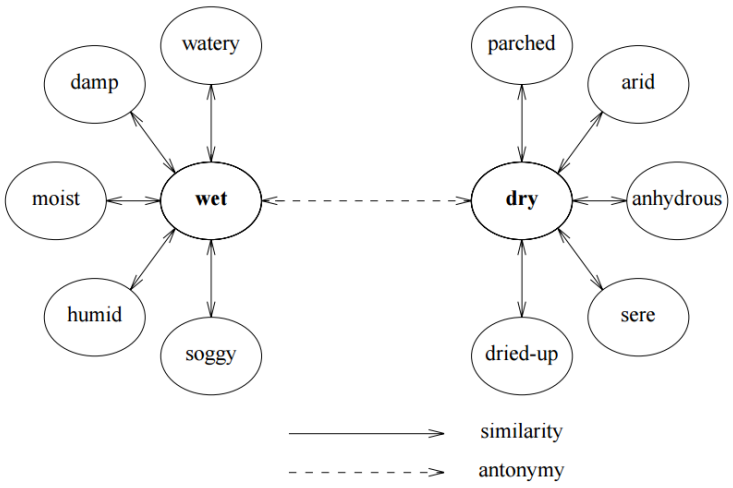
2.3.1 Approaches to antonym canonicity

Antonym canonicity has been subject to a significant amount of research. It is clear, however, that to classify a pair as canonical, means to design an objective empirical method to measure canonicity. As will be further discussed below, antonym canonicity or the conventionalization of antonymous pairs has been subject to numerous experiments (see Sections 2.3.1.1-2.3.1.4). Despite the fact that the research conducted on antonymy has not yet come to the point of being able to provide a singular theory, two major theoretical stances have emerged. First of them, the **lexical-categorical approach** claims that antonyms can be classified into two categories 'canonical' and 'non-canonical'. In contrast, the

perception of antonymy referred to as the **conceptual approach** argues that a continuum exists between these two categories (Jones et al. 2007: 130). The two theoretical stances and the arguments underlying them will be further discussed below with references to corresponding literature.

The lexical-categorical approach, drawing on the structuralist approach to lexis, is primarily based on the Princeton WordNet model which classifies opposites into direct and indirect antonyms (Jones et al. 2012: 44). As can be seen in Figure 1 below, the adjectives *wet* and *dry* are connected by a link. This demonstrates the direct opposition between them. The surrounding adjectives, which are semantically linked as synonyms to the primary member of the antonymous pair, are also in an opposition but are classified as indirect antonyms. Adjectives in the figure *parched*, *arid* or *sere* are deemed indirect antonyms to *wet* but also to its related synonyms. There also seems to be a certain correspondence between direct antonyms and canonical antonyms. As opposed to the former, the latter does not imply such an extensive model of lexical relations.

Figure 1. The WordNet model of direct and indirect antonym relations (adapted from Gross and Miller 1990: 29).



The model of lexical relations as portrayed by the WordNet model (Figure 1) is nevertheless criticized by Jones et al. (2012: 8) who point out that "linguistics has witnessed a wide-spread reaction against seeing language as a stable system of contrasts within which we make choices". This notion also dominates the works of Murphy and Andrew (1993) who conducted a series of experiments in which direct antonyms retrieved from the WordNet model have been tested against an elicitation test. While the subjects were asked to provide an antonym for a selected adjective, researches presented the adjectives either with or without context. Their findings suggest that if the adjective co-occurred with a noun, subjects elicited a different antonym. This leads them to a conclusion that antonyms are not stored

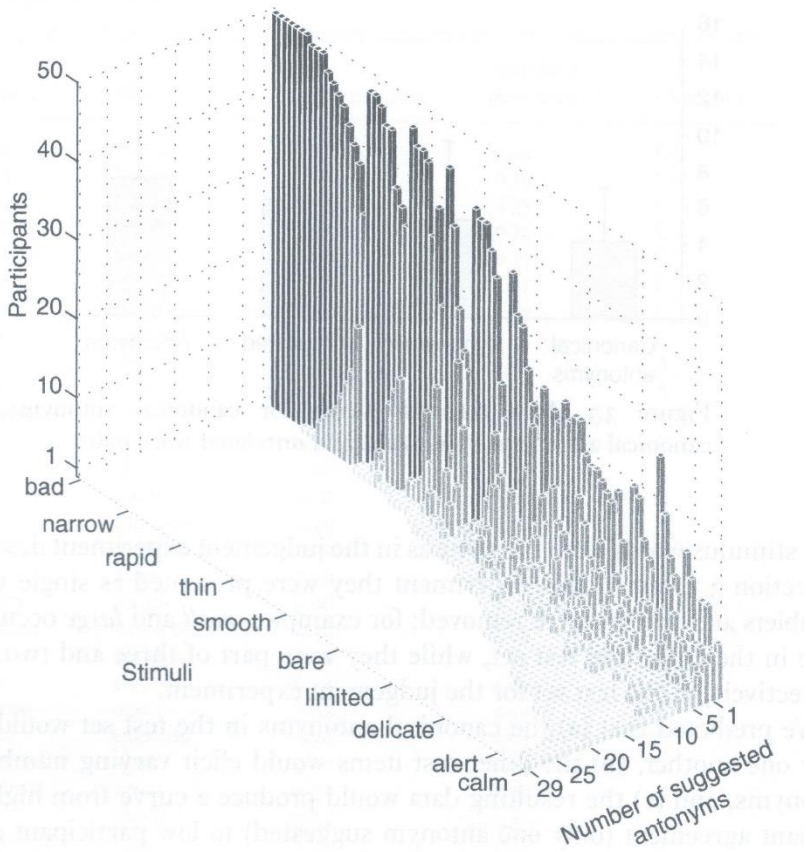
lexical associations but their production rather lies in a knowledge-driven process (Jones et al. 2012: 45). If the contextual factor is involved, antonymy can hardly be viewed as a class of two clear-cut categories. Therefore, many current experiments that operate with textual co-occurrence are more inclined towards the conceptual approach which takes into account the syntagmatic nature of the relationship of antonymy rather than relying solely on other lexical relations. Overall, Jones et al. (2012: 70) are also in favour of the conceptual approach to antonymy:

> We conclude, that canonicity is a gradable property and that all experiments above support a conceptual view of antonymy. At the same time, we acknowledge that there is a small number of antonymous word pairs that top all experiments, which we propose is evidence for the fact that some meaning dimensions lend themselves to antonymous construals more easily than others…

2.3.1.1 Canonicity assessed through elicitation experiments

In the past, there have been many experiments conducted by psycholinguists in which antonym canonicity has been detected using word association tests (Deese 1965, Clark 1970, Charles and Miller 1989). These experiments provided evidence for the hypothesis that some antonymous pairs are retrieved more easily or faster than others. In his essay, Clark (1970) argues that it is the paradigmatic nature of antonymy that allows for quick associations and retrieval of opposites. The primary argument central to his paper is that "...if a stimulus has a common 'opposite' (an antonym), it will always elicit that opposite more often than anything else". In the more recent research, data retrieved from corpus search is used to generate a list of stimulus items. The study *Good and bad opposites: Using textual and experimental techniques to measure antonym canonicity* (Paradis et al. 2009) uses the elicitation technique after a previous research has been conducted and canonical pairs of scalar antonyms have been established. The elicitation experiment revealed that there are conventionalized pairs that are always identified by the subjects in the elicitation test, namely *bad-good*, *beautiful-ugly*, *clean-dirty*, *heavy-light*, *hot-cold*, *poor-rich*, and *weak-strong*. There were, however, only a few test items for which only one adjective was chosen. As can be seen in Figure 2, for most adjectives, multiple adjectives have been suggested. The three-dimensional figure displays three axes: the Z-axis shows the number of participants, the Y-axis lists every tenth test item and the X-axis the number of antonyms suggested. As has been hypothesized by Jones et al. (2012: 70), only a few antonyms like *bad* or *narrow* showed a high level of canonicity. Generally, participants tended to supply various antonyms for most adjectives thus lowering the status of canonicity. The increasing complexity of the figure and the differing number of lexical items retrieved serve as a compelling argument for the existence of a continuum between canonical and non-canonical antonyms.

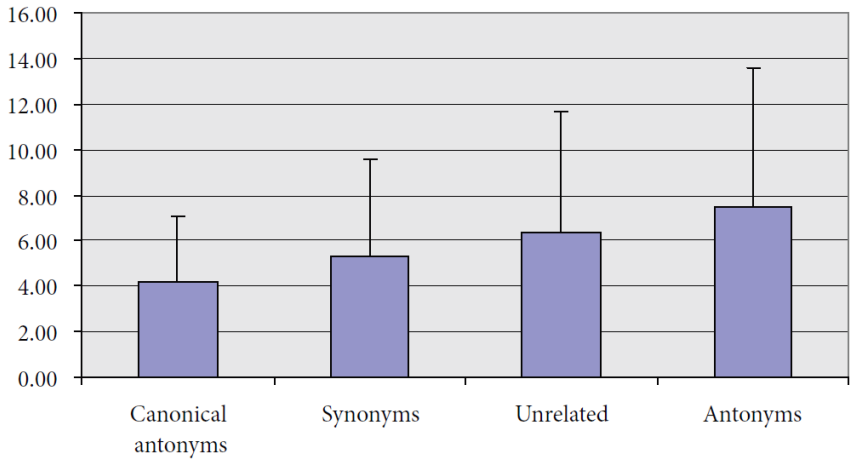
Figure 2. The distribution of antonyms in the elicitation experiment (adapted from Jones et al. 2012: 52).



2.3.1.2 Canonicity assessed through judgement tests

While assessment of antonym canonicity through elicitation techniques yields results that point to a scale between canonical and non-canonical antonyms, assessment through judgement tests produces a more categorized data (Jones et al. 2012: 46-49). Paradis et al. (2009) conducted an experiment in which participants were asked to evaluate the "goodness" of antonymous pairings of scalar adjectives on an eleven-point scale. Participants were asked the question *How good is X-Y as a pair of opposites?* for fifty stimulus items. The pre-selected list of stimuli contained four categories of adjectives: (i) canonical antonyms, these were taken from dictionary definitions of antonyms and from a previous experiment by Herrman et al. (1986), (ii) non-canonical antonyms, which have been selected from the British National Corpus based on their mutual proximity, (iii) synonyms and (iv) adjectives with no semantic relation. Figure 3 shows the mean responses (in seconds) for the four categories. As can be clearly derived from the data, pre-selected canonical antonyms tended to be judged as good examples of opposites

Figure 3. Mean response times for canonical antonyms, non-canonical antonyms, synonyms, and unrelated word pairs (adapted from Paradis et al. 2009: 401).



The mean response time in milliseconds was 4303 for canonical adjectives, 7648 for antonyms, 5446 for synonyms and 6381 for unrelated adjectives which lead to the conclusion that canonical antonyms take less time to be processed than other categories. Even despite greater heterogeneity in the category of non-canonical antonyms (which clearly points to the conceptual approach), there was a strong agreement regarding canonical antonyms, namely *weak-strong, small-large, light-dark, narrow-wide, thin-thick, bad-good, slow-fast,* and *ugly-beautiful*. Moreover, the response time for these was significantly faster than for the remaining categories (this finding supports the lexical-categorical approach).

2.3.1.3 Canonicity assessed through a word recognition test

The results yielded from elicitation and judgement tests can be considered relatively consistent – both have found a set of antonymous adjectives for which one or the other is always retrieved. There is, however, an issue that might complicate this experimental concept and that is the factor of frequency. In both of the experiments above, very few words with low frequency of occurrence were suggested for antonyms that were rated the most canonical. This may point to the explanation, that the highest ranking antonymous pairs contained words that generally occur with a high frequency. This theory has been further explored by Jones et al. (2012) who have searched for the frequency of previously identified antonyms as well as individual words and discovered that these have occurred in the BNC substantially more frequently than other pairs or adjectives. It is pointed out that "more frequent adjectives tend to elicit fewer different antonyms than less frequent adjectives do" (Jones et al. 2012: 55). Another important pattern that has been identified in the data retrieved from elicitation and judgement experiments is the salience of the dimension. For some pairs, the semantic dimension can be easily classified. For instance, the underlying dimension of *slow-fast* is clearly SPEED whereas for less

canonical pairs such as *calm-disturbed* or *lean-fat*, the dimension cannot be derived that naturally. The importance of the semantic dimension antonyms belong to, also presents itself in the polysemy of some antonyms that have been, nevertheless marked as "good". Consider pairs like *light-heavy* or *narrow-wide*. For both of these pairs, a number of different antonyms could have been suggested but participants stayed in the semantic line of the underlying dimension that was more approachable to them. To explore the frequency factor and antonymy, a psycholinguistic experiment has been designed by Van de Weijer et al. (2012). The main experimental question asked was whether canonical pairs of antonyms are deemed as such due to their high frequency of co-occurrence. In a visual decision task involving the priming effect, participants were asked to push a button whenever they saw a real word. The stimuli contained antonymous pairs that co-occurred in the corpora with a varying level of frequency and non-words which followed the phonotactical rules of English. Van de Weijer et al. (2012) discovered a facilitative effect which made antonymous pairings easier to recognize. A correlation was found between the time of the recognition and the lexical relationship of the target word – if the target word was primed with an unrelated word, the target word was recognized significantly slower. It has been also discovered that the frequency does play a role – frequent words were recognized faster than less frequent words. This cannot, however, be applied to co-occurrence of antonymous pairs. The frequency of their co-occurrence did not seem to influence the facilitation effect. Jones et al. summarize the experiment and conclude that "facilitation is thus not likely to be a consequence of strictly lexical association, and it cannot be attributed to frequency either, but has a semantic basis" (Jones et al. 2012: 56-57). This supports the conceptual approach to antonymy.

