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Structural ambiguity based on the grammatical indeterminacy of the ing-nonfinite form in subject position

Strukturní dvojznačnosti založené na gramatické neurčitosti ing-ového slovesného tvaru v postavení podmětu

BAKALÁŘSKÁ PRÁCE

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Abstrakt

Tato práce se zabývá strukturní nejednoznačností u konstrukcí typu *Flying planes can be dangerous,* založené na gramatické neurčitosti *ing*-ového slovesného tvaru, interpretovatelného buď jako gerundium nebo jako participium. Dvojznačnost konstrukcí je zkoumána na základě transitivity *ing*-ového slovesného tvaru a následně na jeho sémantické kompatibilitě s podstatným jménem v roli podmětu a předmětu, v ideálním případě je pak dále zkoumán větný kontext a sledována jeho kompatibilita pro vznik dvojznačnosti. První, teoretická část práce popisuje současný pohled na problematiku dvojznačnosti v angličtině, druhy dvojznačnosti a věnuje se gramatickému popisu neurčitých tvarů slovesa. Druhá, metodologická část popisuje metodu vzorkování, při které byly vyjmuty 2 vzorky z korpusu British National Corpus. První vzorek obsahuje 25 dokladů konstrukcí „*ing*-ový slovesný tvar + podstatné jméno + sloveso" (u slovesa se nerozlišuje slovesný čas, druh slovesa a číslo) a druhý vzorek obsahuje 100 dokladů obdobných konstrukcí, nicméně zde byla dána formální kritéria pro slovesný čas, druh slovesa a číslo u slovesa následujícího podstatné jméno, tak aby dvojznačnosti nezabraňovalo. Třetí, analytická část zahrnuje analýzu a popis jednotlivých vzorků. Z prvního vzorku se dá říci, že dvojznačnosti nejčastěji bránila shoda podmětu s přísudkem, která znemožňovala druhou interpretaci, dále pak sémantická inkompatibilita jednotlivých členů věty při snaze použít obě interpretace. V druhém vzorku nejčastěji bránila vzniku dvojznačnosti transitivita sloves, zkoumaná ručně pomocí slovníku, a dále pak sémantická kompatibilita, nejdříve v rámci *ing*-ového tvaru slovesa a podstatného jména v roli podmětu a předmětu, dále pak v rámci větného kontextu. Ve výsledku bylo však objeveno 11 dokladů, kde mohla být dvojznačnost zkoumána v rámci kontextu věty a byly tak vytvořeny participiální a gerundiální interpretace doplněné průvodním komentářem.

Abstract

This thesis deals with the structural ambiguity of constructions similar to *Flying planes can be dangerous*, where the ambiguity can arise due to the grammatical indeterminacy of ing-nonfinite form that can be interpreted both as gerund and participle. The ambiguity is analysed on the basis of the transitivity of ing-nonfinite form and subsequently on its semantic compatibility with the noun in the role of subject and object, in the ideal case the ambiguity and compatibility is tested further in the sentence context. The first part, the theoretical background presents us with what the secondary sources say to the phenomenon of ambiguity, distinguishes the types of ambiguity and also covers the grammatical description of non-finite verb forms. The Second part, material and method, describes the method of sampling, which brought us 2 samples extracted from British National Corpus. First sample comprises of 25 instances of "ing-nonfinite form + noun + verb constructions" (sg/pl, type of verb and verb tense are not restricted) and the second sample comprises of 100 instances of similar constructions, however the verb following the noun has been restricted on formal grounds for verb tense, verb type and number in order not to represent a hindrance for the ambiguity. The third, analytical part comprises from description of analysis of both samples. First sample has revealed that the ambiguity was often hindered by grammatical subject verb agreement, which did not allow for second interpretation; semantic incompatibility of sentence constituents in effort to come up with two interpretations. In Second sample the most prominent factor of disambiguation was the transitivity of verbs (checked manually in the dictionary) and further again the semantic compatibility, firstly between the ing-nonfinite form and noun in the role of subject and object and secondly the semantic compatibility within the sentence context. In result, we have come up with 11 instances, where the ambiguity could be observed within the sentence context, each instance is accompanied by both participial and gerundial interpretation and related commentary.

Contents

List of abbreviations

V-ing   verb progressive

BNC   British National Corpus

sg.   singular

pl.   plural

ex.   example

List of tables

1. Introduction

The thesis is concerned with the phenomenon of ambiguity in English language. The linguistic field provides us with many views on it, be it the one of shortcoming of language system or that one of an inherent quality of the language. For the research in the corpora and comprehension of this linguistic phenomenon, we have selected and based this thesis on a model example, according to Chomsky˙s: "Flying planes can be dangerous" with presumption to find similar results in BNC. Theoretical background, the first part, gives short review of accessible information from the secondary sources that concern the ambiguity phenomena in English, and subsequently distinguishes the types of ambiguity and covers the grammatical description of non-finite verb forms.

The Material and Method chapter outlines the sampling method that has been applied to access appropriate examples. It covers the method of analysis of two separate samples. The first sample examines examples according to less specific query, while the other sample uses restricted and more specific query in order to obtain more satisfying results. This part also includes description of the method that has been used to assort the data obtained from BNC.

The analytical part of the thesis reveals the obtained data and describes the analysis that has been carried out step by step. Firstly the analysis focuses on the first sample, by which the further limitations for the second sample are defined. Second sample then analyses and defines all the hindrances that block the ambiguity and reveals the total number of ambiguous constructions that have emerged.

2. Theoretical Background

2.1. Ambiguity in language

2.1.1. Perception of Ambiguity

Ambiguity in the sense of use of everyday English is commonly looked upon as the property of sentences to be interpreted in more than one way. Kooij (1971: 1) adds to the general view on ambiguity that there are "insufficient clues available for the intended or optional interpretation". Accordingly, "[t]he term of ambiguity is then synonymous with 'lack of clarity' or 'equivocation', a phenomenon that can be looked upon as a shortcoming of language users, as a deficiency of the system of natural language, or both." (Ibid.) We are therefore presented with two different views on ambiguity; the first one being that of the insufficiency, or as Kooij (1971: 1) employs the term "pathology" of the language, and the second one representing the ambiguity as "a property of the sentences and its consequences for a linguistic description," (Ibid.: 4), something that is inherent in the structure of the language. As far as the perception of linguistic ambiguity is concerned, Smolka (2010: 210) points out that "instances of potential ambiguity do occur frequently in English, but typically go unnoticed because only one of the interpretations jumps to mind naturally." This suggests that ambiguity, strictly speaking, does not cause any interpretative difficulties in most of the cases.

2.1.2. Garden Path versus Ambiguity

When discussing the possibility of multiple interpretations, ambiguity is often mentioned alongside the so called garden path sentences since both "owe their existence to the presence of an ambiguous element" (Gráf, 2014: 85). Unlike ambiguous sentences,

however, garden path ones allow only one possible interpretation. While "an ambiguous sentence has two deep structures, allowing two different readings [...] GP [garden path] sentences [...] owe their imperspicuous character to the fact that they do not allow a second plausible understanding" (Ibid.: 86). Garden path phenomena can be illustrated by example (1).

(1) The poor people the planet.

As shown by Gráf (Ibid.: 88), what makes sentence (1) difficult to read is the fact that the reader is misled to interpret the initial structure as a noun phrase comprising a partially converted noun as a premodifier (*the poor people*) rather than as a case of de-adjectival converted noun (*the poor*) followed by a verb converted from a noun (*people*). When "[w]e reach an error signal, [we] slow down, and start backtracking eventually to realize that what we saw was not what we were meant to get" (Ibid.: 86). Ambiguity, on the other hand, has two deep structures, allowing two different readings throughout the whole sentence. Sentence (2) can serve as a classic example.

(2) He reached the bank.

Sentence (2) is a case of lexical ambiguity: it has two different and completely plausible ways of understanding, one of which would be eliminated by the context, if given. A sequence of sentences such as (3) then leaves "no room for debating ambiguity" (Ibid.: 86).

(3) He reached the bank. As it was past six o'clock it was already shut and he had to find a cash machine.

2.1.3. Classification of ambiguity

To achieve a thorough understanding of ambiguity present in the language it is necessary to define on which levels of the language ambiguity can arise. Gleason (1965: 461-8,[1] cited in Kooij, 1971: 6) presents us with an apt definition of ambiguity in the linguistic description:

> in linguistics 'Ambiguity' has come to mean two different things, i.e.: (i) that a linguistic description assigns more than one structure, lexical or grammatical, to one and the same sentence, and (ii) that a sentence, though it has only one structure assigned to it, still can in some respect be insufficiently specified for communicative purposes.

Gleason refers to three levels of ambiguity in the linguistic description: lexical, grammatical and phonological.

Lexical ambiguity can be demonstrated using the following example:

(4) They passed the port at midnight (Lyons, 1977: 397)

Lyons (Ibid.: 397) distinguishes here between two different interpretations, depending on whether the form *port* is understood as a form of the lexeme "$port_1$" meaning "harbour" or of the lexeme "$port_2$" which denotes a certain kind of fortified wine. We encounter here two identical word forms differentiated in the lexical meaning.

Grammatical ambiguity can be demonstrated by (5), which allows two interpretations; viz. *the stick* performs the syntactic function of the adverbial of instrument (i.e. 'it was with a stick that he hit the man') or that of postmodification (i.e. 'the man who was carrying a stick').

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[1] Gleason, H. A. (1965) *Linguistics and English Grammar*. New York: Holt Rhinehart and Winston, Inc.

(5) He hit the man with a stick (Ibid.: 400)

Lyons (1977: 400) defines grammatical ambiguity as follows: "A grammatically ambiguous sentence is any sentence to which there is assigned (by a generative grammar or a language system) more than one structural analysis at the grammatical level of analysis." He further expands the definition by defining important rules that concern grammatical ambiguity. He asserts that "not every grammatically ambiguous sentence will in fact be interpretable in more than one way" (Ibid.), which applies to the lexical ambiguity as well. He explains that the lexically ambiguous sentence *They drank the port at midnight* is not likely to be interpreted in the way that the subject (*they*) actually drank "port$_1$", i.e. the "harbour", due to the lexical meaning of the verb *drank*. The same applies to the example of grammatical ambiguity stated above (ex. 5) if the verb *hit* is replaced by *shot*. The subject (*he*) is then not likely to be interpreted as using the stick for shooting. Another important point connected with the definition of ambiguity is that the definition of the grammatical ambiguity does not exclude "the possibility that a sentence may be both lexically and grammatically ambiguous" (Ibid.). This demonstrates the fuzzy boundary between lexical and grammatical ambiguity in many examples that will be examined in further chapters.

Ambiguity on the phonological level can be demonstrated, for instance, by example (6).

(6) a nice bucket vs. an ice-bucket

Lyons calls such phenomena "junctural features which serve, optionally or obligatorily, to indicate the boundaries between contiguous forms in utterances" (Lyons, 1977: 399). However, the interpretation of such phonetically ambiguous pairs depends undoubtedly on carefulness of pronunciation, which serves as a factor of differentiation.

