ENGLISH MODAL VERB *CAN* VIEWED FROM SFG PERSPECTIVE

A CORPUS-BASED ANALYSIS

BY

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LIST OF ABBREVIATTIONS

Adj – adjective
Adv - adverb
BNC – The British National corpus
ENPC – The English-Norwegian Parallel Corpus
N/n – noun
NG – noun group
Np – noun phrase
OMC – The Oslo Multilingual Corpus
Pp – prepositional phrase
V- verb
v-inf / to-v – infinitive
v-ing – present participle
v-ed – past participle
SFG – Systemic Functional Grammar
S/s – The spoken corpus
W/w- The written corpus

CHAPTER I

1. INTRODUCTION

F.R. Palmer (1979:1) made the claim that "there is, perhaps, no area of English grammar that is both more important and more difficult than the system of the modals".

Part of the difficulty of English modal verbs for linguists and language learners is that although they are few, most modals are polysemous, and several have similar core meanings. For example "*must, should* and *ought to"* can each express obligation. They are closer together both syntactically and morphologically. My paper is devoted to an analysis of only one modal of the core modal group, namely *can*; and viewed from Systemic Functional Grammar perspective.

In the history of English verb "can" (OE the verb *cunnan* - to know, understand) was originally a main lexical verb (preterit-present verb), which gradually lost its main-verb grammatical properties, such as transitivity and morphological marking for person and number. Properties like these were replaced by typical auxiliary verb characteristics, including the restriction to finite categories.

One of the goals of this thesis is to describe the modal *can* semantically and syntactically pointing at similarities and differences between the written and spoken modern English. Consequently, the present study can be considered as descriptive in nature, making its observations and drawing its empirical basis from authentic uses of the modal *can* by native speakers.

1.1 Aim of the study

The aim of the present paper is to give a broad picture of the modal verb *can*, with specific reference to its distribution and uses in contemporary written and spoken British English. I will attempt to illustrate that the frequency of the modal verb under scrutiny is strongly dependent on its context, particularly with regard to the diversified occurrence of *can.* My study will investigate this modal auxiliary not in isolation but in combination within a wider syntactic environment, i.e. colligations. The identification of this feature offers an important aid to a better understanding of English; namely to identify what are the natural combinations of the modal *can* and other grammatical units regarding this modal. The research seeks to find out exactly what different constructions and meaning extensions of the modal *can* has and observe the frequency with which the verb appears in the corpus.

Another goal of this research is to find out whether the verb *can* occurs in the same syntactic environment in written and the spoken English. If its meaning extensions and syntactic surroundings are different, an attempt will be made to find an explanation for that. I hope this analysis will give a certain idea of the present situation both in written and spoken British English.

1.2 Previous work

Since the time of the great Greek scientist Aristotle, the study of modality was a subject of great interest. Much has been published on modals and modality from theoretical, empirical and applied perspectives. Despite the seemingly simple uses of the modals to make requests, offers or express obligation and necessity etc., their semantic complexities have presented a challenge to both semantic theory (see for example the different approaches of Halliday 1970, 1985, 1994, 2001) and descriptive grammar (Palmer 1979, 2001; Coates 1983). In addition to

their semantic complexity, the modals display a significant degree of regional variation and register variation in Standard English. Especially, several comparative studies have been undertaken on British, American, Australian and New Zealand differences in the use of the modal verbs from a corpus perspective (Hundt 1998, Kennedy 2002, Tottie 1985, 2002). English modal verbs and their historical development were studied by Papafragou 2000, Winford 2000, Krug 2000, Vihla 2000, Palmer 2001 and Facchinetti 2001, 2002.

All these studies were to a large extent a help to make my choice of research-topic.

This paper represents an effort to combine the best observations of the earlier studies with new results of my research. While there are some other studies done on the occurrence of the modals in the British National Corpus, none deal with the specific topic of this study.

There is an interesting study done by Berit Løken – "Expressing possibility in English and Norwegian" (Hovedoppgave 1996). But the thesis is dedicated to comparison of Norwegian "kunne" to English 'may and can' and it is a Parallel corpus-based contrastive study. Løken divides her attention equally between English and Norwegian while the current paper only focuses on the English *can* and the situation in the Modern English.