2.3.1.4 Canonicity assessed through textual co-occurrence

As has been noted the perception of antonymy as an analysis of semantic opposites has recently shifted towards a research of large corpora, where antonyms have been observed to co-occur in context. Such findings have, of course, lead to various studies that aimed to measure antonym canonicity on the basis of their co-occurrence in text. The most recent research (Jones et al. 2007, Jones 2010) has been focused on the aforementioned lexico-syntactic frames (Section 2.2.2.1 and Table 5 below), which may be considered a reliable indicator of canonical antonymy; the most salient feature being the variety of frames in which the antonymous pair occurs. The more frame types the pair occupies, the more canonicity can we attribute to it. There are inevitably some drawbacks that arise from using this method because to search for frames (which generally tend to occur with low frequency) means to use an extremely large corpus. Therefore, web-as-a-corpus search has been employed. As Jones et al. (2012: 68) point out, this method has its limitations due to the fact that web is not actually a corpus and its use entails various issues such as the duplication of texts, inexact frequency counts or the commercial internet engine that disables random search.

The research of Jones et al. (2012: 57-68) has previously defined frames that occurred in the corpora; therefore, his follow-up research did not take into account the possibility of identifying an additional set of frames but rather focused on the possible use of these previously established frames to determine antonym canonicity. Table 5 shows the frames that were used for the search.

Table 5. Lexico-syntactic frames used in Jones et al. (2007),
***** represents a wildcard (adapted from Jones et al. 2012: 60).

frame A	frame B
X and * alike	* and X alike
from X to *	from * to X
both X and *	both * and X
X versus *	* versus X
either X or *	either * or X
between X or *	between * or X
whether X or *	whether * or X

At the beginning of the research, twenty seed adjectives have been selected on the basis of previous elicitation experiments. These were searched for in all fourteen frames (as in Table 5) and in both possible positions of the antonymous pair. It is important to note that the adjectives selected were polysemous (in Jones's terminology multidimensional). The advantage of searching for antonyms that occur in lexico-semantic frames is that it generates quantifiable data. For instance, the seed adjective *soft* generated the antonym *hard* in 47.95% of occurrences but *loud* in less than 6% (Jones et al. 2012: 61-62). Jones (2007: 142) claims that in order to achieve the status of canonicity these criteria must be considered: the number of frames in which the pair occurs, the reciprocity (if the seed word retrieves the antonym and the other way around), and the number of contexts. Table 6 displays all the antonyms that met all three criteria set for canonical pairs.

Jones's (2012: 65-68) research of antonymy also suggests that such frames do not have to be necessarily restricted to coordinated antonymy (as they often are) but can also be found for ancillary antonymy. For instance, the frame *short on* X, *long on* X seems to be well functional. Jones emphasises the potential of research in this area as it may lead to the discovery of less conventionalized oppositions.

Table 6. Canonical antonyms established in Jones 2007 (adapted from Jones et al. 2012: 62).

DIMENSION	CANONICAL PAIRS
BEAUTY	*beautiful-ugly*
WEALTH	*poor-rich, poor-wealthy*
OPENNESS	*closed-open, laparoscopic-open*
SIZE	*large-small, big-small, big-little*
SPEED	*fast-slow*
INTERESTINGNESS	no canonical pairs
STRENGTH	*strong-weak*
WIDTH	*narrow-wide, broad-narrow*
THICKNESS	*thick-thin, fat-thin, fat-skinny*
FATNESS	*fat-lean*
LUMINOSITY	*bright-dull, bright-dim, bright-dark*

2.4 Importance of child-directed fiction

The whole concept of opposition seems to constitute an especially crucial element of processes in language acquisition. Cruse emphasizes that antonymy is "cognitively primitive" (Cruse 2000: 167) and Jones considers it a "key language acquisition mechanism in childhood" (Jones 2007: 1106). The notion of antonymy has always been considered to be one of the most central lexical relationships and as such it also begins to occur in child-produced speech very early. Experiments with only five-year-old children have shown results that suggest that the antonym use in language spoken by children is comparable to that found in the written language (by adults) (Jones et al. 2012: 72).

While it is highly desirable to study child-produced speech and writing, to my knowledge, there is not much research into the primary written language that children are exposed to – fiction written for children. Wild et al. (2012: 190), who have searched for differences between adult-directed and children's fiction using the Oxford Children's Corpus, emphasize that "writing for children differs from writing for adults in sometimes unexpected ways, thus highlighting the need for a separate children's corpus". Similarly, Thompson and Sealy's (2007: 3) research questions are aimed to "explore the issue of whether language deployed in writing for children can be seen to represent the world and human experience differently from the ways in which they are represented in writing for adults". It has been frequently assumed that fiction for children is simply less complex than fiction written for adults. The lack of research into the language of children's fiction then leads to, for instance, the production of school dictionaries being "simply abridgements of adult dictionaries, often unhelpfully abridged to the point of uselessness" (Wild et al. 2012: 191). This premise has been, so far, also reflected in the research

of antonymy that is, generally speaking, more concerned with language acquisition and thus with child-produced speech. There is, however, also a need to study the input children are exposed to as it may lead to rather unexpected findings.

2.4.1 Research of adjective frequency and antonymy in child-directed speech and fiction

It has been mentioned above that not much linguistically focused research has been conducted on children's fiction. A general lexical research has been undertaken by Wild et al. (2012) whose intention was to define the specific lexis of the texts that would characterize the corpus of child-directed fiction and non-fiction as opposed to texts written for adults. The corpus analysis carried out using keywords has led to the overall conclusion that the lexis of child-directed writing substantially differs from the lexis of adult-directed writing. The semantic classification of the top keywords has revealed some interesting results. Overall, fiction written for children tends to contain much more lexis reflecting the "natural" world, "the physical world, including body parts, buildings, tools, containers, landscape and weather, are often objects of attention" (Wild et al. 2012: 201). On the other hand, areas of interest dominating adult fiction are politics, religion, job, law, education and relationships. As the authors conclude, some topics are simply excluded from children's fiction. These are family relationships like *daughter*, *son* or *wife* or the adjective *late*. While the domain of time seems to be important in adult fiction, lexis related to time occurs in children's fiction much less. On the contrary, expressions of spatial relationships occur much more frequently in children's literature. Concerning the top adjectives featuring amongst the keywords, authors claim that there is a "vivid contrast between core adjectives, all amongst the first words we expect a two- or three-year-old to learn, and a far more sophisticated set" (Wild et al. 2012: 202). Table 7 below shows the list of top adjectives found among the keywords.

Table 7. Top key adjectives found in child-directed and adult-directed fiction (adapted from Wild et al. 2012: 199).

Keywords in child-directed fiction	Keywords in adult-directed fiction
big brave clever dangerous far giant huge little narrow round safe sharp strange terrible tiny wild	*active chief civil considerable early financial first general honorary late literary major medical military okay parliamentary personal political popular private public religious royal second social sorry successful such various well*

Another relevant study has been conducted by Thompson and Sealey (2007) who have cross-analysed the lexis of two BNC sub-corpora: a corpus of imaginative literature with adults as target audience (COMP) versus a corpus of imaginative literature written for children (CLLIP). Their work is

focused on the most frequent words, word sequences and parts-of-speech. While the overall results suggest that there are not fundamental differences between these two corpora, especially if the results are compared to a significantly different sub-corpus of newspaper texts, a more detailed analysis of particular sections still shows some significant results. Table 8 contains three lists of the most frequent adjectives that have been retrieved from the three sub-corpora.

Table 8. The 10 most frequent adjectives in CLLIP and COMP corpora. The figures in the 'Freq' columns show the raw frequency of the adjective, and the figures in the '%' show what percentage of all the adjectives in the corpus that particular adjective accounts for (adapted from Thompson and Sealey 2007: 9).

CLLIP	Freq	%	COMP	Freq	%	News	Freq	%
old	788	2.13	*good*	12,071	1.62	*new*	2,057	2.02
good	704	1.91	*other*	10,702	1.43	*labour*	1,538	1.51
little	656	1.78	*old*	10,246	1.37	*other*	1,385	1.36
other	570	1.54	*little*	8,494	1.14	*political*	1,236	1.22
long	485	1.31	*small*	6,783	0.91	*British*	1,220	1.20
small	408	1.1	*sure*	6,773	0.91	*national*	1,042	1.02
big	400	1.08	*long*	6,502	0.87	*European*	810	0.80
great	391	1.06	*young*	5,965	0.8	*prime*	731	0.72
sure	355	0.96	*new*	5,693	0.76	*public*	708	0.70
right	344	0.93	*right*	5,515	0.74	*Soviet*	690	0.68

Similarly to the parts-of-speech analyses, there is not such a significant difference between the children's and adult fiction as there is between these two fiction sub-corpora and the corpus of newspaper texts. There are, however, some minor differences. For instance, the most frequent adjectives in CLLIP seem to be used more frequently, specifically, they account for 14.63 % of all the used adjectives while the top adjectives extracted from COMP constitute only 11.28 % of all adjectives used. Amongst the minor differences found are the adjectives *big* and *great* which occur more frequently in CLLIP and the adjective *young* which does not seem to be much relevant in children's fiction.

3. DATA AND METHODOLOGY

3.1 The subcorpora used

The present thesis focuses on the usage of antonymous adjectives in children's and adult fiction. To represent these two text types, the British National Corpus (BNC) has been chosen as the primary data source. Consisting of more than 100 million words the BNC represents one of the largest balanced collections of texts of British English. The corpus consists of two parts, written and spoken language. The written part constitutes about 90% of the entire corpus with genres ranging from fiction to research journals or newspapers. The text types are classified on various external criteria[1]. The imaginative section of the corpus served as the primary corpus out of which two sub-corpora were created based on their target audience, i.e. children and adult readers:

1. Subcorpus of imaginative texts written for children (SITWCH) (2 077 219 tokens[2])
2. Subcorpus of imaginative texts written for adults (SITWA) (17 593 902 tokens)

One of the obvious issues in conducting a contrastive research on fiction written for children is the smaller number of texts available as opposed to fiction written for adults. The SITWCH corpus is substantially smaller, containing only 2 077 219 tokens and as such it is more than eight times smaller than the SITWA subcorpus, which contains 17 593 902 tokens. Nevertheless, this difference in size of the two subcorpora did not constitute a significant problem for the analysis as the contrastive research was primarily based on a qualitative rather than quantitative approach and the frequencies of occurrence given will be, where necessary, normalized. Furthermore, the small size of SITWCH allowed for a manual search for antonymy which would have been unrealistic in any larger corpora. For the aforementioned reasons, the SITWCH subcorpus was selected as the primary material of the present research.

3.2 Searching for antonymy

While searching for antonymous pairs within lexico-semantic frames can be conducted fairly easily by using CQL queries, research focusing on any co-occurring antonyms requires either the use of pre-defined antonym pairs or an extensive manual analysis of the data. This is further complicated by the vast number of theories published on the subject of antonymy which substantially contribute to a certain fuzziness of boundaries between canonical and non-canonical antonyms. To a certain extent, the

[1] http://www.natcorp.ox.ac.uk/archive/papers/gblibs.html
[2] The data were analyzed using Kontext (www.korpus.cz) interface, the counts are in tokens and not in words, i.e. they include punctuation.

use of pre-defined antonyms would restrict the diversity of antonyms found. It was therefore decided that the co-occurrence of antonymous adjectives (e.g. Jones 2012) would be based on a contextual search for adjectives and sentences containing antonymy will be extracted manually.

The first step in the process was to search for the most frequent adjectives in both subcorpora. The frequency list of adjectives in their lemma forms was generated using the tag 'AJ0' standing for general adjectives. As with the rest of the research, the results from the SITWCH corpus served as the benchmark for the research in SITWA. The total number of adjectives that emerged from SITWCH was 8 294, out of which 55 adjectives occurred more than three hundred times in the corpus and these were therefore selected as the sample of adjectives for the following analysis (the cut-off point of three hundred occurrences is arbitrary). A corresponding number of most frequent adjectives was extracted from SITWA as well.

Having selected the most frequent adjectives from the subcorpus, the next step was to search for their opposites which would occur in nearby context. After several trial runs, I have restricted the query to a 15 token window, which meant, that I have searched for any adjectives occurring within seven words to both left and right of the node. The final number of analysed adjectives was fifty as five adjectives were excluded from the analysis due to their unclear semantical status in regard to antonymous pairings: the intensifier *only,* the quantifier *other* and three colour adjectives (*red*, *green*, *brown*) for which no antonymous pairings are generally determined in literature. It should be, however, noted, there are multiple meanings behind the physical description of colour, consider the following antonyms determined by the Merriam-Webster (2003): *green-barren* or *red-pale*. As opposed to the distinctiveness of other colours, *black* and *white* have reached an antonymous status which manifests itself in various idiomatic expressions, for instance *to see things black and white*. For the aforementioned reasons, *black* and *white* remained the only colours included in the analysis.