2.1.4. Grammatical Ambiguity – a point of view

First of all it is necessary to emphasize the fact that there are no distinction made between potentially ambiguous sentences and utterances. Lyons refers to his examples as to "ambiguous utterance signals" in order to avoid the term "ambiguous sentence". He explains that, for instance, when the sentence is interpretable as containing two different lexemes (port$_1$, port$_2$) as in *They passed the port at midnight* (ex. 4) the utterance would be associated with at least two different sentences of English. In other words, we deal here with one sentence that potentially has two different interpretations based on two underlying structures.

Also we will have to regard to what extend is 'grammatical homonymy' matched by 'ambiguity' in actual interpretation, which is spoken about in one of the secondary sources. (Kooij, 1971: 112). The problem may be illustrated by exx (8 – 10) (Ibid.).

(7) He hit the man with the stick

(8) He hit the man with the scar

(9) He hit the man with the beard

In ex. (8) the ambiguity arises between the adnominal and adverbial interpretation of *with a stick*. However, ex. (9) does not allow the interpretation of *the scar* as the adverbial of instrument but only as a modifier of *the man*, because it is hardly possible to hit someone using a scar for hitting. Example (10) then represents a borderline case, because it may admit the adverbial interpretation of *the beard* to a certain extent.

2.1.5. The type of ambiguous sentences examined in the thesis

The example examined here illustrates ambiguous structure that serves as a model and ideal example for what will be searched within BNC. Just as with the analysis of the example

below, my aim in the practical part of the thesis will be to analyse what leads to the potential ambiguity in 125 excerpted examples.

For illustration let's consider example (7).

> (10)   Flying planes can be dangerous. (Lyons, 1977: 402)

The grammatical ambiguity in the sentence consists in being interpretable in two ways, depending on the distinction between participial or gerundial reading of the form *flying*. Under the interpretation that the form *flying* functions as a participle, the V-ing has an adjectival modifying function and the structure can be then interpreted as 'Objects [planes] that fly can be dangerous'. Under the other, gerundial interpretation the form *flying* functions syntactically as the subject of the sentence, which can be therefore interpreted as 'controlling [flying] planes can be a dangerous activity'.

Having distinguished one factor that leads to ambiguity, viz. the identical form of the sentence-initial –*ing* participle and gerund, it is necessary to present the other factors that concern the issue of grammatical ambiguity. An important factor is the question whether the verb (in the case of this example the modal verb *can*) reflects subject-verb agreement grammatically. "Modal verbs (like 'can', 'may', 'must' etc.) are not subject to singular/plural concord in English." (Lyons, 1977: 402) Therefore we can observe that the modal verb used as an operator in the predicate verb phrase preserves the grammatical ambiguity (as compared to the sentence with a verb *be* as in '*Flying planes is/are dangerous*'). Another factor responsible for the ambiguity is the transitivity of the verb, for *to fly* can be used both transitively (i.e. *someone flies planes*) and intransitively (i.e. *planes fly*). Last of the assumedly considered factors is the singular/plural number of the noun present and the presence/absence of both definite and indefinite articles, where, strictly speaking, the main

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absence of articles is favourable. The presence of article will eliminate potential ambiguity (consider: '*Flying planes can be dangerous*' vs. '*Flying the planes can be dangerous*').

In conclusion, despite the fact that ambiguity can arise on different levels of language, as have been touched upon in previous chapters, the focus will be strictly put on the examples of potentially grammatically ambiguous sentences defined as those sentences which may be assigned multiple underlying grammatical structures. We are then speaking of examples where ambiguity potentially arises due to the homonymy of sentence-initial gerundial and participial forms. Both of those indefinite forms in English will be described in the following subchapters.

2.2. Gerund and participle, description in grammar books

The grammatical description of gerunds and participles will primarily draw on Dušková et al. (2006: 268-279). The convenience of this source for this thesis resides in the differentiation made between participles and gerunds, as opposed to *The Cambridge Grammar of the English Language* (Huddleston and Pullum, 2002) or *A Comprehensive Grammar of the English Language* (Quirk et al., 1985), where the distinction isn't made to such extent and those two forms fall within the same category. First the classification of gerund and participle from Quirk et al. (1985) and Huddleston and Pullum (2002) will be presented and then the description by Dušková et al. (2006) will follow.

2.2.1. The English grammars: *A Comprehensive Grammar of the English Language* and *The Cambridge Grammar of the English Language*

Quirk et al. subsume the term gerund within a broader term "*-ing* participle" which they classify as a non-finite form occurring either in progressive aspect following *be* or in *–ing* participle clauses (Quirk et al.: 96). What we understand by the term gerund is touched upon by Quirk et al. as a part of "the gradience from deverbal nouns via verbal nouns to participles" (Ibid.: 1290). They suggest placing (de-)verbal *–ing* forms along a complex scale, starting from a "pure count noun" (ex. 11) and an abstract "deverbal noun" (ex. 12), with "the purely participial form in a finite verb phrase" at the other end of the scale (ex. 13) (Ibid.).

(11)   some paintings of Brown's

(12)   Brown's deft painting of his daughter is a delight to watch.

(13)   Brown is painting his daughter.

The gradient comprises also constructions which display a "mixture of nominal and verbal characteristics", i.e. a modification of the –*ing* form by an adverb rather than by an adjective, and a directly attached object of the –*ing* form rather than postmodification by an *of*-phrase (ex. 14). These constructions have traditionally been considered the gerund, while examples like (15) and (16) have been classified as participles.

(14)   Brown's deftly painting his daughter is a delight to watch.

(15)   Painting his daughter, Brown noticed that his hand was shaking.

(16)   The silently painting man is Brown.

Quirk et al. (Ibid.: 1292) "do not find it useful to distinguish a gerund from a participle, but terminologically class all the –*ing* items ... [such as exx (14-16)] as participles. ... the participle is in each case the nonfinite verb of a nonfinite clause". According to Quirk et al., this approach makes it possible "to represent more satisfactorily the complexity of the different participial expressions" since what has been termed gerund in English does not correspond to the traditional (narrower) use of the term in Latin.

The approach of Huddleston and Pullum (2002) is similar. They distinguish only three non-finite "form-types": infinitival, gerund-participial (exx 17-18), and past-participial (Ibid.: 1173).

(17)   There's no point in breaking the seal. (Ibid.: 1187)

(18)   They were entertaining the troops. (Ibid.)

The form gerund-participle covers both gerund and present participle of traditional grammar, since they are always identical in form. Furthermore the present participle is functionally comparable to an adjective since it is a head of an expression modifying a noun (Huddleston and Pullum, 2002: 80). Gerund is then defined as "a word derived from a verb base which functions as or like a noun" (Huddleston and Pullum, 2002: 80). Similarly to

Quirk et al. (1985), , Huddleston and Pullum mention the possibility to replace the gerund with a noun while the sense of the sentence remains the same, and determine that the main difference between participles and nouns resides in the comparability of participles to adjectives and gerunds to nouns. A secondary difference is that participles and gerunds do not combine with auxiliaries in the same way. Yet, as was mentioned earlier, Huddleston and Pullum too arrive at a straightforward decision concerning the distinction between gerunds and participles: "We conclude that there is no difference of form, function, or interpretation that correlates systematically with the traditional distinction between 'gerund' and 'present participle'. The distinction introduces an unmotivated complication into the grammar: it is one of the features of traditional grammar that should be discarded" (Huddleston and Pullum, 2002: 1222).

This thesis, however, has to make a distinction between the gerund and present participle since in cases where no premodifier appears potential ambiguity may arise (cf. also the model sentence *Flying planes can be dangerous*). Generally a structure where the item functions nominally is labelled a gerund, e.g. "Painting a child is difficult", and it is labelled as a participle where it functions adverbially or as a modifier, as in: "Painting a child that morning, I quite forgot the time" or "The man painting the child is Brown" (Quirk et al., 1985: 1292). This approach relies on Dušková et al. (2006) and will be dealt with in the following sub-chapter. Dušková et al. (2006) distinguish three non-finite verb forms: the infinitive, the gerund and the participle.

2.2.2.1. Gerund

Dušková et al. (2006: 268) describe gerund as "identical in form with present participle, i.e. it is formed by the *–ing* suffix." The gerund, like infinitive, distinguishes present, past, active and passive forms.

gerund	present	past
active	using writing	having used having written
passive	being used being written	having been used having been written

Table 1: The forms of the gerund (Dušková et al. 2006: 268)

The distinction drawn between the gerund and participle is based on their syntactical function, where the gerund resembles the noun and the participle the adjective. The gerund therefore performs the syntactic functions of the subject, object, nominal part of predicate, adverbial and it can stand after prepositions with lexical meaning, but also prepositions expressing case relations, for example *the advantage of knowing foreign languages* (Ibid.).

Interesting for us is the case of when the gerund and participle occur in the same syntactic function: there are usually some formal aspects that make the distinction clear. Dušková et al. (2006: 269) use the following example:

(19)   melting point

(20)   melting snow

where the participle and gerund are formally distinguished by intonation and stress placement. In example (19) the gerund is indicated by single main stress with falling intonation in the attributive position and it can be rephrased by an of-phrase "the point of melting". Similar examples with the gerund in the function of pre-modifying substantive include, e.g. *copying machine, dining table, ironing board*. (Ibid.: 577). In example (20), the participle, both words are stressed and it can be rephrased by a relative clause: "snow that is melting".

Although the gerund performs nominal syntactic functions, it has mainly the features of a verb, as has been stated earlier in this chapter.

2.2.2.2. Participle

The participle has six different forms (Dušková et al., 2006: 270):

participle	active	passive
present participle	using writing	being used being written
perfect participle	simple - having used - having written continuous - having been using - having been writing	having been used having been written
past participle	used written	used written

Table 2: The forms of the participle (Dušková et al. , 2006: 270)

As a part of the sentence, participle functions as a modifier or as an adverbial (a transgressive). In the adverbial function all of the participial forms can be used (ex. 21) but in the function of the modifier (a syntactic adjective) only the present and past participle occurs (22) (Ibid.: 272).

(21)   Having built the bridge on a wrong spot, the firm landed in trouble[2]

(22)   a. *the firm having built the bridge across the valley is very prosperous (Ibid.)

(22)   b. the firm building the bridge across the valley is very prosperous (Ibid.)

Concerning the appearance of gerunds and participles in terms of ambiguity, identical forms are shared by the present gerund and participle, both active and passive, and by the past gerund and simple perfect participle, active and passive.

2.2.3 The –ing form in clause-initial position

The –*ing* non-finite form in clause-initial position can function either as a modifier of the following head noun, typically a participle (ex. 23) or as the subject of the clause, the gerund (ex. 24). The construction can therefore be ambiguous.

(23)   Training sportsmen need a nourishing diet. (Dušková et al., 2006: 570)

(24)   Training sportsmen is time-consuming. (Ibid.)

Pre-modification with the present participle is often limited only to intransitive verbs and transitive verbs whose object can be omitted. Usually such limitation applies to cases, where the participle expresses a characteristic and lasting quality (*developing countries*, *squeaking door* etc.) The cases when the participle denotes temporary characteristic are rarer (*growing tendency*). Furthermore the premodifying participle is even more admissible when it itself is pre-modified (*self-defeating argument*, *quickly spreading epidemic*). Attributive participle can be rephrased by relative clause, e.g. *a leaking pot – a pot that leaks*. Finally the fact that participles possess the quality of adjective can be demonstrated by their ability to

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[2] My own example.

easily convert to adjectives that are gradable and can be intensified (*a very becoming dress*, *a most astonishing piece of news*).

Alternatively, the –*ing* premodifier can be a gerund, e.g. *drinking water*, *ironing board*. The gerund is distinguished from the pre-modifying participle by intonation and the corresponding paraphrase (see 2.2.2.1. above).

In order for the gerund to function as the subject it has to express an action or verbal process or process as a fact. Dušková et al. (2006: 571) state that this concerns mainly verbs that express an effect on mental and emotional state of being, and state following examples: *alarm, astonish, bewilder, depress, enrage, humiliate* etc. (ex. 25). Furthermore the gerund in the role of the subject does occur more frequently than the infinitive, because the infinitive in the role of the subject is usually in extraposition and is limited only to predications of evaluation and identification.

If the agent of the gerund action is not identifiable from the clause it can be expressed by the possessive pronoun or the adnominal case of a noun (ex. 26).

(25)   Confiding in him was a mistake. (Dušková et al., 2006: 571)

(26)   His leaving no address was most inconvenient. (Ibid.)

3. Material and Method

In order to explore the phenomenon of ambiguity, we needed a large general corpus of contemporary English. Therefore the *British National Corpus* was selected (accessed thorough https://kontext.korpus.cz/). The process of analysis was divided into two steps, each performed on a different set of examples (arranged into two samples)

3.1. Sample 1

The first step of the analysis served as a probe and it tested the factors that hinder the ambiguity within the narrow scope of the construction V-ing + common noun + verb. The formulation of the query was as follows: "<s> [tag="VVG"] [tag="NN.*"] [tag="V.*"]". The query yielded 1757 concordance lines from which the 25 initial concordance lines representing the pattern were chosen for the analysis. The results of the analysis of Sample 1 are presented in chapter 4.3..

3.2. Sample 2

The second step of the analysis was based on a more specific and grammatically more restricted query. Overall, a higher precision in results that would comply with the model sentence *Flying planes can be dangerous* was expected. The formulation of query was as follows: "<s> [tag="VVG"] [tag="NN.*"] [tag="V[V,H,D]D|VM0"] within <s n=".*" />" and grammatically it represented a sentence-initial construction V-ing + common noun + verb (limited to preterite of lexical verbs, *do* and *have*; future *will*; modal verbs). The query yielded 345 concordance lines, which were then manually checked to exclude instances which did not represent the pattern under study, including gerund as a modifier (cf. chapter 4.3.1). With 120

results left, the initial 100 were used.[3] These examples, representing the main source for ambiguous constructions, were subjected to several tests of ambiguity. Firstly the ambiguity was tested within the narrower scope of the construction itself (V-ing + noun + verb), and subsequently the focus was aimed at clause/sentence level (cf. chapter 4.4.3.). The Results of the Analysis are presented in the following chapter 4.

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[3] A corpus manager mistake in the sampling procedure which occurred at the time of the excerption does not make it possible to re-trace the order of the examples used.

4. Analysis

The analytical part comprises the obtained statistical data from the samples and their analysis. It consists of analyses of 2 individual samples, the first one analysing the less specified query and the second one analysing the restricted one, allowing for more precise results. The analytical part presents the reader with the most illustrative examples. The other examples falling within the respective categories are then mentioned via their codes and lines; all of the examples are listed and in the attached appendix.

4.1. Sample 1: *-ing* verb form + noun + verb

On the basis of the model example "Flying planes can be dangerous," the hypothesis presumes that ambiguity can potentially arise in cases where the sentence-initial position is occupied by the *-ing* form of a verb, which is followed by a noun and any type of verb, in the given order. There are 1536 instances of such sequence in the BNC, however, the ambiguity does not appear in most of them for various reasons which are listed below in this chapter. Twenty-five examples of the clauses with the initial "V-ing + Noun + Verb" sequence served as a probe which was expected to reveal the main factors hindering ambiguity. The identification of these factors made it possible to improve the formulation of the query and, consequently, the chances of identifying some cases of (potential) ambiguity. Surprisingly enough, among the results, an instance of garden path (chapter 2.1.2) has also occurred (ex. 1). Garden paths cannot be incorporated into the analysis, since they do not represent ambiguity.

> (1) Helping punters outwit the bookies is something that gives Britain real pleasure [...] (A3L,11)

Here the verb *outwit* seems like a predicate of subject *punters*, however, as the sentence progresses the presence of the verb *is* stops us and we have to go back to the beginning of the sentence and reread it in the intended order, where *outwit* serves as an object complement to *punters*. The fact, that verb *helping* takes on bare infinitive, contributes to the garden-path here. Nonetheless the formal indistinguishability of the participle and gerund create a garden path and not ambiguity in this specific example.

4.1.1. The functions of the V-ing form

Sample 1 contained 25 examples that were analysed for the reasons leading to elimination of ambiguity, comprising two instances of participial syntactical function and 23 instances of gerundial syntactical function as shown in Table 3 below:

	syntactic function of –*ing* form		Total
	subject	**modifier**	
gerund	14	9	23
participle	-	2	2
Total	**14**	**11**	**25**

Table 3: Overview of syntactic functions of –ing form in Sample 1

The expected results in the sample (based on the model example mentioned above) were to be either gerund in the syntactic function of a subject of the sentence (*Flying planes is dangerous*) or participle as a modifier of a subject noun (*Flying planes are dangerous*). The gerund in the function of the subject is demonstrated by ex. (2), and the participle in the function of modifier of a noun by example (3):

(2) Patenting ideas is fairly complicated, but cheap. (CBC, 6328)

(3) Laying hens found radio comforting, he said. (AJ6, 262)

However the sample has revealed a third, relatively frequent, type of construction, where the gerund stands in the role of modifier (ex. 4):

> (4) Teaching aids must not be introduced solely in order to save time, but must
>
> make possible an increase in understanding for the learner. (B33, 1362)

Using this example, it can be demonstrated that the construction *teaching aids* cannot be referred to as *teaching [somebody] aids* but only *as aids for teaching*.[4]

4.1.2. Subject-verb agreement

Since the BNC has been searched using the constructed query "<s> [tag="VVG"] [tag="NN.*"] [tag="V.*"] within <s n=".*" />," where the neither the noun nor verb which follows the noun has been specified for the differentiation between singular and plural, 9 out of 25 examples have been discarded due to agreement in number. The reason leading to elimination of ambiguity in these cases is that the subject-verb agreement would not permit the ambiguous interpretation. For illustration, let's consider the following example, where the singular verb *is* automatically eliminates the possibility of participial interpretation: since the noun *banknotes* is in plural, the only subject available, based on grammatical concord, is the gerund *printing*:

> (5) Printing banknotes **is** one area where Britain leads the world, with De La Rue
>
> having […] (AHB, 48)

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[4] In these constructions, it is difficult (or even impossible) to distinguish between the gerund and a de-verbal noun since the –ing form lacks complementation and modification. This is the reason why the gerund/noun modifiers were excluded from the larger Sample 2. However, to illustrate their features, they were retained in the analysis of the smaller Sample 1.

Table 4 summarizes the conception of singular/plural form as a hindrance to ambiguity and shows that only 16 out of 25 examples could be further analysed for other reasons leading to elimination of ambiguous interpretation.

	the sg/pl form of the verb is compatible with both potential interpretations		
	no	**yes**	**Total**
be pl	2		2
be sg	4	6	10
do sg	1		1
have pl	1		1
have sg	1		1
may		1	1
must		2	2
shall		1	1
should		2	2
will		2	2
past – lexical verb		2	2
Total	**9**	**16**	**25**

Table 4: Compatibility of sg/pl form with both potential interpretations

No problems arise if the form of the verb does not distinguish between singular and plural, i.e. if the verb is a modal or future auxiliary (*may*, *must*, *shall*, *should*, *will*, ex. 6) or if the tense of the verb is the preterite (except the verb *be*, ex. 7). As the table above shows, 10 such instances occurred.

> (6) Fixing instructions **should** be followed carefully. (HKL, 9)

> (7) Betting turnover **doubled**, to £4.5 billion. (ABK, 2004)

With the present tense of the verbs *be*, *do* and *have* as well as of lexical verbs (not attested in Sample 1) and in the preterite of *be* the compatibility of the form of the verb with both potential interpretations depends on the number of the noun preceding the verb:

a) if the noun is in singular,[5] the potential for ambiguity is not blocked by the form of the verb since grammatical concord requires the verb also to be in singular, and the possibility of linking it to the *–ing* form in a subject-verb relationship is not ruled out on formal grounds (ex. 8);

b) if the noun is in plural, the plural form of the verb makes the verb grammatically incompatible with the potential gerund subject (ex. 9), while the singular form of the verb makes the interpretation of the gerund as the subject the only plausible one (ex. 10).

(8) Manipulating <u>behaviour</u> **is** usually considered bad ... (B2F, 726)

(9) Dealing <u>days</u> **are** on the third Friday of March, June, September and December. (CBW, 2268)

(10)   Printing <u>banknotes</u> **is** one area where Britain leads the world, ... (AHB, 48)

Table 5 summarizes the compatibility of the sg/pl form of the verb with the preceding noun, giving us the final number of 6 examples out of 15 examples where the verb that distinguished between sg/pl met the requirements and could be analysed for remaining factors leading to the preservation/elimination of ambiguity.

			The sg/pl form of the verb is compatible with both potential interpretations		Total
			no	yes	
noun in pl	**9**	be pl	2		2
		be sg	4		4
		do sg	1		1
		have pl	1		1
		have sg	1		1
noun in sg	**6**	be sg		6	6
		Total	**9**	**6**	**15**

Table 5 Compatibility of the number (noun) and sg/pl form (verb)

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[5] Since the construction "V-*ing* + Noun + Verb" does not comprise a determiner the noun in singular is a non-count noun, which does not require the presence of an overt determiner

4.1.3. Transitivity of the *–ing* verb and semantic compatibility

The next factor, that of the transitivity of the *–ing* verb, can lead to further elimination of ambiguity. As has been mentioned in the theoretical part of the thesis (chapter 2.4.1.), the decisive requirement for the possibility of the potential interpretation is that the verb can be used both transitively and intransitively. When the verb can be used transitively (ex. 11) or contrarily intransitively only, then there is always only one interpretation possible. However when the verb has both transitive and intransitive uses, then the ambiguity should not be immediately eliminated and semantic restrictions have to be taken into consideration (ex. 12).

      (11)   **Making**[6] money is all about timing and I reckon that as far as […]
            (CEL, 1264)

      (12)   **ASKING**[7] directions will never be quite the same. (AJY, 1682)

Finally, semantic compatibility comes into question, which presupposes both transitive and intransitive use of *–ing* verb. Strictly speaking, we are considering logicality of both interpretations. Example (12) introduced two possibilities (the noun *directions* could be used either as the object or as the subject of the V–ing form) of use of verb *to ask*, respectively: *to ask directions* vs. **directions ask*.