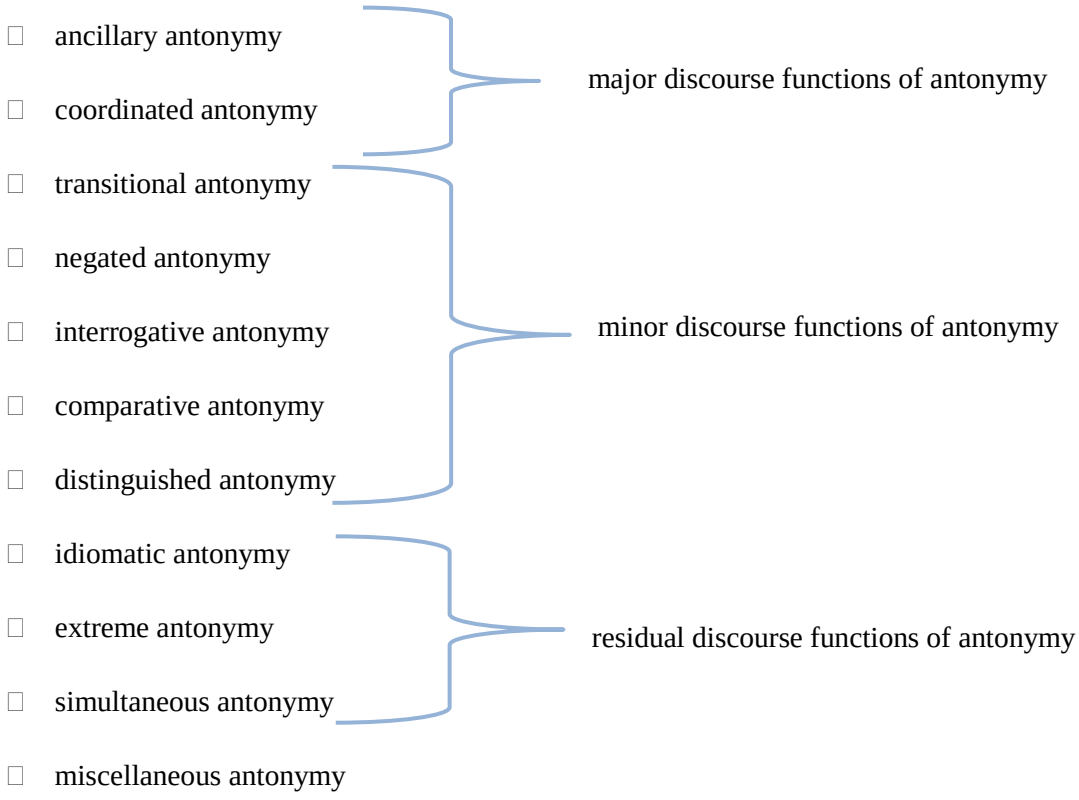
Table 9 shows the most 55 frequent adjectives that were retrieved from SITWCH and the number of hits the above discussed query generated. The total number of concordance lines that were either included or excluded in the research on the basis of manual selection was 17 509. Although the research of antonymy in SITWA only constituted a selective study, a list of the most frequent adjectives was also retrieved to serve as a comparison to the one from SITWCH. The list of most frequent antonyms in SITWA is listed in the fourth and eighth column of Table 9. Section 4.3 which focuses on the comparison of these two lists also mentions the relative frequency of particular adjectives (mainly the ones significantly more frequent in SITWCH). The relative frequency of these adjectives was calculated using the SIGIL tool.*[3]

[3] SIGIL: Corpus Frequency Test Wizard, http://sigil.collocations.de/wizard.html

Table 9. Most frequent adjectives in SITWCH and SITWA, "hits" refers to the number of hits generated by the query (any adjective co-occurring with the given adjective within a 15 token span)

	adjectives in SITWCH	hits	adjectives in SITWA		adjectives in SITWCH	hits	adjectives in SITWA
1	old	1 074	good	**29**	open	613	bad
2	good	999	other	**30**	happy	197	blue
3	other	-	old	**31**	better	292	hard
4	little	813	little	**32**	bad	180	cold
5	long	1 050	small	**33**	wrong	170	large
6	great	548	sure	**34**	true	177	red
7	small	536	long	**35**	best	224	nice
8	young	478	young	**36**	angry	204	true
9	new	418	new	**37**	real	160	poor
10	white	594	right	**38**	only	-	happy
11	black	617	great	**39**	terrible	176	short
12	right	496	black	**40**	quiet	183	possible
13	dead	365	white	**41**	able	132	afraid
14	sure	289	dark	**42**	strong	219	clear
15	dark	595	big	**43**	ready	123	fine
16	big	435	open	**44**	huge	200	deep
17	strange	293	full	**45**	hard	305	beautiful
18	afraid	233	sorry	**46**	nice	159	close
19	cold	425	only	**47**	free	150	ready
20	high	327	able	**48**	important	105	hot
21	sorry	198	dead	**49**	green	-	late
22	poor	296	wrong	**50**	ill	145	aware
23	red	-	whole	**51**	brown	-	certain
24	different	236	better	**52**	fine	164	warm
25	full	281	different	**53**	hot	425	free
26	beautiful	271	high	**54**	deep	212	heavy
27	large	304	best	**55**	empty	174	strange
28	whole	249	real		**TOTAL**	**17 509**	

The next step in the search of antonymy was to extract the sentences containing possibly antonymous pairings to the adjective originally searched for. The concordance lines for every adjective were manually scanned through and examples containing antonymy were extracted from the subcorpus and analysed. Instances of antonymy were then sorted into categories designed by Jones et al. (2012) (see Section 2.2.1):



An extra category named 'miscellaneous' was added to the list to cover unclear cases of antonymous pairs occurring outside sentential boundaries and the like (for more details see Section 4.1.5).

It is rather important to note that the research was conducted manually for each of the fifty adjectives. I have looked for antonyms co-occurring in a context of up to 7 words to both left and right of the node and for this reason, some examples occurred in the research twice. For instance, when searching for the adjective *old*, the following concordance line emerged

*Thank you, my young lass, said the **old** woman." Since you have been so kind to*

Subsequently, when searching for *young*, the same concordance line emerged

*'s bag of corn. "Thank you, my **young** lass," said the old woman.*

It was therefore necessary to remove the identical concordance lines occurring twice as it would have skewed the data in the quantitative analysis. If a concordance line occurred twice in the analysis, it was

subsumed under the more frequent adjective and not counted towards the less frequent one. For instance, the two concordance lines stated above contained the same instance of antonymy which meant removing the concordance line from the second search for *young* and keeping the example under the adjective *old*.

Due to the large amount of data that would have been generated from the SITWA corpus, it was not possible to analyze the data manually as it was done with SITWCH. Therefore, four seed adjectives from SITWCH were selected for a detailed qualitative study that would serve as a comparison point to the research in SITWCH (Section 4.2). The selection of the four adjectives depended on various factors. Firstly, the adjective co-occurred with an antonymous counterpart more than five times in SITWCH. Secondly, the antonyms were distinctive in a sense that they either co-occurred with a single adjective (such as *happy-sad*) or they co-occurred with a large variety of opposites (such as *dark-light*/*bright*/*lustrous*…). The analysis of these four adjectives (*good*, *dark*, *happy*, and *small*) was carried out in exactly the same way as the analysis in SITWCH with the exception that the number of concordance lines extracted was restricted to the same number as in SITWCH so that they would be of a corresponding size. For example, in SITWCH there were 999 hits for adjective *good* (co-occurring with another adjective within a 15 token span), in SITWA, this query generated 6 012 results but only a sample of 999 was extracted. Data were sorted using the function "shuffle" prior to extraction to make sure the sample is random. The results were then manually assorted into the categories based on the discourse functions of antonymy.

The manual analysis of antonymous pairs co-occurring in sentences was further supplemented, where relevant, by search for the lexico-semantic frames established by previous research by Jones et al. (2012). The search in the SITWCH subcorpus was conducted using queries such as "[tag="AJ0"] [word="and"] [tag="AJ0"] [word="alike"]". The lexico-semantic frames used in queries were

- ☐ *whether X or Y*
- ☐ *either X or Y*
- ☐ *both X and Y*
- ☐ *X and Y alike*
- ☐ *neither X nor Y*

3.3 Canonical antonyms

As was outlined in Section 2.3, the canonicity of antonymous pairs can be measured by various means. This study consisted of data retrieved for fifty the fifty most frequent adjectives which represent only a small-scale sample of the actual usage, therefore, only a few pairs could be marked as canonical.

Even these, however, would have to be tested through various experiments to determine their level of canonicity.

To determine the level of canonicity of adjectival pairs in SITWCH, two criteria were applied: i) the number of occurrences and ii) the degree of "exclusiveness". The number of occurrences was simply the number of times the antonymous pair co-occurred in the data. Due to the restricted amount of data, pairs which co-occurred three times and more were included. The degree of "exclusiveness" refers to the overall number of occurrences the two adjectives of the pair occurred with each other. For instance, the adjective *dead* only co-occurred with *alive* thus the degree of exclusiveness of this relationship was 100%. If different opposites were retrieved for the adjectives, the pair was marked as having a lower exclusiveness. For instance, the adjective *good* co-occurred mainly with the adjective *bad* but other antonyms were also found (*evil, poor, awful*) hence the degree of exclusiveness based on the number of occurrences is 74%.

4. ANALYSIS

This chapter focuses on detailed classification of the data retrieved from the subcorpora. The first part (Section 4.1) focuses on the data retrieved from the SITWCH corpus and the second (Section 4.2) analyses selected samples from the SITWA corpus. A quantitative overview (Section 4.1.1) of the data retrieved precedes the qualitative part of the research in which sentences containing antonymous pairs are sorted into Jones's categories based on their discourse functions. The chapter is then further divided into sections based on the frequency of occurrence of the discourse functions. Section 4.1.2 presents the most frequent types, labelled by Jones et al. (2012) as 'major': ancillary and coordinated antonymy. Sections 4.1.3 and 4.1.4 respectively present less frequent ('minor') types: transitional, negated, interrogative, distinguished and comparative antonymy and a category labelled by Jones et al. 'residual', which includes simultaneous, idiomatic and extreme antonymy. The additional category 'miscellaneous' is included in Section 4.1.5. The examples which are used to illustrate the usage of antonymy in Sections 4.1 and 4.2 have been numbered consequently as they come up in the text but each example also contains its full reference in square brackets according to which they can be found in the *Appendix*.

4.1 Antonymy in SITWCH corpus

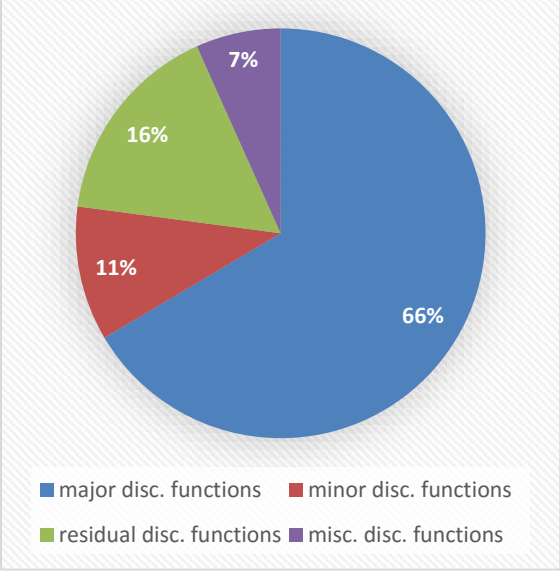
4.1.1 Distribution of discourse functions in SITWCH

The figures below (Figures 4 and 5) reflect the distribution of discourse functions in the SITWCH corpus. The overall number of instances of co-occurring antonymy identified in SITWCH corpus was 179. Figure 4 shows the distribution in terms of the big categories: major, minor and residual discourse functions (Jones et al. 2012) including also the category labelled as miscellaneous. The two major discourse functions, the ancillary and coordinated antonymy, took up 64% of the cases of antonymy which is a result in line with Jones et al.'s previous research in which the percentages of major discourse functions ranges from 51.4% in child-directed English to 77.1% in the English newspaper corpus (Jones et al. 2012: 28) The minor functions of antonymy including transitional, negated, interrogative, comparative and distinguished antonymy took up 10% of the antonymic cases and residual functions of antonymy such as idiomaticity, extremity and simultaneity constituted 15% of the occurrences. As has been expected, the major functions of antonymy dominated in the corpus. Nevertheless, the data gathered in the first part of the research suggest that antonymy might manifest itself slightly differently in child-directed fiction writing. The number of instances categorised under the residual discourse function is in fact higher (15%) than instances classified under the label minor discourse functions (10%). Although Jones et al. do not distinguish between adult-directed and child-directed fiction, in their data gathered from multiple language domains (Jones et al. 2012: 38), residual

antonyms occurred in 5.6% cases in adult-produced writing which consisted of texts from *The Independent*. This means that the distribution of the discourse functions might have reflected the news writing style rather than the fact that the texts were adult-produced (residual discourse functions were, however, more prevalent in speech, especially in adult-produced speech (16.1%); see Table 4). From this perspective, the data seem to suggest that the target audience and the text type may be the key factors which would explain the prominent percentage of residual discourse functions found in the analysed data. Figure 4 contains detailed distribution of all discourse functions found in the SITWCH corpus. The two major discourse functions – ancillary and coordinated occurred in 64% of the sentences out of which 51% were cases classified as ancillary antonymy. Jones et al.'s (2012) research of the distribution of the discourse functions of antonymy across multiple corpora differing in dialect, register or even language shows that ancillary antonymy remains the primary discourse function in all corpora. The fact that the percentage of occurrences of ancillary antonyms amounted to 50% can still be considered very substantial. For instance, in Jones et al.'s (2012: 30) research, ancillary antonymy constituted 38.7% in adult-produced writing, 36.7% in child-produced speech and 31.9% in child-directed speech.