The original meaning of "someone asking for direction" reveals that the meaning of the verb *to ask* is ascribed to animate beings/people rather than to inanimate or abstracts things, hence the impossibility of the intransitive interpretation above.

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[6] According to http://www.oxfordlearnersdictionaries.com/definition/english/make_1 (accessed 18 July, 2014)
[7] According to http://www.oxfordlearnersdictionaries.com/definition/english/ask_1 (accessed 18 July, 2014);
although *ask* is primarily transitive it can also be used intransitively, e.g. *Don't ask*.

	noun is compatible with V-*ing*		
	either as S or O	both as S and O	Total
both transitive and intransitive	8	1	9
transitive only	7		7
Total	**15**	**1**	**16**

Table 6: Transitivity of the –ing verb and semantic compatibility (only those cases where ambiguity is not blocked by the singular/plural form of the verb are listed)

If all of the requirements that have been listed in this chapter are met, then the (local) ambiguity may arise. In the example below (ex. 13) the modal verb *shall* does not distinguish between the singular and plural, the –*ing* verb *cooling* can be used either transitively or intransitively (e.g. *The evening breeze cooled her face / Glass contracts as it cools*),[8] and the semantic compatibility does not hinder ambiguity, i.e. the noun *water* is semantically compatible with the verb *cool* both as the subject (agent – *water cools*) and the object (patient – *to cool water*).

(13)   **Cooling water shall cause** minimum disturbance to the aquatic ecosystems of rivers and estuaries; (HR3,1901)

Three interpretations arise:

a) gerund subject: *if we cool water this shall cause* […]

b) gerund modifier: *water which is used for cooling shall cause* […]

c) participle modifier: *water which cools shall cause* […]

It is only on the basis of wider context (ex. 13') and general knowledge (coal-fired electricity generating stations)[9] that interpretation b) can be identified as the intended one.

(13') A particular east-coast state of the United States, which has several large population centres, requires an assessment of potential sites for new major

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[8] According to http://www.oxfordlearnersdictionaries.com/definition/english/cool_2 (accessed 20 July, 2014)
[9] Cf., e.g. http://en.wikipedia.org/wiki/Fossil-fuel_power_station (accessed 20 July, 2014).

public facilities, in particular <u>coal-fired electricity generating stations</u>. The criteria governing the location of such facilities include:

(i) Environmental <u>Cooling water shall cause minimum disturbance to the aquatic ecosystems of rivers and estuaries</u>; sulphur-bearing smoke shall not pass over urban areas; the chosen site must not interfere with or reduce the value of scenic and recreation areas, nor must the habitats of rare or otherwise important plant and animal species be disturbed; if possible the buildings and other structures associated with the facility should not be visually intrusive.

(ii) Economic [...] (HR3, 1898-1905)

In conclusion, Sample 1 has confirmed that the crucial factor in terms of eliminating ambiguity is the singular/plural form of the verb in the third position of the query. The next constructed query will therefore eliminate the sg/pl distinction and will include only those verbs that do not distinguish between sg/pl (preterite of lexical verbs, *do* and *have*; future *will*; modal verbs). The analysis of Sample 2 in the next chapter will also eliminate the frequent type that the first sample identified, where the clause-initial gerund or *–ing* substantive is in the syntactic role of a modifier and the following noun is in the syntactic function of the head of phrase. The reasons behind this decision are that when the gerund is in the role of premodifier it is difficult or sometimes almost impossible to say whether the *–ing* form should be considered a gerund or a noun. Strictly speaking, the *–ing* form in this position can be neither modified nor can it have a complement, and therefore it does not offer any clue how to distinguish the gerund from the noun. The next sample, consisting of 100 examples will consider only the two types of syntactical constructions that correspond to the model example of this thesis:

a. participle as a modifier + noun as a head + verb

b. gerund as a subject + noun in the role of object of the *–ing* verb + verb

4.2. Sample 2: *-ing* verb form + noun + (preterite of lexical verbs, *do* and *have*; future *will*; modal verbs)

Sample 2 analyses 100 results that have been excerpted from BNC using a narrowed-down query "<s> [tag="VVG"] [tag="NN.*"] [tag="V[V,H,D]D|VM0"] within <s n=".*" />." This narrowed-down query yielded 345 concordances in total as has been mentioned in the previous chapter, those results where the gerund stood in the position of a modifier had to be discarded. From the total number of 345 results we have been left with 120 results from which the first 100 examples were taken and the Sample 2 created and consequently analysed.

4.2.1. The limits of ambiguity

The method of analysis focuses on two factors that may lead to blocking the ambiguity:

a) **Transitivity of V-ing** (verified at http://www.oxforddictionaries.com/): The results have been sorted into 3 groups, those where the V-ing is transitive only, intransitive only and those where V-ing can be used both transitively and intransitively.

b) **Semantic compatibility**: the factor of semantic compatibility has been considered to determine whether the noun is semantically compatible with the V-ing both in the role of its subject and object. This has been tested in two steps both for gerundial (ex.1) and participial constructions (ex.2):

(1) Losing weight can also make a big difference. (CEK,5721)

1. Weight as an object of losing: *Somebody loses weight.*

2. Weight as subject of losing: **Weight loses (something).*

We can observe here that the noun *weight* is not compatible with the verb *to lose* in the role of its subject, because *to lose* is intransitively used in meaning "fail to win" such as in "they lost by one vote"[10]

 (2) Overflowing dustbins festered in areas and neglected front gardens. (FRC, 1648)

 1. Dustbins as object of overflowing: *Somebody/something overflows dustbins.

 2. Dustbin as subject of overflowing: Dustbins overflow (with garbage).

Here we can observe that although the verb *to overflow* has the same meaning when used transitively and intransitively, there are collocation restrictions on the subject and object of the transitive use, cf. *The river overflowed its <u>banks</u>*.[11]

The idea behind the analysis is simple, the execution much more complicated. In the ideal case three successive tests have been applied for determining the possibility of ambiguous interpretation:

1. The V-ing was checked for its transitivity.

2. In the cases where the verb allows for both transitive and intransitive uses, both interpretations would be further tested for the semantic compatibility of the noun with the V-ing as its subject and its object.

3. If the noun was found to be compatible with the V-ing, both as subject and object (ex. 3), further limitations of the ambiguity were considered within the sentence/clause.

 (3) Voting lib-Dem could mean, in effect, favouring Labour. (AK9, 1856)

 1. Lib-Dem as object of voting: Somebody votes Lib-Dem.

 2. Lib-Dem as subject of voting: Lib-Dem vote (somebody).

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[10] According to http://www.oxforddictionaries.com/definition/english/lose?q=lose (accessed 31 July, 2014)
[11] Cf., e.g. http://www.oxforddictionaries.com/definition/english/overflow?q=overflow (accessed 31 July, 2014)

Here, both interpretations are acceptable, ambiguity is not blocked and is distinguished only by context or general knowledge. This example and similar examples will be addressed at the end of the analytical chapter.

4.2.2. Distribution of transitivity

In terms of distribution of the construction types, Sample 2 comprises 53 gerundial and 47 participial constructions (illustrated by exx 4 and 5, respectively).

(4) Using nails could disturb the roof covering. (CCY, 1531)

(5) Strolling musicians played softly throughout. (ED9, 850)

transitivity	gerund	participle	total
both trans/intrans	18	27	45
intransitive only	0	14	14
transitive only	35	6	41
Total	**53**	**47**	**100**

Table 7: Transitivity in relation to distribution of construction types

We can observe here that among the gerundial ones, most of the cases were transitive only. Furthermore, among the gerundial construction there were no instances of intransitive use, since the object has to be always present in the gerundial construction. This also implies that if the verb in gerundial construction allowed for both transitive and intransitive use, it had to be and was always used transitively. Participle construction allowed for all three cases.

Among the cases where the V-ing could be used both transitively and intransitively, the examples where the meanings of the transitive and intransitive verbs are not identical were also included, cf. e.g. restrictions on intransitive uses in ex. 6:

(6) Using drugs can be dangerous, especially when they're taken in excess or for a long time, or in the wrong combinations. (EX5, 2289)

In ex. (6) the verb *using* is used transitively, there being no restrictions on the choice of the object (cf. *to use drugs / a key / the English language*). Where *to use* is used intransitively it has restricted meaning "to take (an illegal drug)".[12]

Sometimes the shift in the meaning was larger, in these cases grammatical ambiguity was accompanied by lexical ambiguity, cf. e.g. the intransitive use of *to obtain*:

(7) Obtaining compliance will be as difficult as it always has been […] (AB6, 1438)

In ex. (7) *obtaining* is used as a transitive verb ("get, acquire, or secure (something)"). Where *obtaining* is in intransitive use it means "be prevalent, customary, or established".[13]

4.2.3. Semantic compatibility

Table 8 below summarizes the semantic compatibility of the noun with the V-ing both as the subject and the object of the verb.

transitivity	semantic compatibility		
	no	yes	in total
both	20	25	45
intransitive only	14	0	14
transitive only	36	5	41
total number	70	30	100

Table 8: Semantic compatibility of V-ing and the noun ("yes" = the noun is semantically compatible with V-ing both as its subject and its object; "no" = the compatibility of the noun and the verb is restricted to either the subject or the object function of the noun)

For intransitive verbs, semantic compatibility is immediately ruled out by the verb never taking an object (ex. 8, *somebody roosts birds)

(8) Roosting birds rustled overhead; the night breeze stirred the leaves; here and there a dead twig fell. (EWC,516)

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[12] According to http://www.oxforddictionaries.com/definition/english/use?q=use (accessed 31 July, 2014)
[13] Cf., e.g. http://www.oxforddictionaries.com/definition/english/obtain?q=obtain (accessed 31 July, 2014)

It appeared that semantic compatibility could be tested only with verbs that can be used both transitively and intransitively, however, when the tests were also performed on transitive only verbs, it turned out that if the transitive verb is used as a participial modifier, its object can be omitted, although in the gerund function the object is required. Therefore in result, among the transitive only verbs, we have identified 5 cases where the V-ing is marked in the dictionary as transitive only, but in those cases they might also be used without an object in premodification. The boundary between a de-verbal adjective and participle in premodifying function appears to be fuzzy.[14] Consider following examples:

(9) Controlling persons may also be liable for controlled persons who tip others. (HSF, 1833)

In ex. (9) the transitive verb *controlling* can be interpreted either as *somebody controls persons* (i.e. gerund + object) or as *persons who control* (*something*) (i.e. a participial premodifier with object deletion).

(10)   Reflecting surfaces can be used too: glass on pictures, windows, the TV set. (C9R, 1441)

Similarly to ex. (9), in ex. (10) *reflecting surfaces* may be ascribed either the meaning *something reflects surfaces* (gerund) or *surfaces which reflect (something).*

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[14] The V-ing forms of the verbs *disbelieve*, *threaten*, *move*, *win*, *work*, *intend*, *take*, *travel* and *rise* can be found in the dictionary as adjectives but were nevertheless included in Sample 2. We have arrived at this decision later during the analysis. The exclusion of all the V-ing forms which can function as adjectives according to the dictionary would have led to a substantial reduction of the size of Sample 2. Moreover, the deverbal –*ing* adjectives, such as *travelling*, do not fit all the criteria of adjectival status (intensification, attributive as well as predicative use. Quirk et al. (1985: 413-415) adds to this "There are many adjectives that have the same suffixes as participles in -ing or -ed [...]" and further comments on the behaviour of adjectives with following: "Often the difference between the adjective and the participle is not clear-cut. The verbal force of the participle is explicit for the -ing form when a direct object is present." What Quirk et al. refer to also explains why the V-ing in sentence like *They are insulting us* is treated like participle, but in the cases where participle is in the position of a premodifier, no object is present and therefore this criterion cannot be applied. After all, the dictionary also lists the model V-ing form *flying* as an adjective (According to http://www.oxforddictionaries.com/definition/english/flying, accessed 9 August, 2014).