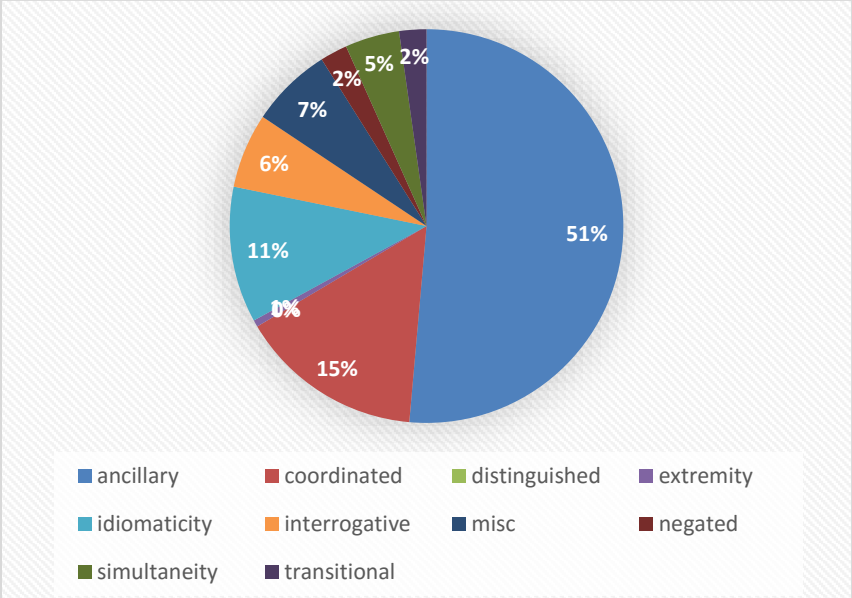
As was hypothesized in the theoretical section in line with the research by Jones et al. (2012), the second most common discourse function was coordinated antonymy. In contrast, the third most frequent discourse function in the SITWCH corpus was antonymy classified under idiomaticity with 11% of occurrences, which belongs, according to Jones et al. to the residual discourse functions. 6% of the occurrences contained instances of interrogative antonymy, 5% simultaneity and 7% miscellaneous cases of antonymy which will be further discussed in the following analysis of the found instances of antonymy (see Section 4.1.5).

Figure 4. Distribution of major, minor, residual, and miscellaneous discourse functions in SITWCH.



With ancillary antonyms occupying half of the data extracted from SITWCH, the distribution of coordinated antonymy (15%) was not as dominant as was suggested by previous research. According to Jones et al. (2012: 32) "coordinated antonymy accounts for about one third of all antonym use in English". As has been already mentioned, the prevalence of the residual antonyms, specifically of the categories of idiomaticity and simultaneity, was rather surprising as the percentage of all residual discourse functions generally range from 5 - 16%. The interrogative antonymy, which tends to be low in count in adult-produced writing but prominent in child-directed speech, accounted for 6% of the instances in SITWCH. The least frequent instances of discourse functions were categories of extremity (1%), negated and transitional antonymy (each 2%). There were no instances of comparative and distinguished antonymy, which generally range from 2.5 - 6.8% in various types of corpora (Jones et al. 2012: 35-38).

Figure 5. Distribution of specific discourse functions in SITWCH.



4.1.2 Major discourse functions of antonymy

Ancillary antonymy

Having classified all identified cases of co-occurring antonyms into Jones et al.'s (2012) categories, 92 instances of ancillary antonyms emerged from the data. Overall, 50% of all antonyms were found to comply with this category. Ancillary antonymy seemed to occur most frequently with adjectives *old*, *small*, *right*, *white* and *dead*. Table 10 shows the instances of ancillary antonymy found in data excerpted from SITWCH.

Table 10. Ancillary antonyms in the SITWCH corpus. The most frequent opposites are in bold with number of occurrences in brackets.

seed adjective	instances of ancillary antonymy	opposites
old	24	***young (12)***, *new, younger, youngest*
white	19	*black*
small	13	***big (7)***, *great, large, huge, vast*
right	6	*wrong*
dead	5	*alive*
dark	4	***bright (2)***, ***pale (2)***
good	3	*bad, awful, poor*
great	3	***tiny (2)***, *bad*
little	2	*large (1), big (1)*
long	2	*short*
high	2	*low*
happy	2	*sad*
huge	2	*tiny*
new	1	*older*
big	1	*tiny*
poor	1	*rich*
wrong	1	*right*
best	1	*worst*
TOTAL	**92**	**-**

Instances of ancillary antonymy are identified as containing two pairs: a canonical antonymous pair which draws attention to the antonymy of the less canonical pair (see also Section 1), e.g. in example (1) below *young - old* emphasizes the antonymy of *lass - woman*. In the present thesis, the more canonical A-pair is always represented by an adjective, while generally it can be represented by other parts of speech. The less canonical B-pair can take on various lexico-semantic structures. Jones and Murphy (2007: 111) note that B-pairs can be represented by single words or longer word-strings. They can "themselves be antonyms or near-antonyms (…) or they can be co-hyponyms, whether established or instantial." The following examples of antonymy (1 – 12) illustrate the variety of ancillary antonymy found in the SITWCH corpus.

(1) *"Thank you, my **young** lass," said the **old** woman.* [29 FUB]

(2) *The house had a **large** garden with a **small** river running at the foot of it and was situated […]* [79 HDB]

(3) *[…] to make out that I was **wrong** and you were **right**.* [116 CA3]

(4) *[…] cried Izz Huett, a* ***pale*** *girl with* ***dark*** *hair.* [147 GW8]

(5) *This* ***new*** *complication revived all the* ***old*** *doubts that she had successfully conquered […]* [33 BMU]

(6) *It was a* ***large*** *house, so she ate a* ***little*** *piece of mushroom to get* ***bigger****, and walked on […]* [54 FNS]

(7) *Agatha, the* ***young*** *man was Felix, and the* ***old*** *man was called Father.* [25 H8G]

(8) *All my people have* ***tiny*** *heads and* ***huge*** *arms and legs.* [176 CAB]

(9) *[…] them, a tall figure all in* ***black****. Two* ***white*** *hands rose and put back the hood.* [100 F99]

(10) *[…] elbows were awkward on the youngsters' shoulders, one* ***high*** *and jolting, one* ***low*** *and smooth.* [156 APW]

(11) *The* ***huge*** *ship hit our* ***tiny*** *boat with a* ***great*** *crash.* [65 FPU]

(12) *David proposed and Jenny accepted. That was the* ***best*** *part. The* ***worst*** *part was the arguments with her the arguments with her mother that were inevitable. [*175 HD6]

In the above examples, the A-pairs are in bold and the B-pairs are underlined. As was hypothesised, most of the A-pairs were canonical. In most examples, the pairs labelled as B-pairs would not be generally considered opposites (e.g. *house - piece of mushroom*) and only represent local opposition which is created by the canonicity of the A-pair (e.g. *large - little*). While in the majority of sentences, the antonymy of the B-pair was rather intrinsic (such as in example (5), *complication - doubt*), there was also one prototypical example of ancillary antonymy with the canonical pair *young - old* emphasizing the antonymy of the B-pair *lass - woman* (ex. 1). The B-pair in example (1) is according to Jones's taxonomy of B-pairs (2002: 49) a 'human B-pair' in which two individuals are contrasted. In several sentences, the B-pair consisted of hyponyms such as in (11) *ship-boat* or (8) *heads - arms and legs*. In others, the nature of the relationship between the B-pair elements seemed to be meronymous such as in (4) *girl - hair* or (9) *figure - hands*.

Regarding the form of the B-pair, most of the instances consisted of single words such as nouns (ex. 1, 2, 4, 5, 9 and 11), pronouns (ex. 3), proper nouns (ex. 7), adjectives and participial adjectives (ex. 10) or longer strings of words (ex. 6 and 8). Some ancillary antonyms were found outside sentential boundaries such as in (9) and in some cases the B-pair was represented by a whole sentence as in (12): *David proposed and Jenny accepted. – the arguments with her mother that were inevitable*. In example (11), there were three pairs with the adjective *tiny* being contrasted by *huge* and *great* and the contextual *ship - boat - crash*. This layout of two synonyms surrounding an opposite has also been encountered elsewhere in the data from SITWCH. In (6) two ancillary pairs in opposition, the established A-pair *large - little* and the B-pair *house - piece of mushroom*, are followed by transitional antonymy signified by the verb *get* and adjectival antonym in comparative form *bigger*. The structure of these antonymous triplets *huge-tiny-great* and *little-large-bigger* show a certain stylistic effort to avoid repetition. Moreover, the fact that the authors chose to juxtapose these antonyms also means

that both surrounding adjectives were considered as antonymous to the middle one. The semantic scheme of these triplets then functions to portray a fictional world in which contrasts intensify the differences in size or impact.

Coordinated antonymy

As opposed to ancillary antonymy, the function of coordinated antonymy is to express a certain inclusiveness or exhaustiveness of a scale. The two antonyms are generally connected by conjunctions *and* or *or*. A variety of coordinated antonymy occurred within the lexico-semantic frames which will be examined further in this section. Altogether 15% of all analysed instances of antonymy were categorized under coordinated antonymy. Table 11 shows the instances of coordinated antonyms found in the data excerpted from SITWCH.

Table 11. Coordinated antonyms in the SITWCH corpus. Most frequent opposites are in bold with number of occurrences in brackets.

seed adjective	instances of coordinated antonymy	opposites
good	6	***bad (5)***, *evil*
cold	5	*hot*
old	3	***young (2)***, *new*
dead	3	*alive*
small	2	*large, big*
better	2	*worse*
long	1	*short*
white	1	*black*
dark	1	*light*
poor	1	*rich*
happy	1	*sad*
best	1	*worst*
TOTAL	**27**	-

Overall, there were 27 coordinated antonyms. The number of coordinated antonyms was considerably lower than that of ancillary antonyms. The following examples illustrate the use of coordinated antonymy in SITWCH.

(13) *[…] sorry for them -- sorry for all the world,* ***good*** *and* ***bad***, ***rich*** *and* ***poor***, ***young*** *and* ***old*** *[…]* [1 FS3]

(14) *[…] like to know -- why the sun shines on* ***the good*** *and* ***the bad*** *just the same, ' she said* [52 GW8]

(15) *It doesn't matter if your hair is* ***short*** *or* ***long***. [61 GVM]

(16) *[…] and nobody who cared twopence*[4] ** whether you were* ***alive*** *or* ***dead*** *(not after the competition, anyway […]* [124 AT4]

In example (13) three antonymous pairs are juxtaposed to emphasize speaker's intention: *I am sorry for them — sorry for all the world …* The keyword in the sentence is *all* as it subsumes the listed categories of society (*good - bad, rich - poor, young - old*). Similar meaning is expressed in (14), where the two antonyms could be easily substituted for *everyone*.[5] A slightly different change of tone can be recognized in examples (15) and (16) where the exhaustiveness of a scale is still implied but the keywords here are *doesn't matter* and *nobody who cared* in the previous context. In both of these examples, the irrelevancy of both qualities is stressed.

Coordinated antonymy frequently occurs within a set of lexico-semantic frames which has been pointed out in Section 1. Contrary to the lengthy process of manual classification of antonymy, antonyms occurring within the frames can be found fairly easily with the use of CQL queries. For this reason, I did not consider the adjective frequency list but rather looked for antonyms within the whole SITWCH subcorpus. Therefore, the antonyms found within the lexico-semantic frames have not been included in quantitative overview (Section 4.1.1). Table 12 summarizes the number of hits within the pre-defined lexico-semantic frames.

Table 12. Number of hits for the lexico-semantic frames in the SITWCH corpus.

frame	hits
both X and Y	21
X and Y alike	3
neither X nor Y	2
either X or Y	0
whether X or Y	0
TOTAL	**26**

The most frequently occurring frame was '*both X and Y'* with 21 hits. The following examples illustrate the use of antonymy within this frame.

(17) *[…] for beauty and pleasure -- pleasure of all kinds,* ***both good and bad****.* [198 GUS]

(18) *[…] who Baron Samedi is, but they believe he is* ***both dead and alive****.* [199 GWA]

[4] ***** error copied from BNC

[5] Sentence number 52 (example 14) was one of a few instances of antonymy where the engine of the corpus did not recognize the correct word class. Despite *the good* and *the bad* being substantivized adjectives, they were included in the research as I presume they would not be of much difference to a child reader.

(19) *[…] anyone using it as she rode past on regular exercise* ***both early and late****: it deserved better.* [183 AT4]

(20) *She loved him, and was* ***both sorry and glad*** *that he was gay, and hoped […]* [188 CA3]

(21) *[…] an outcrop of rock, where I hoped it was* ***both safe and unobtrusive*** *for the […]* [203 HGS]

(22) *It belonged to a period of architecture that was* ***both ugly and ornate****, and it was fairly covered with scrolls and plaques […]* [184 BMU]

Generally, it can be said that the antonymous pairs that emerged from this particular frame were either very conventional or very unconventional. In examples (17), (18), and (19) the antonymous pairs *good - bad, dead - alive* and *early - late* would all fall under canonical antonyms. The second type of antonyms that emerged was much less explicit and even synonymous to a certain extent. In (20) the pair *sorry - glad* would not typically be considered antonymous, nevertheless, in this context it is clear that the speaker wanted to express an opposing bittersweet emotion. In (21) the pair *safe - unobtrusive* is synonymous rather than antonymous. Again, the pair *ugly - ornate* in (22) does not seem to express such a strong opposition at first sight but certainly has an antonymous undertone.

In none of the other frames did adjectival antonyms occur with such frequency. The second frame with most hits was '*X and Y alike'* with three sentences:

(23) *[…] that sickness strikes identically against* ***rich and poor alike****.* [207 CA3]

(24) *Indeed, threads dangled down from all life,* ***psychic and non-psychic alike****.* [208 CM4]

(25) *[…] and instantly it was in every mind at once, with* ***young and old alike*** *fighting each other to be first up on the pageant.* [209 HTN]

The two canonical pairs that emerged from this frame were *rich - poor* in (23) and *young - old* (ex. 25). In (24), the pair *psychic - non-psychic* expresses the same coordinated discourse function as the other two but the pair is not canonical although it is certainly antonymous. This pair was also the only one in which the adjective was negated by a negative prefix *non*. Overall, this frame generally unites two distinct groups and it would be rather unlikely to encounter synonyms here.

Two sentences emerged out of the '*neither X nor Y'* frame:

(26) *'ll soon be there,' said Tock, sounding* ***neither happy nor sad****.* [180 AMB]

(27) *[…] aren't really brave, your judges and lawyers are* ***neither reasonable nor honest****.* [181 FPV]

In (26) the canonical pair *happy - sad* occurs, while in (27) the adjectives express two positive qualities, which are not necessary in opposition but rather point to the fact that *judges and lawyers* are not *reasonable* and not *honest*.

There were no adjectival occurrences for frames '*whether X or Y', 'either X or Y'* although a closer look at the data revealed other frames. For instance, two adjectival antonyms *better - worse* seemed to occur within a specific frame *'X instead of Y':*

(28) *[…] three more got in, so things* ***were worse instead of better***. [167 BMU]

(29) *[…] science in general, wishes to remould the world for the* ***better, and instead leaves it a worse place*** *than he […]* [170 HGS]

A similar syntactic frame is also originally described by Fellbaum (1995: 296) '*Instead of* X, Y' who subsumes it under 'redundancy' (see Section 2.2). In SITWCH, however, this frame was specific to the *better - worse* pair. Another structure, which occurred in the data, operated with intensifiers *too* and *so*. It is difficult to derive the pattern from such a small number of examples but examples (30 to 32) illustrate its usage:

(30) *We are* ***too old*** *now* ***to make new friends***. [21 GV7]

(31) *The garden was really* ***too small for a dog so big***. [67 CFJ]

(32) *It's* ***too small for a big ship*** *like this.* [72 FPP]

4.1.3 Minor discourse functions of antonymy

Transitional antonymy

The most typical structure in which transitional antonyms occur is the frame '*from X to Y'*. Table 13 shows the instances of transitional antonymy found in data excerpted from the SITWCH corpus.

Table 13. Transitional antonyms in SITWCH.

seed adjective	instances of transitional antonymy	opposite
good	1	*bad*
little	1	*big*
poor	1	*rich*
huge	1	*tiny*
TOTAL	**4**	-

There was only one example in the data in which transitional antonymy was found within the prototypical frame '*from X to Y'* (ex. 36). However, as the other examples (33 to 35) show, antonymy can be used to express the transition from one end-point to another also in other ways:

(33) *People say I'm very* ***bad****, but I'll try very hard to* ***be good****. Oh, thank you!* [38 FPT]

(34) *When the* ***little*** *ones* ***get big*** *enough to come here, he'll […]* [53 AEB]

(35) *The* ***rich get richer*** *and the* ***poor get poorer****, my accountant's on the fiddle […]* [158 CA3]

(36) *[…] just* ***progressed from*** *a* ***tiny*** *red tricycle* ***to*** *riding a* ***huge*** *yellow proper bicycle, with* stabilizers. [177 HD6]

In (33) the transition is from *bad* to *good*. There is no lexical indication of progression towards being *good* other than the verb phrase *try to be* which could be in this context replaced by *become* that clearly indicates a state of change. A similar transition from *little* to *big* is in (34) where the keyword signalling the transition is *get*. Example (35) borders on several interpretations of antonymy. Firstly, it could be ancillary antonymy as A-pair *rich - poor* emphasizes the antonymy of the B-pair *richer - poorer*. Secondly, to a certain extent this case could be also categorized under idiomaticity. In this case, I believe that interpreting it as transitional antonymy is closest to speaker's intention to highlight social injustice. Antonyms *tiny - huge* in (36) are the only exemplification of the prototypical frame of transitional antonymy '*from X to Y'*.

Negated antonymy

Negated antonymy is mostly constructed with the negator *not* and typically occurs within the frame '*X, not Y'*. Jones and Murphy (2007: 1112) consider it the most emphatic antonymy type because the "word is affirmed by the denial of its antonym". Table 14 shows the instances of negated antonyms found in data excerpted from the SITWCH corpus.

Table 14. Negated antonyms in the SITWCH corpus.

seed adjective	instances of negated antonymy	opposites
good	2	*bad, evil*
dead	1	*alive*
better	1	*worse*
TOTAL	4	-

The negation of the antonym can either precede or follow the other element. The following four examples (37 to 40) contained negated antonymy.

(37) *Mr. Bolsover see that Brownies look for ways of doing* ***good*** *turns to people,* ***not bad ones****.* [36 B0B]

(38) *[…]* ***do not think*** *they are* ***evil****. They may be* ***good****. They may even be divine.* [37 CH4]

(39) *[…] landing back on my feet again. I'm* ***not dead****. I'm* ***alive****. And I'm free.* [125 BMS]

(40) *[…] to be there but it's* ***worse*** *now,* ***not better****.* [168 EFJ]

All the sentences above contain very canonical antonyms *good - bad*, *evil - good*, *dead - alive* and *worse - better*. In some sentences, the negation precedes the antonym such as in (38) and (39), in others it negates the second antonym (ex. 37 and 40).

Interrogative antonymy

As I have mentioned in Section 1, interrogative antonymy tends to be very prominent in child-directed speech. Moreover, its use seems to be restricted to highly canonical antonyms. The hypothesis was that the interrogative use of antonymy in child-directed speech would also be somehow reflected in child-directed literature, perhaps in a different format (dependent interrogative sentences rather than actual questions). While keeping in mind that the research in SITWCH only included 182 occurrences of antonymy, the fact that interrogative antonyms were found in 6% of the data is still fairly substantial. Overall, there were eleven instances of interrogative antonymy. Table 15 shows the instances of interrogative antonymy found in the SITWCH corpus.

Table 15. Interrogative antonyms in the SITWCH corpus.

seed adjective	instances of interrogative antonymy	opposite
dead	4	*alive*
good	2	*bad*
white	1	*black*
right	1	*wrong*
open	1	*shut*
true	1	*false*
long	1	*short*
TOTAL	**11**	-

The following examples (41 to 46) illustrate the types of structures that were found:

(41) *Which do we live on? A* ***good*** *one* ***or*** *a* ***bad*** *one?* [47 GW8]

(42) *I couldn't see him. Would his eyes be* ***open or shut****?* [161 BMS]

(43) *You can tell me* ***if I 'm right or if I 'm wrong****.* [121 H7V]

(44) *I don't know now whether she's* ***alive or dead****.* [127 F99]

(45) *I didn't know if you were* ***dead or alive****! ' she cried.* [135 FSB]

(46) *[…] sniffed his own hand. Is it true that* ***white folk*** *smell different* ***from black folk****? Jess asked* [94 C85]

Interrogative antonyms usually represent two opposing choices connected by the connector *or*. The most typical representations are examples (41) and (42), where antonyms *good - bad* and *open - shut* are part of questions providing two clear options. The two elements opposed do not necessarily have to be single adjectives but can be also represented by whole clauses such as in (43), where two *if*-clauses are opposed. In other examples interrogative antonyms are part of a dependent interrogative clause such as in (44) and (45). It is questionable whether example (46) should be classified as interrogative antonymy. On one hand, it is a part of a question, on the other hand, it does not pose two options to the speaker and only requires affirmation or refutation. Moreover, it borders on another discourse function of antonymy – distinguished antonymy.

Distinguished antonymy

Distinguished antonymy is generally regarded as a concept rarely expressed by children as it requires a complex metalinguistic understanding of two opposing qualities. There were no instances of distinguished antonymy in the data.

Comparative antonymy

Similarly, to distinguished antonymy, there were no instances of comparative antonymy in the data.

4.1.4 Residual discourse functions of antonymy

Idiomatic antonymy

Idiomatic antonymy is specific in the sense that it frequently resembles other discourse functions of antonymy but the antonyms create an established pair which can be found in a well-known structure or even a cliché, saying or idiom. Contrary to previous expectations, there were twenty instances of idiomatic antonyms, which represents 11% of all occurrences of antonymy in the data. Table 16 shows the instances of idiomatic antonymy found in the data excerpted from the SITWCH corpus.

Table 16. Idiomatic antonyms in the SITWCH corpus. Most frequent opposites are in bold with number of occurrences in brackets.

seed adjective	instances of idiomatic antonymy	opposites
white	10	*black*
dead	5	*alive*
good	3	***bad (2)***, *evil*
long	1	*short*
better	1	*worse*
TOTAL	**20**	-

Most of the idiomatic antonymous pairs that occurred in the data were idioms containing pairs *black and white* and *dead or alive*. The following sentences (examples 47 to 52) exemplify the usage:

(47) *But please remember,I can be* ***a good friend, but a bad enemy*** *[…]* [49 FPL]

(48) *It was a* ***black and white photograph*** *which had been partially tinted with pastel colours so that […]* [85 AC5]

(49) *Phoebe! You* ***take everything*** *so* ***black and white****,' Harriet said […]* [93 C85]

(50) *But here we are.* ***For better or for worse****.* [169 FR0]

(51) *[…] do believe there is a great design, and that* ***Good and Evil*** *are inextricably linked in a metaphysical battle across […]* [48 HTY]

(52) *[…] if Sikes doesn't return that boy to me,* ***dead or alive****, I'll tell the police about him […]* [132 FRK]

The above examples show a variety of idiomatic antonyms ranging from well-known collocations such as *dead or alive* in (52) and idiomatic expressions such as in (47) *good friend, but a bad enemy*. The varying range of idiomaticity can be seen in examples (48) and (49). While in (49) the usage is clearly idiomatic - seeing things *black and white* refers to having a two-sided view of the world, in (48) *black and white* refers to a colour scheme. Despite the fact that it is a description of physical properties, it has become a category of film and photography and is universally used as a collocation. Similarly, *Good and Evil* in (51) are not part of a particular idiom, yet, their frequent co-occurrence suggests a definite lexical opposition commonly used in tales and stories.

Simultaneous antonymy

One of the residual functions of antonymy, simultaneity, generally occurs at a very low count. In this research, eight examples of simultaneous antonyms were found. The most important characteristic is that one element of the sentence possesses two opposing qualities – '*X* and *Y'*. Table 17 shows the instances of simultaneous antonymy found in the data excerpted from the SITWCH corpus.

Table 17. Simultaneous antonyms in the SITWCH corpus.

seed adjective	instances of simultaneous antonymy	opposites
dark	2	*glittery, lustrous*
happy	2	*sad*
poor	1	*rich*
white	1	*black*
great	1	*small*
dead	1	*alive*
TOTAL	**8**	-

The following sentences (examples 53 to 56) exemplify the instances of simultaneous antonyms:

(53) *Lexandro's eyes were* ***dark*** *and* ***lustrous****, his teeth pearly, his dusky hair […]* [147 CJJ]

(54) *I was* ***happy*** *and* ***sad*** *at the same time.* [167 FSB]

(55) *[…] so I was* ***rich****, but I considered myself* ***poor****, because I was tied to a mad wife […]*[162 FR6]

(56) *On the* ***small monitor*** *screen his* ***great external weapon*** *was white-hot, seething, dripping molten metal […]* [63 CJJ]

In example (53) the *eyes* show antonymous qualities. They are both *dark* and *lustrous* at the same time. In (54) the speaker wants to express an opposing emotion, he or she is *happy* but also *sad*. In (55) the simultaneity is slightly weakened by a different verb phrase *was – considered myself*. Example (56) is rather complex. The apposition of the two noun phrases *small monitor screen* and *his great external weapon* might be interpreted as ancillary antonymy. Nevertheless, based on extended context, it is clear that both noun phrases refer to one object.

Extreme antonymy

Extreme antonymy is defined by the frame 'ADV *X (n) or* ADV *Y'*. Instead of coordinated antonymy that encompasses the entire scale, extreme antonymy unites two end-points (Jones and Murphy 2007: 1114). There was one example of extreme antonymy in the data:

(57) *And his people were real. No one was* ***all good****, or* ***all bad****.* [42 FS3]

In example (57), the canonical pair *good - bad* are premodified by the adverb *all*.

4.1.5 Miscellaneous instances of antonymy

Jones et al. (2012: 37) note that the established discourse functions of antonymy are not flexible enough to cover the diversity with which antonyms occur in context. 15 examples of antonymy that occurred in the research but did not comply completely with any of the categories listed above were classified as miscellaneous. A major group of miscellaneous antonyms was represented by examples in which at least one of the members was a proper noun denoting place such as examples (58) and (59) where the antonyms *old - new* occur. These mostly referred to a specific place in the fictional world created by the author (Chambers and King, *Warhammer Armies: High Elves*).

(58) *Elves is situated in the Great Western Ocean between the* ***Old*** *and the* ***New*** *Worlds.* [4 CM1]

(59) *Caradryel orders the recall of the Elf armies from the* ***Old*** *World to combat this* ***new*** *threat.* [8 CM1]

In some examples, the two opposite properties were contrasted, yet, there were no less conventional pairs within context that would classify them as ancillary antonymy. In (60) the author clearly distinguished between two personality characteristics *nice - nasty*. In example (61) the superlative forms create a well-constructed emphasis.

(60) *Interrogators always come in pairs, Mr* ***Nice*** *and Mr* ***Nasty****.* [179 BMS]

(61) *Staring in, she said, 'It was **best** to know the **worst**, and I know it now […]* [174 FRE]

In some examples, it is clear that the author intended to create the opposition although very subtle such as in (62):

(62) *How **strange**, she thought, that such **normal**, pleasant people […]* [149 A7A]

4.1.6 Canonical antonyms in SITWCH

The focus of this chapter is the canonicity of antonyms retrieved from SITWCH (see Section 2.3). Two groups of antonyms emerged from the research: i) the adjective co-occurred with one specific adjective only and ii) the adjective co-occurred with a variety of other adjectives (see also the degree of "exclusiveness" as explained in Section 3.3). The second group supports the scalar character of antonymy as suggested by Herrman et al. (1986), Paradis et al. (2009), and Jones et al. (2012). Table 18 below summarizes the first group of adjectives, i.e. the adjectives which co-occurred with a single counterpart. There were seventeen antonymous pairs which co-occurred with a single antonymous counterpart, nine of them occurred more than three times in the data and were therefore subjected for consideration regarding their level of canonicity. These were *white-black*, *dead-alive*, *long-short*, *cold-hot*, *happy-sad*, *better-worse*, *poor-rich*, *best-worst* and *huge-tiny*. The most canonical pair was undoubtedly *white-black* which occurred 32 times in the data. On the whole, colours tend to be excluded from antonym research due to reasons described in Section 3.2, yet, the *black-white* pair represents a visual as well as metaphoric and idiomatic contrast which was particularly prominent in the data. The strong reciprocity of the second most canonical pair *dead-alive* can be explained by its binary nature - it simply does not allow for any continuum in between the two opposite poles and is therefore categorized by Cruse (2000) as 'complementary' antonymy (see Section 2.2.1). A fairly strong relationship was observed in *long-short*. Paradis et al. (2009: 415) suggest the more frames the antonyms occur in, the more canonical their co-occurrence is.