The adjectivisation of the V-*ing* present in those examples can be illustrated by another example, which was not be included into the survey (and instead used as model example for explanation of the issue), since *distracting* is listed in the dictionary as an adjective.[15] Although the example *Distracting thoughts will occur but do not worry about them* was excluded there would arise potential ambiguity. Let's consider the following participial/adjectival use and the gerundial one, respectively: *Thoughts which distract somebody will occur/ Someone will distract thoughts*. The ambiguity would be resolved by the concord with the pronoun *them* further in the sentence.

Looking back, the use of participial constructions in exx (9) and (10) is in principle similar to the adjective *distracting*, although the V-ing forms *controlling* and *reflecting* are not classified as adjectives in the dictionary, and therefore we can characterize the cases as object deletions due to the premodifying function of V–ing verb.

Apart from these two participial constructions, also 3 cases of gerundial use have been identified, which were in the dictionary classified as transitive only verbs, but could possibly be used as the participial premodifier the same way as was shown on exx (9) and (10). The following examples do not exclude the ambiguous interpretation and the dictionary does not label them as adjectives:

(11)   Persecuting Nonconformists could have a knock-on effect in a community, hitting those who were loyal to the established Church. (HY9,701) (*somebody persecutes Nonconformists/ Nonconformists who persecute someone*)

(12)   COACHING juniors can give much satisfaction but it also has its drawbacks as Gareth Parkin, coach to Broughton Park Under-12s and a regular playing member of the club's third team found to his cost after his charges won the recent age-group

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competition at Waterloo. (ECD, 1913) (*somebody coaches juniors/ Juniors who coach someone*)

(13)   Teaching children should always be taken at the child's pace, answering questions as truthfully and accurately as possible, rather than trying to tell the whole story. (BP1, 45) (*somebody teaches children/ children who teach somebody*)

This has brought us to a significant realization in the process of sorting the examples in the Sample 2. It has emerged that there are more examples that can be treated similarly, since there occurred a lot the object deletion also with verbs in their transitive use. Initially we based our classification on what the dictionary had to say about the transitivity, but sometimes the transitive V-ing was in a role of a modifier with an ellipsis of object, although generally, according to the dictionary, the verb can also be used intransitively. This kind of behaviour of transitive and intransitive use can be aptly demonstrated on the following example:

(14)   Disbelieving parents shook their heads when they arrived at Overdale County Primary School in Northwood, Kirkby. (K97,15624)

Here *disbelieving* is used as a participial pre-modifier without an object: "be unable to believe [someone]",[16] although only the context will reveal the intended use of the verb in this case, since the meaning of *disbelieving* does not correspond to the meaning given for the use without an object by the dictionary, the object being deleted. However if we take in consideration the intransitive use of *disbelieving*, which has restricted meaning of "Have no religious faith"[17] it is not probable to be such usage in this sentence (it is the case of *parents*

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[16]   According to http://www.oxforddictionaries.com/definition/english/disbelieve?q=disbelieve (accessed 1 August, 2014)

[17]   Cf., e.g. http://www.oxforddictionaries.com/definition/english/disbelieve?q=disbelieve (accessed 1 August, 2014)

who disbelieve somebody/something shook their heads, rather than *parents who have no religious faith shook their heads*. This construction bears resemblance to example (11).

The semantic compatibility test was further performed on all V-ing in the sample. There were 20 examples, where the V-ing can be used both transitively and intransitively according to the dictionary, however, the semantic incompatibility with the noun either as its subject or object occurs (see Table 8).

The interpretation of the noun as object of V-ing (group a.) or as subject of V-ing (group b.) is restricted either by semantic features of the noun, e.g. the subject noun must be animate, or there occurs a collocation restriction.

a. It was often the case that the V-ing had the selection of the object semantically restricted to specific sphere. In ex. (15) the transitive use of *depart* requires particularly "leave (one's job)",[18] in ex. (16) the process of *mounting* denotes a physical movement if used transitively and is also restricted to certain objects as dictionary states, such as "stairs, hills" or certain means of transportation.[19] Other, unmentioned, similar examples can be found in the appendix (BMF, 1638; ANL, 2573; FRA, 1905; K55, 5535; FRC, 1648).

(15)   Departing staff will be required to clear their desks and hand in their entry passes by midnight tonight. (HGN, 3977) (i.e. the staff departs)

(16)   Mounting discontent came to a head over a professional insurance scheme which Fimbra attempted to force on all its members. (A9U, 199) (i.e. discontent mounts)

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[18] According to http://www.oxforddictionaries.com/definition/english/depart?q=departing (accessed 1 August, 2014)

[19] Cf., e.g. http://www.oxforddictionaries.com/definition/english/mount?q=mount (accessed 1 August, 2014)

b. Another case is that the V-ing has the subject selection semantically restricted to a specific sphere. In ex (17) the verb *losing* is limited in its choice of the subject to animate/human subjects, and when used intransitively it has restricted meaning of "Fail to win/ not keep/ Earn less (money) than one is spending or has spent."[20] The verb *stripping* in ex (18) also has a different meaning when used intransitively, which refers to "taking off one's clothes".[21] Analogical, unmentioned examples can be found in the appendix (K97, 16017; CGS,1605; HCC, 97; EW5, 1038; ED4, 1797; HAC, 302; A62, 597; HXH, 1047; CJ9,550; B74, 1435; CDK, 1530).

(17)   Losing weight can also make a big difference. (CEK, 5721) (i.e. someone loses weight)

(18)   Stripping wallpaper can be a messy, time-consuming job, made worse by several layers, or overpainted papers. (H99, 41) (i.e. someone strips wallpaper)

There are 30 examples left, where ambiguity happens to be blocked neither by transitivity (V-ing either has both transitive and intransitive uses or can be used as a transitive verb with object deletion) nor by semantic compatibility in the narrower scope (as in the previous cases) but may be blocked further in the sentence or context. We can divide them further to individual groups according to the factors leading to disambiguation, commencing with the one which manifests quite superficially (based on coreference, group a.), followed by restricted semantic compatibility of the predicate exclusively with abstract subject or concrete subject only (group b.) and finishing with instances where the ambiguity is preserved within the clause/sentence and only context disambiguates the sentence (group c.). The examples in the last group are provided with the constructed paraphrases of both possible meanings and accompanying commentary.

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[20] Cf., e.g. http://www.oxforddictionaries.com/definition/english/lose?q=losing (accessed 1 August, 2014)
[21] Cf., e.g. http://www.oxforddictionaries.com/definition/english/strip?q=stripping (accessed 1 August, 2014)

a. The obstruction in preserving ambiguity was in 3 cases caused by coreference of the subject with some expression/word further in the sentence structure. The disambiguating word is underlined. Ex. (19) shows an instance where the coreference of subject and following pronoun disambiguates the possible gerundial interpretation, whereas ex. (20) illustrates an instance where the subject-apposition disambiguates the two interpretations. The last instance is when the complementation of predicate disambiguates in ex (21).

(19)   Moving pavements must have failed under the weight they bore, otherwise one side of the crowd would surely be pulled to the rear. (CM4, 605)

(20)   Reflecting surfaces can be used too: glass on pictures, windows, the TV set. (C94, 1414)

(21)   Providing authorities/hospitals would be paid for cases treated either on the basis of actual cost per case , or on some laid-down or agreed cost per case, … (HH2. 1461)

b. Another prevalent factor of removing ambiguity is the semantic compatibility of the subject in one interpretation with predicate of the sentence, typically due to the fact that predicate is incompatible with an abstract subject or the concrete one. Human or animate subject is required for the verb *believed* in ex (23) and therefore the gerundial interpretation is eliminated by the subject-predicate incompatibility. Contrariwise the predicate in ex (24) requires the subject to be abstract and does not allow the human agent/concrete noun.

(23) Merging companies believed they could achieve significant gains in productivity and profits, and government policy assumed that these would offset any adverse effects from an increase in monopoly power. (HGP, 1667)

(24) Teaching children should always be taken at the child's pace, answering questions as truthfully and accurately as possible, rather than trying to tell the whole story. (BP1, 45)

c. The third group comprises the most interesting instances, where the ambiguity is preserved within the whole clause or sentence and is further disambiguated only by further context. Since the aim of the research analysis was to look for occurrences such as these, every example found will be closely examined and paraphrased according to two possible interpretations.

(25)   Wrenching reforms can be politically awkward. (CR7, 1232)

Ex. (25) can be either interpreted as a gerundial interpretation *It can be politically awkward to wrench reforms* or as a participial construction *reforms which wrench something can be dangerous*. The Participial construction counts with agent (*wrenching reforms by politicians can be politically awkward*) of the action unexpressed.

(26)   Winning customers became a priority and in the early 1980s banks began tailoring accounts to meet the needs of certain sections of the population. (AAS, 353)

Ex. (26) can be interpreted either as gerundial construction *somebody wins the customers* or the participial one *customers who win something*. Here the ambiguity is preserved due to the fact that the verb *to win* is used in the meaning of "acquire"[22] and not in the meaning of "be successful or victorious."[23] The sense in which is the V-ing is used then allows for animate object. Furthermore it is possible for the whole clause to preserve the ambiguity, since *certain sections of the population*, can be seen as referring back to the *customers that win something*.

(27) Pumping adrenalin lent a shrill, neurotic edge to his voice as he answered. (CDA, 3101)

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[22] According to http://www.oxforddictionaries.com/definition/english/win?q=win (accesed 1 August, 2014)
[23] Cf., e.g. http://www.oxforddictionaries.com/definition/english/win?q=win (accesed 1 August, 2014)

In ex. (27) we can also provide 2 different interpretations, the intended participial one of *the adrenalin that was pumping (in his/into his body) lent a shrill* […] and the constructed one of pumping artificially by syringe *someone/somebody's pumping adrenalin into his veins/body lent a shrill* […].

(28)   Feeding flies made hitching hell, but eventually a farm wagon delivered them battered and bumped -- which did a lot for Hebbert's ribs -- at the Pen-y-Gwryd. (CG1, 526)

Here two interpretations are possible, the assumed, participial one of *flies feeding on something* and the gerundial one of *somebody feeding flies with something*. It makes comical impression that someone would feed flies on purpose and more likely for what reason, however grammar and omitted agent of the action (the feeder of the flies) allow for it.

(29)   Jostling fans rocked his car and hurled verbal abuse.