Table 18. Adjectives which occurred with a single opposite (SITWCH).

seed adjective	opposite	number of occurrences
white	black	32
dead	alive	19
long	short	6
cold	hot	5
happy	sad	5
better	worse	4
poor	rich	4
best	worst	3
huge	tiny	3
high	low	2
big	tiny	1
nice	nasty	1
open	shut	1
right	wrong	1
strange	normal	1
true	false	1
wrong	right	1

The fact that this thesis does not operate with a large number of frames (only 26 frames were retrieved from SITWCH, see Table 12) means that the frequency of occurrence across different lexico-semantic frames cannot be considered a valid indicator of canonicity. However, it is noteworthy that particularly *long-short* occurred across various discourse functions, for instance:

(63) ***Long*** *straw or* ***short*** *straw? ' he'd say.* [56 AEB]

(64) *Anyway, to cut a* ***long*** *story* ***short****, I had an argument […]* [57 CCA]

(65) *It doesn't matter if your hair is* ***short*** *or* ***long*** *[…]* [61 GVM]

In example (63) the antonyms are in opposition in an interrogative function, in (64) they are used within an idiomatic expression and in (65) they are in a coordinated position. Other two antonyms that showed a strong relationship were *cold-hot* and *happy-sad*, they occurred five times in SITWCH and were also reciprocal. While *cold-hot* occurred solely in the coordinated discourse function, *happy-sad* occurred in multiple discourse functions. Some of the adjectives also showed a strong tendency of preceding or following their antonymous counterpart. For instance, *cold* always followed *hot* and *happy* always preceded *sad*. Regarding the form of the antonyms, it is worthy of mention that while *good* occurred

with other counterparts than just *bad*, its comparative and superlative form co-occurred with *worse* and *worst* fairly consistently (4 occurrences of *better-worse*, 3 occurrences of *best-worst*).

The second group based on the SITWCH data was a group of adjectives that co-occurred with multiple counterparts as shown in Table 19.

Table 19. Adjectives which co-occurred with multiple opposites (SITWCH). Most frequent opposites are in bold with number of occurrences in brackets.

seed adjective	opposites
dark	**bright (2)**, **pale (2)**, glittery (1), light (1), lustrous (1)
good	**bad (14)**, evil (3), poor (1), awful (1)
great	**tiny (2)**, small (1), bad (1)
little	**big (2)**, large (1)
new	**old (3)**, older (1)
old	**new (17)**, young (14), younger (1), youngest (1)
small	**big (8)**, large (4), great (1), huge (1), vast (1)

The adjectives *old* and *small* co-occurred with one more established opposite (*new* and *big*) and one less frequent but still prominent (*young* and *large*). The most frequent antonym for *small* was *big* which does not correspond with Paradis et al.'s (2009) elicitation experiment and Jones et al.'s (2007) research in both of which *small* formed a canonical pair with *large*. This was in fact one of the strongest canonical pairs in both experiments. The difference between *big* and *large* seems to be very subtle. Oxford Advanced Learner's Dictionary (8th edition) defines *big* as 'large in size' and *large* as 'big in size'. If writing for children to a degree reflects the way we speak and generally communicate with children, the explanation might be that *big* is word shorter and easier to pronounce that *large* and is therefore perhaps more natural to children. The adjective *old* co-occurred with *new* and *young* very frequently. The explanation here is straightforward, *new* refers to something which has not existed before as illustrated in example (67) and *old* refers to age such as in (66). *Old* is thus a 'good' antonym for both adjectives.

(66) *It's an **old** story, **young** man.* [23 GWC]

(67) *[…] breaking new ground -- planting **new** footprints on God 's **old** Earth.* [27 HTN]

As opposed to the corresponding antonyms *better-worse* and *best-worst*, the adjective *old* co-occurred with *younger* and *youngest*. Both of the examples have been classified as ancillary antonymy since the canonical pair *old-young*(*er*/*est*) brings out the contrast between the two differently aged characters (ex. 68 and 69).

(68) *[…] she getting on without a farm manager? ' the **old** maltster asked the **younger** men.* [11 FRE]

(69) *Now the **old** man turned to his **youngest** grandson, Yanek.* [15 FUB]

The continuum between the two opposites was particularly extensive for the adjective *dark*. There were in total five opposite counterparts retrieved for the adjective *dark* and none seemed to be more prominent than others. It is safe to assume that adjectives *glittery* and *lustrous* do not strike as direct opposites of *dark*, yet, their usage was very specific. In both examples (70, 71) these express the discourse function of simultaneity which unites the two end-points, interestingly, the two qualities here are used to describe eyes in both examples. Moreover, other words within the sentence emphasize the author's intentional wordplay (*light*, *candle*, *blaze* in ex. 70 and *pearly*, *dusky* in ex. 71).

(70) *[…]the light from her candle but with the eyes frighteningly* ***dark*** *and* ***glittery****, blazed the furious face of Miss Harker* [142 AEB]

(71) *[…] Lexandro 's eyes were* ***dark*** *and* ***lustrous****, his teeth pearly, his dusky hair […]* [144 CJJ]

Even though the research in SITWCH operates with a restricted amount of data, several antonymous pairs showed a high canonical status. The criteria that have been set in Section 3.3 enabled a selection of the strongest pairs, Table 20 lists the pairs which fitted the criteria.

Table 20. Canonical antonyms in SITWCH.

antonyms	number of occurrences	level of exclusiveness in %
black-white	32	100%
dead-alive	19	100%
long-short	6	100%
hot-cold	5	100%
happy-sad	5	100%
better-worse	4	100%
poor-rich	4	100%
best-worst	3	100%
huge-tiny	3	100%
new-old	3	75%
good-bad	14	74%
small-big	8	53%
old-new	17	51%
old-young	14	43%
small-large	4	26%

The above data show that while some of the pairs fit the criteria, their occurrence was lower than that of some which did not fall under the category of canonical antonyms as was hereby defined. As was mentioned before, since the adjective *old* had two distinct counterparts, the two strong opposites *old-*

new and *old-young* did not fit the definition because they only co-occurred in 51% and 43% respectively. Nevertheless, it is necessary to emphasize that their co-occurrence was prominent in the research.

4.2 Antonymy in SITWA corpus

To compare the results from the SITWCH corpus, a selective study was conducted in the SITWA corpus. Due to the large size of the SITWA corpus, only four antonyms were chosen from the analysis of antonyms in SITWCH to be contrasted in a qualitative study in SITWA (for the selection criteria see Section 3.2). The four seed adjectives selected were *good*, *dark*, *small*, and *happy*. Sections 4.2.1 – 4.2.4 present the analysis results.

4.2.1 Adjective *good*

The analysis which followed the search for antonyms with the seed adjective *good* revealed an almost identical number of contextual antonyms in both corpora. The total number of antonymous co-occurrences in SITWA was 20 and 19 in SITWCH, which means, considering the size of both corpora, that it occurs in SITWCH eight times more frequently (the normalized frequencies are 1.14 ipm and 9.15 ipm respectively). Table 21 summarizes the antonymous counterparts found in both subcorpora. While the quantitative difference in the two corpora was significant, in terms of the pair canonicity the contrast was hardly discernible – the most canonical pair in both was *good-bad*, the pair *good-evil* occurred more times in SITWCH but other antonym counterparts seemed more haphazard and only occurred once (such as *unpleasant*, *unremarkable* or *terrible* in SITWA or *poor* and *awful* in SITWCH).

Although the antonymous counterparts were similar in both corpora, the striking difference was in the diversity of discourse functions in which antonyms occurred. Table 22 shows that coordinated and ancillary antonymy were most frequent in SITWA, there was also one occurrence of interrogative antonymy, simultaneous antonymy, and distinguished antonymy for which there were no occurrences in the SITWCH data. This complies with Jones et al.'s data (2012: 37) which showed that distinguished antonymy tends to be used primarily by adults. If that was the case, it would mean that the use of antonymy in child-directed literature (although adult-produced) reflects its usage in child-produced speech.

Table 21. Antonyms retrieved for adjective *good* in SITWCH and SITWA.

(the frequency counts are raw frequencies of occurrence).

antonyms	number of occurrences in SITWCH	number of occurrences in SITWA
good - bad	14	16
good - evil	3	1
good - unpleasant	0	1
good - terrible	0	1
good - unremarkable	0	1
good - poor	1	0
good - awful	1	0
TOTAL	**19**	**20**

Table 22. Discourse functions of *good* in SITWCH and SITWA.

(the frequency counts are raw frequencies of occurrence).

discourse function	SITWCH	SITWA
ancillary	3	5
coordinated	6	8
interrogative	2	1
distinguished	0	1
idiomaticity	3	0
extremity	1	0
negated	2	0
transitional	1	0
simultaneity	0	1
miscellaneous	1	0

4.2.2 Adjective *dark*

The visual imagery of light and dark that was apparent in the SITWCH examples was even more evident in SITWA as the lexical diversity of the opposites retrieved for *dark* was considerably more multifarious. However, from the quantitative point of view, the adjective *dark* and its antonyms were again prominently more frequent in SITWCH (8 occurrences altogether, i.e. ipm 3.85) than in SITWA (22 occurrences, ipm 1.25). Despite the strong relationship between *dark-pale*, no other opposites could be marked as canonical. In total, *dark* co-occurred with fourteen opposites. This leads to the conclusion that the adjective *dark* generally tends to co-occur with a large scale of opposites. Table 23 shows the variety of opposites that co-occurred with *dark*.

Table 23. Antonyms retrieved for adjective *dark* in SITWCH and SITWA.

(the frequency counts are raw frequencies of occurrence).

antonyms	number of occurrences in SITWCH	number of occurrences in SITWA
dark - bright	2	2
dark - pale	2	6
dark - glitter (-y/-ing)	1	2
dark - white	0	3
dark - light	1	1
dark - lustrous	1	0
dark - fair	0	1
dark - fiery	0	1
dark - glassy	0	1
dark - glossy	0	1
dark - shining	0	1
dark - translucent	0	1
dark - pale-gold	0	1
dark - blonde	0	1
TOTAL	**8**	**22**

The examples in SITWA also revealed a corresponding pattern to the one noted in SITWCH – a simultaneous use of antonyms which both denote two opposing qualities describing *eyes*. In the examples in SITWCH, *eyes* were described as *dark* and *glittery* or *lustrous*, in SITWA eyes were also referred to as *fiery*, *bright*, *glassy*, and *fair*. Example (72) from SITWA illustrates this phenomenon:

(72) *[…] long pony tail swinging, laughing and shouting, eyes* ***dark*** *and* ***glittering****.* [21 F9X]

The contrastive depiction of eyes was also apparent from other examples that did not contain an adjectival co-occurrence such as in (73).

(73) *Kate rubbed her cheek thoughtfully, but now her* ***dark*** *eyes had* ***lit with an inner fire****.* [HGM][6]*

Similarly to the layout of discourse functions of *dark* in SITWCH, in SITWA the two most frequent discourse functions were ancillary antonymy, which served to contrast an illuminated element on a dark background, and simultaneity, which mostly occurred in the aforementioned examples in reference to eyes.

[6] * example not included in research hence no reference number for *Appendix*

Table 24. Discourse functions of *dark* in SITWCH and SITWA.

(the frequency counts are raw frequencies of occurrence).

discourse function	SITWCH	SITWA
ancillary	4	13
coordinated	1	0
interrogative	0	1
simultaneity	2	7
transitional	0	1

4.2.3 Adjective *happy*

There were only three examples in SITWA in which an opposite was retrieved for the seed adjective *happy*. The original conjecture was that in SITWA, there would be a diversified range of antonyms contrary to SITWCH in which *happy-sad* was the only antonym that occurred. Although *happy - sad* also occurred once in the data, two other opposites also co-occurred with *happy - bad* and *disappointed*. Overall, a larger sample of data would be needed to determine whether in adult-directed literature *happy* co-occurs with multiple opposites.

Table 25. Antonyms retrieved for adjective *happy* in SITWCH and SITWA.

(the frequency counts are raw frequencies of occurrence).

antonyms	number of occurrences in SITWCH	number of occurrences in SITWA
happy - sad	5	1
happy - bad	0	1
happy - disappointed	0	1
TOTAL	**5**	**3**

The distribution of the discourse functions as listed in Table 26 does not point to a particular trend due to the low number of occurrences.

Table 26. Discourse functions of *happy* in SITWCH and SITWA.

(the frequency counts are raw frequencies of occurrence).

discourse function	SITWCH	SITWA
ancillary	2	1
coordinated	1	0
simultaneity	2	1
miscellaneous	0	1

4.2.4 Adjective *small*

There were six more antonyms retrieved for *small* in SITWCH than in SITWA. The nine antonyms that were found in a sample of identical size were most frequently *small-large* and *small-big*. The pair *small-big* occurred eight times in SITWCH but only three times in the SITWA sample of identical size. This result seems to correspond to Paradis et al.'s (2009) elicitation experiment in which *small-large* was among the most canonical pairs. We can only speculate whether the results would be *small-big* if children were exposed to the stimuli in an elicitation experiment. Table 27 shows the comparison of antonyms in SITWCH and antonyms in the sample from SITWA.

Table 27. Antonyms retrieved for adjective *happy* in SITWA.

(the frequency counts are raw frequencies of occurrence).

antonyms	number of occurrences in SITWCH	number of occurrences in SITWA
small - big	8	3
small - large	4	4
small - great	1	0
small - vast	1	0
small - huge	1	1
small - monstrous	0	1
TOTAL	**15**	**9**

Table 28 shows that the distribution of discourse functions for the adjective *small* in the SITWA sample was roughly similar to SITWCH. The most dominant in both corpora was ancillary antonymy. Two examples with coordinated antonymy were found.

Table 28. Discourse functions of *small* in SITWCH and SITWA.

(the frequency counts are raw frequencies of occurrence).

discourse function	SITWCH	SITWA
ancillary	13	6
coordinated	2	2
miscellaneous	0	1

4.3 SITWCH and SITWA: frequent adjectives

The frequency lists extracted from SITWCH and SITWA revealed several differences and similarities which will be summarized here. First of all, the frequency list of fifty-five adjectives in Table 9 showed that while on the whole, the most frequent adjectives were identical in both corpora, several of them occurred in only one list. The adjectives which were among the most frequent ones in SITWCH but did not occur on the SITWA frequency list were *angry*, *terrible*, *quiet*, *strong*, *huge*, *important*, *green*, *ill*, *brown*, and *empty*. It has been mentioned in Section 2.4.1 that literature for children tends to exploit the descriptions of the natural and physical world more than literature for adults, this would correspond with the occurrence of *strong*, *huge*, *green*, *ill*, *brown* and *empty*. Furthermore, Table 7 shows that particularly adjectives *terrible* and *huge* have been classified as keywords in children's literature (Wild et al. 2012: 199). The adjectives that occurred among the most frequent ones in SITWA but were not on the list in SITWCH were *short*, *possible*, *clear*, *late*, *aware*, *certain*, *warm*, and *heavy*. Although among these were also adjectives referring to physical description (*short*, *warm*, *heavy*) various abstract concepts occurred frequently (*possible*, *clear*, *aware*, *certain*). Some adjectives occurred in both lists but with significant differences in frequency. Table 29 illustrates the differences in frequencies that were found amongst various adjectives occurring in both lists. Adjectives that occurred significantly more frequently in SITWCH were *strange*, *afraid*, *beautiful*, *poor*, *dead* and *cold*. Adjectives more frequent in SITWA were *able* and *sure*. These seem to have a very wide area of usage and meanings as opposed to the adjectives prominent in SITWCH which all refer to a fairly concrete quality.

Table 29. Relative frequency of the same adjectives in SITWCH and SITWA, "pmw" refers to relative frequency.

adjective	pmw in SITWCH	pmw in SITWA
strange	278.3	123.1
afraid	273.4	149.9
able	180.5	218.1
beautiful	235.9	141.9
poor	251.8	164.5
sure	358.7	436.3
dead	370.2	216.8
cold	260.9	181.8

5. CONCLUSION

The primary aim of this thesis was to analyse the usage of antonyms in child-directed literature and compare the results with a selective sample from the corpus of adult fiction. The theoretical framework for this thesis was the co-occurrence hypothesis (Charles and Miller 1989, Fellbaum 1995, Jones 2002) which has brought about a contextual perception of antonymy. The co-occurring antonyms were searched for in two subcorpora which represented the two domains of fiction - child-directed and adult-directed fiction.

5.1 Summary and findings

The analytical part of the thesis was based on two lists of the most frequent adjectives which were extracted from SITWCH and SITWA. Because of the large amount of data, the SITWCH frequency list was restricted to 51 adjectives with frequency of more than 300 occurrences. A list of corresponding number of adjectives extracted from SITWA revealed some differences. While the majority of adjectives occurred in both lists with roughly the same frequency, some very frequent adjectives in SITWCH did not occur in the top 51 adjectives in SITWA. These were *angry*, *terrible*, *quiet*, *strong*, *huge*, *important*, *green*, *ill*, *brown*, and *empty*. Adjectives that occurred in both frequency lists but were significantly more frequent in SITWCH were *strange*, *afraid*, *beautiful*, *poor*, *dead* and *cold*. Most of these seem to comply with the notion that the lexicon of children tends to be more structured around the physical and natural world. These seem to be in favour of the argument that child-directed literature reflects child-produced speech.

The primary focus of the study was to identify and analyse the discourse functions in child-directed fiction and compare their usage to adult fiction. Although studies analysing children's speech exist, child-directed fiction has not been examined. Jones et al. (2012) who have put together an overview of current research of antonym co-occurrence provide two interesting points of comparison. First point of view is their research of adult-produced writing, which, theoretically speaking, would be generally expected to generate the same results as child-directed fiction which is naturally written by adults. The second, is their analysis of child-produced speech. This is an important juxtaposition as it reveals whether child-produced speech is somehow reflected in the literature they are exposed to. Table 30 compares the results from SITWCH with these two domains. The first non-standard result in SITWCH is the large number of ancillary antonyms - 51.4 % which means that more than half of all antonyms in SITWCH were ancillary. As can be derived from the table, this is a rather non-standard percentage since usually ancillary antonyms take up about one third of all antonyms in any corpora. The explanation for such a significant difference might be in the nature of the genres. Jones's (2002) data consisted of newspaper writing which tends to be very specific and might not draw so heavily on the

contrast of two antonyms as fiction in which ancillary antonymy serves to emphasise the dual contrast in descriptive passages. It can be assumed that the lower count of coordinated antonymy (15%) is due to the large number of ancillary antonyms.

Regarding the minor functions of antonymy, there was a lower occurrence of transitional and negated antonyms in SITWCH than in child-produced speech but it was of a similar percentage as in adult-produced writing. The categories of interrogative, comparative and distinguished antonymy are especially interesting because they reveal results that correspond to results based on the child-produced speech more than adult-produced writing. Jones (2012) suggests that due to their complexity, comparative and distinguished antonymy (which occurred in adult-produced writing with 6.8 and 5.4% respectively) did not occur in child-produced speech. This finding is in line with the results based on SITWCH corpus, where no such antonyms were found. This might suggest that child-directed writing does reflect into a degree the way children speak.

A significant difference was also found between the percentages of occurrence in distribution of the residual' discourse functions which took up 5.6% in adult-produced writing and 10.7% in child-produced speech. The percentage was even higher in SITWCH with 16.3%. This is mostly due to the occurrence of the idiomatic antonyms which occurred very frequently in the corpus. It is, yet again, speculative whether this might be because fiction in general tends to use idiomatic expressions or whether this is primarily specific in child-directed fiction.

Table 30. Distribution of discourse functions in adult-produced writing (Jones 2002), child-produced speech (Murphy and Jones 2008) and child-directed fiction (SITWCH).

discourse function	adult-produced writing in %	child-produced speech in %	child-directed fiction in %
ancillary	38,7	36,7	51,4
coordinated	38,4	29,9	15
transitional	3	8,7	2,2
negated	2,1	9,6	2,2
interrogative	0	4,1	6,2
comparative	6,8	0,3	0
distinguished	5,4	0	0
residual	5,6	10,7	16,3

The second major focus of the study was to look for canonical pairs of antonyms and determine whether child-directed fiction would contain more canonical antonyms than adult fiction. The most canonical pairs retrieved from SITWCH corpus were *white-black*, *dead-alive*, *long-short*, *cold-hot*, *happy-sad*, *better-worse*, *poor-rich*, *best-worst* and *huge-tiny*. Due to its frequent occurrence in research of antonym canonicity, the pair *old-new* can also be considered canonical although it did not pass the criteria set for this study. The adjectives which occurred with a large variety of antonyms were *dark* (*bright, pale, glittery, light, lustrous*), *good* (*bad, evil, poor, awful*), *great* (*tiny, small, bad*), *little* (*big,*

large), *new* (*old, older*), *old* (*new, young, younger, youngest*), *small* (*big, large, great, huge, vast*). The fact that a variety of adjectives co-occurred with multiple opposites (out of which some were stronger, some weaker) supports the conceptual approach to antonym canonicity. The four samples extracted from SITWA did not reveal any results that would be significantly different from the results in SITWA. Generally, it can be said that the adjectives showed a similar tendency when it came to finding their opposites. If the adjective co-occurred with multiple antonyms in SITWCH, it also co-occurred with a variety of opposites in SITWA. For example, for the adjective *dark*, five opposites were retrieved from SITWCH which lead to the conclusion that the opposites to *dark* stand on a scale which was further noted in SITWA where thirteen various opposites co-occurred with *dark*.

5.2 Limitations of the study

Searching for antonyms in context has been so far mostly done with the use of seed words in frames or pre-defined antonymous pairs. This is a method very helpful for determining the frequency with which these pairs occur but to a certain extent, it limits the variety of antonyms that may be retrieved. For this reason, I have chosen a different path and looked for antonyms in context manually after applying a query which restricted the span to a 15 token window and defined parts of speech (adjective). This method allowed for a thorough analysis of the most frequent adjectives in SITWCH and did not depend on pre-defined antonyms which most certainly lead to a greater variety of antonyms found. Nonetheless, this method does have its substantial drawbacks. It goes without saying that with manual analysis of the data, human error may occur but the major disadvantage is that this method can only be applied to a limited amount of data. The process of manual classification is extremely time consuming, hence the analysis of only the most frequent antonyms in SITWCH and the selection of samples from SITWA. It is important to keep in mind that the analysis of antonyms in SITWCH originated from extraction of the most frequent adjectives and therefore only concerned a sample of the actual usage. The analysis of antonymy in both entire corpora would certainly generate very interesting results and would deliver a more complete picture of antonym usage not only in child-directed fiction but also other domains of discourse. Hopefully, with the advancement of corpus linguistics, we might one day be able to search for antonymy in context much more successfully.

6. RESUMÉ

Diplomová práce se zabývá antonymními adjektivy v kontextu literatury psané pro děti. Antonyma jsou sama o sobě velmi zajímavým předmětem výzkumu - jednak představují jeden ze základních lexikálních vztahů, a jednak jsou velmi důležitá při osvojování mateřského jazyka. Jones et al. (2012), kteří shrnují dosavadní poznatky z výzkumu antonym v různých textových typech sice popisují výzkum dětské řeči a texty psané dospělými, ale nezkoumají specificky literaturu psanou pro děti.

Teoretická část práce (Odd. 2) se věnuje popisu antonymie a uvádí dva hlavní přístupy k pojetí antonymie. Dále poskytuje přehled diskursních funkcí antonymie a věnuje se podrobně metodám používaným při stanovení míry kanonicity antonym. Antonymie a synonymie totiž představují dva základní paradigmatické vztahy v rámci našeho lexikonu. Nejenže antonymie představuje primární lexikální vztah, ale podle Cruse (2000) je do určité míry i kognitivně primitivní a tedy lehce osvojitelná dětmi již od útlého věku. Z dosavadního výzkumu vyplývá, že děti okolo tří let již antonymii rozumí a od zhruba pěti let dokáží tento koncept i aktivně aplikovat (Jones et al. 2012: 71-74).

V teoretickém chápání antonymie existují v zásadě dva rozdílné přístupy. První z nich, který nastiňuje Cruse (2000) chápe antonyma jako významové jednotky, které popisuje pomocí dvou atributů — formy a významu. Tyto jednotky fungují v rámci systému lexikálních vztahů. Podle Cruse (2000) jsou definujícími znaky antonymie jejich binární a inherentní povaha, tedy opozita jsou nekompatibilní - *X je dlouhé* znamená, že *X není krátké.* Binární povaha jako taková může být nahodilá a závislá na situaci, zatímco "dobrá" opozita mají antonymii inherentně danou jako např. *up-down*. Dalším zásadním rysem je "patentnost", tedy např. *Monday* a *Wednesday* by teoreticky mohly být opozity, neboť jsou rozděleny slovem *Tuesday*, zde je však antonymie skrytá a je zjevná spíše u páru *yesterday-tomorrow*. Cruse (2000) rozlišuje několik typů opozit: doplňková opozita (*complementaries*), která představují prototypická opozita vykazující silnou binaritu např. *dead-alive* a netvoří škálu; antonyma (*antonyms*), která se vyznačují především tím, že jsou stupňovatelná a jedno slovo z dvojice tvoří bezpříznakovou otázku např. *How long is it?*; směrová opozita (*directional opposites*) jsou typická tím, že většinou popisují opačný směr, např. *south-north*; reciproční opozita (*converses*), kde je jejich vzájemný vztah definován vyjádřením opačné polarity např. *buy-sell*.

S prudkým nárůstem korpusového výzkumu je věnován prostor i tématu antonymie. První změnu ve vnímání antonymie jako uzavřené lexikální kategorie přinesl výzkum Charlese a Millerové (Charles — Miller 1989), který stál za vznikem takzvané hypotézy "souvýskytu" (*co-occurrence hypothesis*), podle které se antonyma vyskytují v úzkém kontextu s větší, než náhodnou pravděpodobností. Tento výzkum byl dále podpořen výzkumem Fellbaumové (Fellbaum 1995), Willnersovou (Willners 2001) a Jonesem (2002). Podle Fellbaumové se antonyma vyskytují v kontextu z několika důvodů:

- antonyma se často vyskytují v ustálených spojeních a v lexiko-syntaktických rámcích,
- antonyma jsou často užívaná nadbytečně, slouží jako prostředek zdůraznění,
- vzájemný kontrast antonym (zejména doplňkových antonym) slouží jako prostředek zdůraznění a humoru,
- antonyma explicitně popisují přechod ze stavu A do stavu B.