In ex (29) the intended participial interpretation represents *fans that jostled rocked his car and hurled verbal abuse*, however the gerundial interpretation, where the agent is missing (let's assume for example police) can be also constructed, let's consider *somebody jostled the fans, which rocked his car*. The latter interpretation, however, is limited to the initial clause of the sentence since the predicate of the latter clause – *hurled verbal abuse* – is semantically compatible, most likely, only with the human subject *fans*.

(30)   Collecting Lustreware will be of enormous benefit to this and future generations wanting to know more about the pottery and porcelain that comes their way. (K4P, 420)

The intended interpretation is that of gerundial construction, which can be paraphrased as *gathering of Lustreware will be enormous benefit* […] (i.e. *someone gathers Lusterware*), however we can apply also the participial one in the meaning of "Accumulate over a period of

time"[24], which results in following interpretation of *accumulating Lustreware will be of enormous benefit to this and future generations* [...] (i.e. *Lusterware which gathers/accumulates*).

(31)   Persecuting Nonconformists could have a knock-on effect in a community, hitting those who were loyal to the established Church. (HY9, 701)

Here in ex (31) the intended meaning is that of gerundial construction with unexpressed agent of the action, that of *somebody's persecuting nonconformists could have a knock-on effect in a community* […], although it is arguable that it could also mean that it was the nonconformists themselves who persecuted, therefore the participial construction of *nonconformists who were persecuting (someone) could have a knock-on effect* […]. However it is highly probable that the following clause or rather the idea of "nonconformists who persecute" disambiguates the possible double meaning.

(32)   Swirling sand made visibility terrible -- I had to fly the aircraft looking down through the side window because I couldn't see ahead. (BNV, 989)

Ex (32) represents a participial construction which can be paraphrased as *sand that swirled made the visibility terrible* […], although we can interpret the clause also as a gerundial construction, where *swirling* is used transitively and could be paraphrased as *the fact that somebody was swirling the sand [perhaps on purpose] made the visibility terrible*. Again the agent of the action would be omitted in the sentence.

(33)   Voting Lib-Dem could mean, in effect, favouring Labour. (AK9, 1856)

Ex (33) represents a gerundial construction which can be paraphrased as *voting for Lib-Dem could mean, in effect, favouring Labour*. However since the preposition is not present within

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[24] According to http://www.oxforddictionaries.com/definition/english/collect?q=collecting (accesed 1 August, 2014)

the original example from the sample, we can provide a second, participial construction, which implies it would be Lib-Dem themselves who vote, therefore *Lib-Dem who are voting, could mean* [in meaning of "intend (something) to occur or be the case"[25]], *in effect, favouring labour.*

(34)   Approaching death should be viewed in its own personal cultural and religious perspective for the person concerned. (CGD, 763)

Ex (34) has the intended gerundial meaning can be paraphrased as when *somebody is approaching death it should be viewed* […]. However other, participial construction can be provided, where *approach* (in meaning of "Come near or nearer to (someone or something) in distance or time"[26]) relates to the death as process of dying itself, *therefore death that approaches should be viewed* […].

(35)   Acidifying droplets can reduce the growth of trees and crops, at concentrations far lower, than had been suspected up to now.

Ex (35) has intended participial construction present, where it can be paraphrased with *droplets that are acidifying can reduce the growth of trees and crops* […]. However we can come up with gerundial construction of *the fact that somebody/something acidifies the droplets can reduce the growth of tress and crops* […], where the agent, the one who would acidify the droplets artificially, is again omitted.

Sample 2 has given us larger perspective on the phenomena of ambiguity of -ing verb form + noun + (preterite of lexical verbs, *do* and *have*; future *will*; modal verbs). The decisive factor of the emergence of ambiguous constructions was shown to be the transitivity of the verb, further limited by the semantic compatibility of subject or object with the V-ing. Many

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[25] According to http://www.oxforddictionaries.com/definition/english/mean?q=mean (accesed 1 August, 2014)
[26] According to http://www.oxforddictionaries.com/definition/english/approach?q=approach (accesed 1 August, 2014)

examples had to be eliminated directly on the basis of containing V-ing that could be used transitively only or intransitively only, leaving us altogether with 30 examples, where local, small scale ambiguity (i.e. ambiguity within the scope of the "V-ing + noun + verb" construction) was observed. In these examples the actual extent of ambiguity could be further tested, extending the scope to the clause or sentence. From the number of 30 examples, those examples that matched all the criteria, 11 in total, have proven to be ambiguous within the sentence context. The gerundial constructions have always omitted the agent, which is another crucial factor for the emergence of ambiguity.

5. Conclusion

In conclusion, the analysis of the 125 examples following the pattern of the model sentence "Flying planes can be dangerous" has fulfilled the assumed hypothesis. Sample 1 has proven that when the form of the verb following the noun in the query is left unspecified (verb could distinguish between sg/pl form), then the ambiguity will be often eliminated by the grammatical subject verb agreement (9 out of 25 examples have been eliminated on these grounds) and therefore the ambiguity had automatically smaller chance to occur. However, it had revealed that the gerund may occur not only in the position of the subject, but also in the position of a premodifier (9 out of 25 instances), which raised the question of whether whether the V-ing should be considered as a gerund or as a noun, and those instance were decided to be discarded from the upcoming Sample 2. Concerning the compatibility of the verb with the other sentence constituents, we were left with 16 instances (6 results where the verb distinguished between sg/pl form and 10 instances where it did not). Those instances of the verb were compatible with the preceding noun and could be further analysed for ambiguity. Then the transitivity was tested and in result we have found out 9 instances to be both transitive and intransitive and in 7 instances transitive only. Not surprisingly, only one case where the noun was compatible with V-ing both as its subject and as its object was found. In the rest (15) instances the noun was compatible with V-ing only either as subject or object. The one instance that fulfilled the requirements of analysis was labelled as ambiguous and possible interpretations were listed. Sample 1 has prepared better prerequisites for Sample 2. In order to achieve better results and probability of occurrence of ambiguity in our research, gerunds in premodifying function were discarded from Sample 2, and the verb following the noun was restricted to those forms where the singular/plural does not present a hindrance.

In Sample 2, we have constructed three simple tests to further eliminate non-ambiguous instances: transitivity of the V-ing, semantic compatibility of V-ing with the following noun both as its object and subject and finally the obstructions in further sentence context. The crucial factor in the means of further elimination was the transitivity of verbs, where 41 examples were labelled as transitive only and 14 as intransitive only (55 in total). The transitive only cases were firstly not considered to be subjected to further tests of semantic compatibility at all (because both transitively and intransitively used V-ing forms were presupposed for emergence of ambiguity). However 5 cases of V-ing used transitively only could be interpreted both as participle and gerund due to an object deletion. Therefore we were left with 50 instances, which were subjected to be test for semantic compatibility. In 20 instances there occurred semantic incompatibility since the noun was not compatible with the V-ing either as its subject or object (due to the verb requiring a particular semantic class of nouns, such as animate or, inanimate nouns, as its subject or object, or its being collocationally restricted in its combinability with the noun). That has left us with 30 examples where the hindrance in ambiguity was inspected further within the sentence context. In three cases there has been an obstruction in coreference of subject with one of the further sentence constituents. In 16 cases the obstruction was represented by semantic compatibility of the subject in one interpretation with the predicate of the sentence (typically due to the fact that predicate is incompatible with abstract noun or concrete noun). Eleven examples in total turned out to be ambiguous within the clause context and mostly only further context could eliminate the ambiguity. As could have been observed already on Chomsky's example sentence, the favourable factor is that the agent of the action was omitted from the sentence in gerundial constructions (consider *Flying planes can be dangerous* vs. *Flying planes by pilots can be dangerous*).

One concluding observation should be mentioned at the very end of this thesis. Although the aim was to test ambiguity within the sentences that have been subjected to analysis, we have to admit that if a context larger than a sentence was considered and the general knowledge of the world taken into account, then the ambiguity would arise almost in no cases, or very rarely. In other words, it was observed that as long as the narrow scope of the ambiguity was considered (without the sentence context) the ambiguity could be observed within the V-ing + noun + verb paradigm, however, when the analysis was progressing towards the sentence context, then the intended meaning interpretation (original one) seemed always to stand out, being the more probable one. After all this finding is nothing more than a confirmation of what Smolka (2010: 210) pointed out concerning the Ambiguity phenomenon. It was addressed in the Theoretical Background and can be used as an appropriate final line of this thesis: "instances of potential ambiguity do occur frequently in English, but typically go unnoticed because only one of the interpretations jumps to mind naturally."

6. References

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7. Resumé

Bakalářská práce se zabývá dvojznačností jako jevem v anglickém jazyce, který se může vyskytovat u konstrukcí obdobných větě *Flying planes can be dangerous*. Dvojznačnost je založena na gramatické neurčitosti *ing*-ového slovesného tvaru, který může být interpretován jako gerundium (*řízení letadel*) nebo jako participium (*letící letadla*). Cílem práce je tedy na 125 příkladech, rozčleněných do dvou vzorků, popsat všechny okolnosti, které vzniku dvojznačnosti brání a doklady rozčlenit do skupin podle podobností v těchto ohledech. U každého potenciálně dvojznačného příkladu se zkoumala stavba podmětu a stavba celé věty, což nám ukázalo, co dvojznačnosti dále ve větě brání.

První část práce popisuje co o dvojznačnosti a jejím chování bylo doposud zjištěno v sekundární literatuře. Hned pro začátek je důležité uvést, že se názory na to, proč se dvojznačnost v jazyce objevuje, různí - jedni ji považují za nedokonalost či patologii jazykového systému, jiní ji vidí jako věc jazykovému systému přirozenou (Kooij, 1971: 1), avšak Smolka (2010: 210) přichází s praktickou poznámkou, že se doklady dvojznačnosti v angličtině v podstatě vyskytují velmi často, nicméně, my si jich nevšimneme, protože mozek automaticky interpretuje jen jednu z možností. Tato skutečnost také úzce souvisí s existencí tzv. „Garden path", která ale dvojznačnost nepředstavuje, protože umožňuje jen jednu interpretaci. „Garden path" je proto v první části práce také zmíněna. Teoretická část dále klasifikuje jazykové úrovně, na kterých se dvojznačnost může vyskytovat. Jsou jimi lexikální, gramatická a fonologická úroveň. Gramatické dvojznačnosti je věnován důkladnější popis, jelikož analytická část zkoumá právě a pouze jí. Poslední podkapitoly teoretické části se zabývají popisem *ing*-ových (neurčitých) tvarů sloves v anglických gramatikách a popisují, jak je v každé z nich klasifikováno participium a jak gerundium. *Quirk a kol.* spolu s *Huddelston a Pullum*, používají pro participium a gerundium jeden společný název, zatímco

Dušková a kol. mezi oběma tvary rozlišují a oba tvary jsou tedy řádně z gramatického hlediska popsány. *Dušková a kol.* pro tuto práci právě pro tyto důvody představují výchozí gramatiku.

Druhá část práce popisuje metodologii práce, tedy jak se postupovalo při práci s korpusem a jak se řadily jednotlivé vzorky určené pro analýzu. Pro výzkum byl zvolen *Britský národní korpus* (*British National Corpus*, dále jen BNC), protože představuje bohatý a důvěryhodný zdroj pro současnou britskou angličtinu. Pro práci byly vyhotoveny 2 vzorky sestávající z 25 a 100 dokladů, postavené na dvou rozdílných dotazech, které byly do vyhledávání v korpusu zadány. První vzorek představuje jakousi sondu do chování naší konstrukce „ing-ový slovesný tvar + podstatné jméno + sloveso" zatímco druhý vzorek, který je vyhledávaný přesnějším a formálně omezenějším dotazem, přináší řadu 100 dokladů, kde je výskyt dvojznačnosti mnohem pravděpodobnější. Doklady pro druhý vzorek však musely být ještě manuálně vytříděny, jelikož během analýzy došlo ke zjištění, že gerundium ve funkci premodifikátoru do analýzy nelze zařadit.

Třetí, analytická část práce popisuje analýzu dvou vzorků. První vzorek se shoduje s pracovní hypotézou a dokazuje, že možnost pro výskyt dvojznačnosti je v 36% (9 případech) znemožněna hned shodou přísudku s podmětem v konstrukci, která znemožňuje druhou, ať už participiální či gerundiální interpretaci. Z celkových patnácti příkladů, kde slovesa *be*, *do*, *have* rozlišovaly mezi formou singuláru a plurálu, splňovalo dále podmínky pro obě interpretace pouze 6. Slovesné formy, rozlišující mezi sg/pl se ukázaly být nevhodnými kandidáty. Celkově nám tedy zbylo 16 (64%) příkladů, kde dvojznačnost nebyla odstraněna již neshodou v čísle, ale na základě transitivity (9 dokladů jak transitivní, tak intransitivní a 7 pouze transitivní), ze kterých pouze jeden (4%) splňoval sémantickou kompatibilitu podstatného jména (v roli jak podmětu, tak předmětu) s *ing*-ovým tvarem slovesa a mohl být interpretován dvěma způsoby a prokázal se být tedy dvojznačným.

Důležitým poznatkem, při analýze prvního vzorku bylo, že gerundium se často ve zvolené konstrukci vyskytuje ve funkci modifikátoru (9 dokladů z 25), kde je téměř nemožné rozlišit, zdali je *ing*-ový tvar podstatné jméno či gerundium. Gerundium ve funkci modifikátoru bylo proto tedy vyřazeno z druhého vzorku a pro následující vzorek zůstaly pouze dva typy syntaktických konstrukcí a) participium v roli modifikátoru + podstatné jméno + sloveso b) gerundium v roli podmětu + podstatné jméno v roli předmětu *ing*-ového tvaru slovesa + sloveso.

Druhý vzorek byl z výše zmíněných důvodů vyhledáván pomocí upraveného a omezeného dotazu - ve funkci přísudku se mohly vyskytovat jen tvary sloves, které nerozlišují singulár a plurál (préteritum lexikálních sloves, slovesa *do* a *have*; budoucí *will*; modální slovesa). Hlavním faktorem eliminace se ukázala být transitivita, jejíž chování nelze formálně odstranit z vyhledávacího dotazu. 45 dokladů se ukázalo být jak transitivními, tak intransitivními, 14 pouze intransitivními a 41 pouze transitivními. Sémantická kompatibilita byla u 20 (z 50, které prošly testem transitivity) příkladů eliminována na základě toho, že podstatné jméno v roli podmětu či předmětu bylo ve vztahu s *ing*-ovým tvarem slovesa omezeno buď na životného nebo neživotného činitele nebo se jednalo o lexikálně omezenou kombinovatelnost slovesa s podstatným jménem ve funkci jeho podmětu nebo předmětu. Při dalším kroku, a to zjišťování sémantické kompatibility mezi ing-ovým tvarem a podstatným jménem v rolích podmětu a předmětu, bylo zjištěno, že pouze 30 dokladů dovoluje dvojznačnou interpretaci a dvojznačnosti buď je, nebo není zabráněno dále ve větném kontextu. Zde došlo k zajímavému zjištění, a to, že u 5 dokladů, kde *ing*-ový tvar mohl být použit pouze transitivně, k dvojznačné interpretaci i přesto mohlo dojít, a to díky tomu, že předmět byl z originálního znění věty vynechán. U zbývajících 30 příkladů tedy byla dvojznačnost zkoumána v rámci kontextu věty. Nejčastějšími překážkami byla koreference, dále omezená sémantická inkompatibilita přísudku buď s životným či neživotným /

abstraktním podmětem. Nakonec nám zůstalo 11 dokladů, kde dvojznačnost byla zachována v kontextu věty. Tyto doklady byly také doplněny ilustračním komentářem a obě parafráze byly uvedeny. Práce potvrdila, že ačkoli v rámci úzce vymezené konstrukce „V-ing + substantivum + sloveso" nacházíme případy potenciální ambiguity, vezmeme-li v úvahu širší, alespoň větný, kontext a obecné znalosti o světě, dvojznačnost se obvykle ztrácí a jedna a interpretací vystupuje jasně do popředí.

8. Appendix

8.1. Sample 1

25 initial results of the query "<s> [tag="VVG"] [tag="NN.*"] [tag="V.*"]"

number	code	example	ing	V-ing function	Compatibility of verb sg/pl yes/no?	verb sg/pl	noun sg/pl	V-ing transitivity	S/O compatibility
1	ABK, 2004	Betting turnover doubled, to £4.5 billion.	gerund	modifier	yes	past	sg	both	no
2	HS3, 381	Tufting machines are being upgraded with modular needles.	gerund	modifier	no	be pl	pl	transitive	no
3	AKP, 76	Presuming guilt is not a selective means of convicting the guilty with more certainty.	gerund	head	yes	be sg	sg	both	no
4	AJY, 1682	ASKING directions will never be quite the same.	gerund	head	yes	will	pl	both	no
5	CBW, 2268	Dealing days are on the third Friday of March, June, September and December.	gerund	modifier	no	be pl	pl	both	no
6	B33, 1362	Teaching aids must not be introduced solely in order to save time, but	gerund	modifier	yes	must	pl	both	no
7	AHB, 48	Printing banknotes is one area where Britain leads the world, with De	gerund	head	no	be sg	pl	both	no
8	HSH, 311	Protecting birds is not always a battle -- the Society is so large	gerund	head	no	be sg	pl	both	yes
9	CNC, 54	Trading profit was about £110,000, but losses after interest amounted to £2.2m.	gerund	modifier	yes	be sg	sg	both	no

10	B2F, 726	Manipulating behaviour is usually considered bad but this is more debatable.	gerund	head	yes	be sg	sg	transitive	no
11	AND, 505	Raising standards does n't come from giving children harder sums or difficult words	gerund	head	no	do sg	pl	transitive	no
12	CBC, 6328	Patenting ideas is fairly complicated, but cheap.	gerund	head	no	be sg	pl	transitive	no
13	F9D, 1203	Cutting prices is a very expensive pastime.	gerund	head	no	be sg	pl	both	no
14	CEL, 1264	MAKING money is all about timing and I reckon that as far as	gerund	head	yes	be sg	sg	transitive	no
15	EW5, 1149	Achieving profit is the only thing that gives identity to a PROFITBOSS.	gerund	head	yes	be sg	sg	both	no
16	CRB, 1084	Capping entitlements has never been popular, mainly because it has always been	gerund	head	no	have sg	pl	transitive	no
17	A8P, 82	LEARNING Hebrew is a priority for all, and places in the famous	gerund	head	yes	be sg	sg	both	no
18	CBU, 1674	Using CD-Roms will save us around £120,000 a year and that does n't	gerund	head	yes	will	pl	transitive	no
19	HRX, 289	Briefing groups have been established at many locations and a news bulletin is circulated throughout the Company's businesses.	gerund	modifier	no	have pl	pl	transitive	yes
20	HR3,1901	Cooling water shall cause minimum disturbance to the aquatic ecosystems of rivers and estuaries;	gerund	modifier	yes	shall	sg	both	yes
21	HKL, 9	Fixing instructions should be followed carefully.	gerund	modifier	yes	should	pl	transitive	no
22	B0X,506	Predisposing factors must be searched for and treated.	participle	modifier	yes	must	pl	transitive	no
23	FB2,664	Housing requirements may alter as families move through life, and different types of financial commitments may be undertaken at different points in the life-cycle.	gerund	modifier	yes	may	pl	transitive	no

24	HXH,1047	Investigating register should enable you to develop a style that observes established conventions but is at the same time not too disconnected from your own voice or sense of self.	gerund	head	yes	should	sg	both	no
25	AJ6,262	Laying hens found radio comforting, he said.	participle	modifier	yes	past	pl	transitive	no

8.2. Sample 2

100 manually checked results of the query "<s> [tag="VVG"] [tag="NN.*"] [tag="V[V,H,D]D|VM0"] within <s n=".*" />"

number	reference	example	V-ing function	Transitivity of V-ing	S/O compatibility
1	K55,5535	Winning schools will collect a £200 cash prize when their editorial teams visit The Northern Echo's head office in Darlington to learn how to edit their stories which will appear on the education page.	participle	both	no
2	HGN,3977	Departing staff will be required to clear their desks and hand in their entry passes by midnight tonight.	participle	both	no
3	GV0,691	Fringing reefs may occur directly exposed to the sea or may form on coasts within barrier reefs: the former often have a zonation similar to barrier reefs and atolls, but the latter have no algal ridge and often very abrupt outer edges.	participle	transitive only	no
4	J2N,448	Dissenting countries included Britain, which opposed on principle, because it does not agree with removing taxation from national to Community jurisdiction.	participle	intransitive only	no
5	K51,1382	Mushrooming business may help twenty more farmers diversify	participle	intransitive only	no
6	K97,15624	Disbelieving parents shook their heads when they arrived at Overdale County Primary School in Northwood, Kirkby.	participle	both	yes
7	CR7,1232	Wrenching reforms can be politically awkward.	participle	both	yes
8	AAS,353	Winning customers became a priority and in the early 1980s banks began tailoring accounts to meet the needs of certain sections of the population.	gerund	both	yes
9	CJ3,667	Defoliating caterpillars can cause severe damage to oak trees -- indeed, trees sometimes have to put out a new set of leaves later in the summer.	participle	transitive only	no
10	A9U,199	Mounting discontent came to a head over a professional insurance scheme which Fimbra attempted to force on all its members.	participle	both	no
11	CDA,3101	Pumping adrenalin lent a shrill, neurotic edge to his voice as he answered.	participle	both	yes
12	K97,16071	Choosing crackers can be a real luck-of-the-draw lottery, too.	gerund	both	no