Za inovativním přístupem k antonymii, který využívá kontextuálního chápání antonymie, stojí právě Jones (2002), z jehož výzkumu a teoretických poznatků čerpá i tato práce. Jones et al. (2012) rozdělují antonyma do několika kategorií podle jejich diskursní funkce, kterou vyjadřují v rámci blízkého kontextu. Dvě ústřední kategorie, které Jones et al (2002) charakterizuje, jsou "pomocná" (*ancillary*) a koordinační (*coordinated*) antonyma. Pomocná antonyma jsou charakterizována tím, že se vyskytují jako kontrast dvou antonymních dvojic, z nichž jedna dvojice představuje ustálený antonymní pár, který přenáší kontrast i na dvojici druhou, která by bez přítomnosti tohoto kontextu antonymní nebyla. Tento jev lze ilustrovat na větě

(20) *As the old adage puts it, <u>oppositions</u> do not **win** elections; <u>governments</u> **lose** them.* (APW-E)

V této větě se vyskytuje kanonická (ustálená) A-dvojice: *win-lose*, která podtrhuje antonymní charakter druhé B-dvojice: *oppositions-governments*. Zatímco A-dvojice je jednoznačně antonymní i bez kontextu, B-dvojice se nachází v opozitním vztahu pouze díky A-dvojici. Pomocná antonymie většinou v různých typech diskurzu převažuje a představuje více než třetinu všech výskytů antonymie.

Další ústřední kategorií jsou koordinační antonyma, která primárně nezdůrazňují kontrast mezi antonymy, ale slouží k zahrnutí všech bodů na škále např. *rich and poor alike* zahrnují všechny, jak bohaté, tak chudé. Koordinační antonyma se také často vyskytují v lexiko-sémantických rámcích. Mezi nejfrekventovanější větné rámce patří

- X *and* Y *alike*
- *both* X *and* Y
- *either* X *or* Y
- *whether* X *or* Y
- *neither* X *nor* Y

Koordinační antonyma patří mezi druhou nejfrekventovaněji se vyskytující kategorii a představují zpravidla zhruba třetinu všech výskytů.

Další kategorií patřící mezi méně frekventované diskursní funkce jsou tzv. přechodová (*transitional*) antonyma. Tato antonyma označují přechod z bodu A do bodu B, většinou s pomocí konstrukcí jako '*from X to Z*'. Tato antonyma jsou více frekventovaná v dětské řeči (8.7%), neboť usnadňují popis fyzického světa. Tzv. "popřená", tedy záporná (*negated*) antonyma jsou opozita vyskytující se v takové větné konstrukci, kde se u jednoho slova z dvojice vyskytuje v záporném tvaru. Prototypickým příkladem jsou věty s konstrukcí '*X, not Y'*. Další kategorie, tázací (*interrogative*) antonyma, se vyskytují především v otázkách v konstrukci se spojkou *nebo,* tedy '*X or Y*'. Jones et al. docházejí k závěru, že tato antonyma používají především dospělí, když mluví na děti, ale v psaném projevu dospělých se nevyskytují vůbec. Antonyma srovnávací (*comparative*), jejichž opozice je nastavena v rámci srovnání dvou vlastností, jsou naopak doménou projevu dospělých a prakticky se nevyskytují v dětské řeči. Tzv. antonyma "odlišená" (*distinguished*) se také spíše vyskytují v projevu dospělých a jsou definována vzorcem '*Z between X and Z*' kdy Z je slovo kořenově vázané na slovo *difference* (rozdíl).

Nejméně frekventované diskursní funkce antonym řadí Jones et al. (2012) do takzvaných 'zbytkových' kategorií. Mezi ty patří antonyma idiomatická (*idiomatic*), která se vyskytují v idiomatických spojeních a antonyma "extrémní" (*extreme*), která jsou charakteristická tím, že se vyskytují s intenzifikátorem modifikujícím antonymní dvojici. Další, sem patřící, antonyma jsou simultánní antonyma (*simultaneous*), kdy se oba členové páru vztahují k jednomu referentu.

Další část teoretické části práce se věnuje kanonicitě antonym, kterou lze volně chápat jako míru ustálenosti antonymického páru. Zde lze opět pozorovat dva různé přístupy k chápání kanonicity. Lexikálně-kategorický přístup (*lexico-categorical approach*) vychází z hypotézy, že antonyma buď jsou, anebo nejsou kanonická a neexistují žádné přechodové případy. Konceptuální přístup (*conceptual approach*) naopak chápe kanonicitu jako stupňovatelnou vlastnost, a spíše, než na definování kanonických a nekanonických antonym se zaměřuje na určení míry kanonicity. Míru kanonicity lze určit několika způsoby. Jedním z experimentů, jehož výsledky silně poukazují na škálové vnímání antonymie, jsou elicitační experimenty, v rámci kterých účastnící výzkumu doplňují antonyma k předem vypsaným slovům. Výsledkem tohoto typu experimentu (Paradis et al. 2009) bývá škála, na které se objevují jak velmi kanonická opozita (dvojice, u kterých není elicitováno žádné jiné opozitum), tak i opozita velmi nekanonická (taková, kde elicitovaných opozit je velké množství). Pokud jsou účastníci výzkumu vyzváni k posouzení ustálenosti antonym pomocí škály, posuzují většinou kanonické dvojice velmi rychle jako "dobrá" antonyma, ale trvá jim delší dobu rozpoznat ostatní antonyma. U těch jsou samozřejmě výsledky hodnocení různorodé (Paradis et al. 2009). Z psycholingvistického výzkumu, ve kterém byli účastníci vyzváni zmáčknout tlačítko, jakmile spatří na obrazovce slovo, vyšlo, že antonyma byla rozpoznána rychleji, než jiné dvojice slov (Van de Weijer et al. 2012). Další z metod, kterou lze u antonym posuzovat míru kanonicity, je výskyt antonym v lexiko-sémantických rámcích.

Těchto větných rámců lze využít i při korpusovém výzkumu. Určujícím faktorem je zde počet rámců, ve kterých se antonyma vyskytnou. Čím větší rozptyl rámců, tím větší míra kanonicity.

V metodologické části práce (Odd. 3) jsou popsány metody, které byly využity při práci s daty v obou korpusech. Data vychází z britského národního korpusu (BNC), ve kterém byly vytvořeny dva subkorpusy:

1. SITWCH (subkorpus literatury psané pro děti)
2. SITWA (subkorpus literatury psané pro dospělé)

Z obou korpusů byly nejdříve extrahovány seznamy nejfrekventovanějších adjektiv, které posloužily jako základ práce. Ze seznamu korpusu SITWCH bylo vybráno 51 nejfrekventovanějších adjektiv, která se vyskytovala v korpusu s frekvencí větší než 300. Následovalo zadání dotazu v korpusu, který byl omezen tak, že vyhledával jakékoliv jiné adjektivum v rámci rozpětí 7 tokenů od daného adjektiva doleva i doprava, tedy kontextu 15 tokenů. Tento dotaz poté umožnil manuální utřídění dat. Každý příklad byl tedy analyzován, a pokud vyhledaná dvojice adjektiv představovala antonymum, tak byla zařazena do Jonesovy kategorizace diskursních funkcí antonymie. Protože se práce věnuje také kanonickým antonymům, byla v této části definována kritéria pro vysokou míru kanonicity. Aby bylo opozitum zařazeno do kanonických antonym, muselo se v korpusu vyskytnout alespoň třikrát. Dále byla určena míra "exkluzivity", která měřila počet opozit, s kterými se dané adjektivum vyskytlo. Hranice pro určení kanonicity zde byla nastavena arbitrárně na 75%. Většina výzkumu dnes jasně naznačuje, že antonyma se vyskytují na škále, proto je nutné brát tuto hranici s rezervou, neboť není možné ji jasně definovat. Mimo analýzy v korpusu SITWCH, popisuje odd. 3 také postup práce v korpusu SITWA. Z důvodu velkého množství dat byla vybrána pouze čtyři adjektiva na základě analýzy v korpusu SITWCH jako vhodná k selektivní sondě do korpusu SITWA. Z tohoto korpusu byly stejným způsobem extrahovány vzorky, které byly manuálně roztříděny do kategorií. Vzhledem k většímu počtu příkladů v SITWA vzorcích, byly tyto vzorky omezeny na stejný počet příkladů jako původní vyčerpávající sondy do korpusu SITWCH.

Analytická část práce, odd. 4, se věnuje jednak kvantitativní analýze rozložení diskursních funkcí a jednak kvalitativní analýze dokladů antonymie. Procentuální rozložení diskursních funkcí v korpusu SITWCH do určité míry odhalilo, že použití antonymie v literatuře psané pro děti může reflektovat dětskou řeč. Silně převažující diskursní funkcí v korpusu byla pomocná antonymie, která se vyskytovala v 51,4 % příkladů. Více než polovina dokladů tedy odpovídala této funkci. To je výsledek značně rozdílný od Jonesova et al (2012) výzkumu, ve kterém "pomocná" antonyma zabírala maximálně 38% korpusu. Je třeba říci, že Jonesův výzkum textů psaných dospělými se výhradně skládal z novinových článků. Takto vysoký počet antonym klasifikovaných jako "pomocná" nemusí být vyloženě specifický pro literaturu psanou pro děti, ale může být i důsledkem charakteru textového typu,

tedy beletrie, jako takové. Tento typ antonym je totiž dobře využitelný v popisných pasážích, kde slouží k vykreslení duálního kontrastu. Koordinačních antonym bylo v korpusu SITWCH naopak podstatně méně, celkem 15%. To lze zřejmě vysvětlit vysokým počtem "pomocných" antonym.

Co se týče méně frekventovaných diskursních funkcí, "přechodová" a záporná antonyma se vyskytovala v korpusu SITWCH se zhruba stejnou frekvencí jako naznačil Jonesův výzkum z oblasti psaného projevu dospělých. Celkem bylo nalezeno 2,2% přechodových antonym a stejný počet antonym záporných. Naopak kategorie antonym tázacích, srovnávacích a "odlišených" poukazovala spíše na shodnost s jinými oblastmi diskurzu, než s texty psanými dospělými. Jak bylo již zmíněno, tázací antonyma jsou především používána dospělými, kteří mluví na děti, ale prakticky se nevyskytují v jiném typu diskurzu. Proto je velmi zajímavé, že v korpusu SITWCH tato kategorie dosáhla hranice frekvence výskytu 6,2%. Zejména kategorie srovnávacích a "odlišených" antonym se shodovala s výsledky z oblasti výzkumu dětské řeči. Vzhledem k tomu, že je tento typ antonymie poměrně složitý, prakticky se v dětské řeči nevyskytuje a vyskytuje se pouze v textech psaných dospělými. Nulové výsledky z těchto kategorií v korpusu SITWCH naznačují, že literatura psaná pro děti do určité míry odráží dětskou řeč. Poměrně zajímavým výsledkem bylo také značně vysoké procentuální zastoupení takzvaných zbytkových diskursních funkcí, které v tomto korpusu dosáhlo 16,3%. To je výsledek značně nestandardní, neboť tato kategorie zpravidla dosahuje zhruba 6% v celém korpusu. Celkem bylo v dokladech z korpusu SITWCH nalezeno 5% simultánních antonym, 2% extrémních antonym a 11% idiomatických antonym. Ta se vyskytovala zejména v idiomatických výrazech se dvojicemi *good- bad, dead-alive* a *black-white*. Tento výsledek je velmi překvapivý a může být opět podmíněn typem žánru. Na druhou stranu je třeba zmínit, že předchozí výzkum ukázal vyšší výskyt idiomatických antonym v dětské řeči.

Druhým stěžejním bodem výzkumu byly kanonické dvojice antonym. Dá se říci, že z výzkumu vyšly dvě skupiny adjektiv. Adjektiva, která se vyskytovala pouze s jedním protějškem a adjektiva, která se vyskytovala s různorodou škálou opozit. Následující páry z korpusu SITWCH vykazovaly největší míru kanonicity: *white-black, dead-alive, long-short, cold-hot, happy-sad, better-worse, poor-rich, best-worst* a *huge-tiny*. Kromě těchto lze na seznam zařadit i *old-new*, které sice neprošlo stanovenými kritérii, ale lze ho vzhledem k předchozímu výzkumu považovat za kanonické. Další skupina adjektiv se vyskytovala s různými opozity: *dark* (*bright, pale, glittery, light, lustrous*), *good* (*bad, evil, poor, awful*), *great* (*tiny, small, bad*), *little* (*big, large*), *new* (*old, older*), *old* (*new, young, younger, youngest*), *small* (*big, large, great, huge, vast*).

Dalším bodem výzkumu byly čtyři selektivní sondy do korpusu SITWA. Adjektiva k této analýze (*good, dark, happy, small*) byla vybrána na základě výsledků z korpusu SITWCH. Adjektivum *good* se v korpusu SITWA objevilo dvacetkrát, což je skoro stejný počet jako počet těchto antonym v korpusu SITWCH. Stejně jako v tomto korpusu se i zde *good* objevovalo především s *bad*, ale

vyskytla se i jiná adjektiva (*poor, awful*). Adjektivum *dark,* které se v korpusu SITWCH ukázalo jako velmi škálové, se i v korpusu SITWA objevilo se širokou škálou opozit; celkem bylo nalezeno 13 opozit. Antonym s adjektivem *dark* bylo v korpusu SITWA dvacet dva, což je skoro trojnásobný počet oproti výskytům v korpusu SITWCH. Adjektivum *happy* se vyskytlo pouze třikrát a to se třemi různými opozity (*sad, disappointed, bad*).

Adjektivum *small* bylo v korpusu SITWA méně frekventované a objevilo se s menší škálou opozit, než v korpusu SITWCH. Obecně lze říci, že na tak malém počtu dokladů nelze stavět definitní závěry, nicméně lze říci, že zkoumaná antonyma se vyskytla s podobnými protějšky v obou korpusech.

Závěr práce také zmiňuje určitá omezení studie. Mezi ty patří zejména omezené množství dat, která práce využívá. To je důsledkem zdlouhavého manuálního třídění, které práce s antonymy vyžaduje. V případě, že by pokroky v korpusové lingvistice umožnily automatické vyhledávání antonymie, mohli bychom lépe porozumět tomu, jak je antonymie využívána nejen v rámci literatury psané pro děti, ale i dalších typů diskurzu.

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