13	AB6,1438	Obtaining compliance will be as difficult as it always has been, but an international community which has used sanctions to encourage change in southern Africa should be able to tackle the much more serious issues of enforcement associated with climate change and international security.	gerund	both	yes
14	ED9,850	Strolling musicians played softly throughout.	participle	intransitive only	no
15	B1M,672	RECYCLING PACKAGING CAN HELP SAVE MANY OF THE EARTH'S INCREASINGLY SCARCE RESOURCES	gerund	transitive only	no
16	CGH,2331	Using chemicals can be a tricky business, especially when it comes to working out how much to use.	gerund	transitive only	no
17	CCY,1531	Using nails could disturb the roof covering.	gerund	transitive only	no
18	H9L,1838	Making love would be an exorcism for both of them.	gerund	transitive only	no
19	HNR,240	When you sat in its branches threatening strangers passed you by.	participle	both	yes
20	K97,378	Removing caravans would make people homeless and there would be menageries of animals needing food and shelter.	gerund	transitive only	no
21	HGP,1667	Merging companies believed they could achieve significant gains in productivity and profits, and government policy assumed that these would offset any adverse effects from an increase in monopoly power.	participle	both	yes
22	CG1,526	Feeding flies made hitching hell, but eventually a farm wagon delivered them battered and bumped -- which did a lot for Hebbert's ribs -- at the Pen-y-Gwryd.	participle	both	yes
23	HH2,1461	Providing authorities/hospitals would be paid for cases treated either on the basis of actual cost per case, or on some laid-down or agreed cost per case, …	participle	both	yes
24	AMA,761	Tackling poverty will be the top priority of our aid programme.	gerund	transitive only	no
25	FRJ,891	Planning meals would go so much easier.	gerund	transitive only	no
26	EWC,516	Roosting birds rustled overhead; the night breeze stirred the leaves; here and there a dead twig fell.	participle	intransitive only	no
27	HJA,3159	Planning exhibitions should be carried out within a rolling three-year cycle, so that strategic, management, budgetary, horticultural, and logistic aspects can be incorporated in a professional manner well ahead of time.	gerund	transitive only	no
28	H9L,506	Surging resentment drove her on.	participle	intransitive only	no
29	EA4,830	Defining abuse can allow the relative power of the carer to take precedence over the plight of the older person.	gerund	transitive only	no
30	A80,132	Jostling fans rocked his car and hurled verbal abuse.	participle	both	yes

31	HWN,431	Radiating spokes informed prospect-viewers of the distances and directions to such exotic destinations as Nepal, Tasmania, the Nile Delta, Portugal and Penge.	participle	both	yes
32	CGS,1605	Recording behaviours can help parents discover that things are not as bad as they think.	gerund	both	no
33	BP4,647	Finding hostesses posed no problems by all accounts.	gerund	transitive only	no
34	CEK,5721	Losing weight can also make a big difference.	gerund	both	no
35	K4P,420	Collecting Lustreware will be of enormous benefit to this and future generations wanting to know more about the pottery and porcelain that comes their way.	gerund	both	yes
36	B2M,933	Accessing information would be improved by showing the file location in the index, and making secondary copies available for issue if required.	gerund	transitive only	no
37	HY9,701	Persecuting Nonconformists could have a knock-on effect in a community, hitting those who were loyal to the established Church.	gerund	transitive only	yes
38	CHV,1410	Attacking sides can now repeatedly drive and place the ball safe in the knowledge that, providing support is there, possession will be retained.	participle	both	yes
39	CM4,605	Moving pavements must have failed under the weight they bore, otherwise one side of the crowd would surely be pulled to the rear.	participle	both	yes
40	BNV,989	Swirling sand made visibility terrible -- I had to fly the aircraft looking down through the side window because I could n't see ahead.	participle	both	yes
41	CD2,1884	Scrubbing floors would be better than this.	gerund	transitive only	no
42	HCC,97	Gathering information became part of the routine and only very occasionally did I find it impossible to do.	gerund	both	no
43	HRK,1199	Deleting information will also cause problems.	gerund	transitive only	no
44	EW5,1038	Writing reports can become an addiction.	gerund	both	no
45	HWS,6273	Referring clinicians gave permission for this to be carried out and the study was approved by the local Hospital Ethical Committee.	participle	transitive only	no
46	BMF,1638	Winning teams will receive the Olympic anthem and flag.	participle	both	no
47	K9K,408	Eliminating accidents involved every single person -- management and workforce -- employed on the overhaul and the major capital projects.	gerund	transitive only	no
48	FRC,1648	Overflowing dustbins festered in areas and neglected front gardens.	participle	both	no
49	AK9,1856	Voting Lib-Dem could mean, in effect, favouring Labour.	gerund	both	yes
50	EX6,795	Orchestrating publication can also be difficult because of internal factors.	gerund	transitive only	no

51	G2N,1623	Getting benefit will depend on:	gerund	transitive only	no
52	ALL,999	Bobbing lanterns wove in and out of the goods trains in the College Rail Yard.	participle	both	yes
53	AKH,154	Replacing windows will be a big expense.	gerund	transitive only	no
54	B08,1514	Quantifying compensation may be complicated if an ex gratia payment has been made to you.	gerund	transitive only	no
55	GVH,1262	Proving liability will depend, if it is denied by the defendant, upon three factors.	gerund	transitive only	no
56	CJA,2355	Blossoming projects died, leaving their lattices of unglazed steel and nebulae of rivets tumbling pointlessly about `beyond the sky'.	participle	intransitive only	no
57	A96,661	Auctioning franchises will mean less money for programmes, and programmes that are expensive but attract lower audiences will be squeezed; more light entertainment, sport and bought-in programmes are likely.	gerund	transitive only	no
58	FT1,210	Adding salbutamol caused a large increase in FEV 1 after placebo (0.69 l) with progressively smaller changes after increasing doses of salmeterol (0.19 l after salmeterol 200 µg).	gerund	transitive only	no
59	HXW,826	Working people had new expectations as to just rents and as to the housing conditions they should enjoy (encapsulated in the political slogan "homes fit for heroes").	Participle	both	yes
60	ED4,1797	Applying eyeliner can be a tricky business (see page 82), but if you really love that 50s look, Lenthéric's Eye-Definer is the best liquid liner we could find.	Gerund	both	no
61	EAX,641	Purchasing patents would make significant savings on initial research costs and adapting or improving known techniques would increase the speed of development.	gerund	transitive only	no
62	HAC,302	Entering text could n't be much easier as the program uses common word processing commands.	gerund	both	no
63	EX5,2289	Using drugs can be dangerous, especially when they're taken in excess or for a long time , or in the wrong combinations.	gerund	transitive only	no
64	A62,597	Watching television had a much smaller effect and, like age, it had a positive effect upon images of all the parties and all the leaders.	gerund	both	no
65	ANX,737	Using humans would be unethical if, say, some astronauts did not exercise in space as a comparison and suffered injury as a result.	gerund	transitive only	no
66	ANL,2573	Intending clients could stroll in from the street, look over what was on offer, and come to an arrangement with the young lady of their choice.	participle	both	no
67	CH2,6916	SQUABBLING Tories launched all-out civil war over Europe yesterday -- with Premier John Major trapped as piggy in the middle.	participle	intransitive only	no

68	CCX,1680	Standing water will also freeze in winter -- an obvious but often forgotten hazard.	participle	intransitive only	no
69	HXH,1047	Investigating register should enable you to develop a style that observes established conventions but is at the same time not too disconnected from your own voice or sense of self.	gerund	both	no
70	CGD,763	Approaching death should be viewed in it own personal cultural and religious perspective for the person concerned.	gerund	both	yes
71	K91,1136	Returning soldiers found the civil population too obsessed with their own hardships to try to understand what they were being subjected to at Verdun.	participle	both	yes
72	FEM,973	Billowing smoke drifted across the street from the grilled fish and kebab stalls.	participle	intransitive only	no
73	C9R,1441	Reflecting surfaces can be used too: glass on pictures, windows, the TV set.	participle	transitive only	yes
74	AMA,673	Protecting children will be high on the agenda, as will the full implementation of the Children Act and the UN Convention to promote childrens rights.	gerund	transitive only	no
75	FRA,1905	Intending candidates should obtain further information as soon as possible from the Secretary, Civil Service Commission, Alencon Link, Basingstoke, Hants, RG21 1JB (tel. 0256-68551).	participle	both	no
76	A6C,367	Dubbing films became obligatory by law, and they took advantage of it to change the dialogue.	gerund	transitive only	no
77	CJ9,550	Sharing works may be part of the `culture' of the drug-using community, but it is still a risk even if it is with close friends or a partner.	gerund	both	no
78	CLH,1346	Hearing people may have had difficulty in access, but we have argued that this arises in the unequal status of the learner (hearing) and teacher (deaf).	participle	both	yes
79	G2V,3634	Finding homes proved difficult.	gerund	transitive only	no
80	CCY,1009	Covering fire kept his head down as somewhere flankers began their move that would finally pin him down.	gerund	transitive only	no
81	H99,41	Stripping wallpaper can be a messy, time-consuming job, made worse by several layers, or overpainted papers.	gerund	both	no
82	B74,1435	Accepting forgiveness can be hard too.	gerund	both	no
83	CD6,813	Acidifying droplets can reduce the growth of trees and crops, at concentrations far lower, than had been suspected up to now.	participle	both	yes
84	HWL, 2539	Squealing mice seemed bedded in my ears, and green hoppity things abounded, but right smack in my mind's eye were two teams of digitised Ice Hockey players fighting it out in front of a packed stadium.	participle	intransitive only	no
85	CDK,1530	Paying cash had the added benefit of leaving no record of our visit except a pencilled telephone bookng under two untraceable names.	gerund	both	no

86	B7K,843	Taking responsibility would mean you would say, `I felt upset when you didn't speak to me this morning.'	gerund	transitive only	no
87	ACP,2413	EVOLVING humanoids grew more intelligent at about the time they began using tools to hunt; this finding has <corr> encouraged </corr>anthropologists to speculate that it was tool use that made intelligence particularly adaptive.	participle	both	yes
88	AJA,563	Slavering foxes will be stopped from trotting down 30 miles of tunnel by ten-foot fences, electric` stun mats' and being shot with humane killers.	participle	intransitive only	no
89	ECD,1913	COACHING juniors can give much satisfaction but it also has its drawbacks as Gareth Parkin, coach to Broughton Park Under-12s and a regular playing member of the club's third team found to his cost after his charges won the recent age-group competition at Waterloo.	gerund	transitive only	yes
90	HSF,1833	Controlling persons may also be liable for controlled persons who tip others.	participle	transitive only	yes
91	B1X,365	Returning soldiers would expect higher wages than the Egyptian migrant workers hired during the war.	participle	both	yes
92	A0J,785	Travelling mills came over in force from England and Scotland and commenced the wholesale felling of demesne timber.	participle	intransitive only	no
93	BP1,45	Teaching children should always be taken at the child's pace, answering questions as truthfully and accurately as possible, rather than trying to tell the whole story.	gerund	transitive only	yes
94	AS6,19	Scalding tears brimmed over, and James Halden checked them with the cushion of his thumb.	participle	transitive only	no
95	H07,2012	Rising unemployment turned a lingering and growing malaise into a crisis.	participle	intransitive only	no
96	A60,827	Giving birth can be a heady, exciting and unpredictable experience.	gerund	transitive only	no
97	EFD,1416	Categorising data cannot easily be standardised.	gerund	transitive only	no
98	K4W,673	Claiming benefit can often be a degrading experience and it would appear that this is the effect desired.	gerund	transitive only	no
99	CHT,1399	Falling debris rained down as eight men in breathing apparatus fought the flames.	participle	intransitive only	no
100	B03,1552	CHEERING crowds greeted Jack Lammiman and his crew when they sailed home to Whitby, North Yorks, after following Columbus's route to America -- where they were rescued after drifting for a month with engine failure.	participle	both	yes