Facchinetti 2001 investigated the frequency of *can* and *could* together with other modal verbs: *may* and *must.*

Also, Hunston (2000) has done special study on phraseology and the modal verbs, where she analyses particular phrases and patterns with modal verbs: *must, may* and *can*. The implication of the work presented in her paper is that phraseology can be a reliable indicator of the sense of modal; a practical application of this would be use of phraseology to automate the quantification of modal senses in a corpus. Susan Hunston (2000) claims that patterings of co-

occurring elements are patterns of the modal.

Both works of Hunston (2000) and Facchinetti 2001 are much more general and removed from individual *can.*

However, Facchinetti (2002) has another study "The Modal Verb *Can/Could* in Contemporary British English" where she presents a similar study and discusses Epistemic, Dynamic and Deontic values of the modal *can/could*. *Can/could* were studied only in spoken register and data was retrieved from the spoken section of the *International Corpus of English – British Component*. The important difference between Facchinetti's approach and the one in the present thesis is that to find similarities and differences with *can* by comparing contemporary Spoken and Written British English to each other. The work by Facchinetti (2002) has given me some very useful insights and is useful as an example to show how the similar investigation should be undertaken.

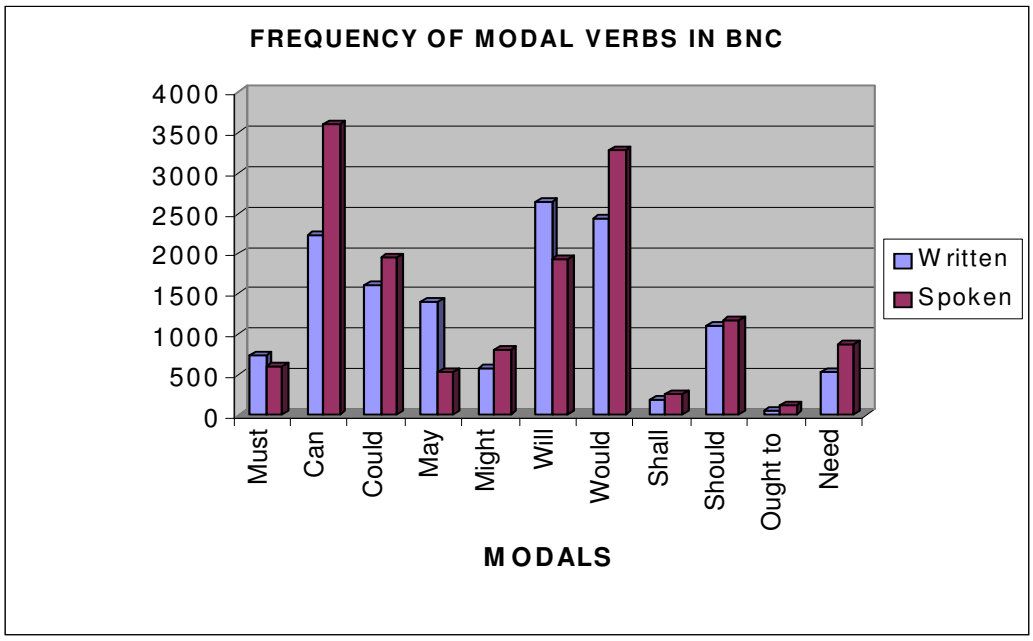
The main source of inspiration for the present work has been Halliday (2004) and his Systemic Functional Grammar approach. I would like to follow Halliday's theory and compare my investigation data with the results from the existing literature.

1.3. Preliminary look at the modal verbs

1.3.1. Frequency and distribution

Can is among the most frequently used modal auxiliary verbs in English relying on my observations in the BNC and the reason must be its multifunctional nature and semantic richness. (Frequency is demonstrated in the diagram below).

Figure 1. Diagram has been constructed according to the data taken from BNC. Frequency of the English Modal verbs per million words:

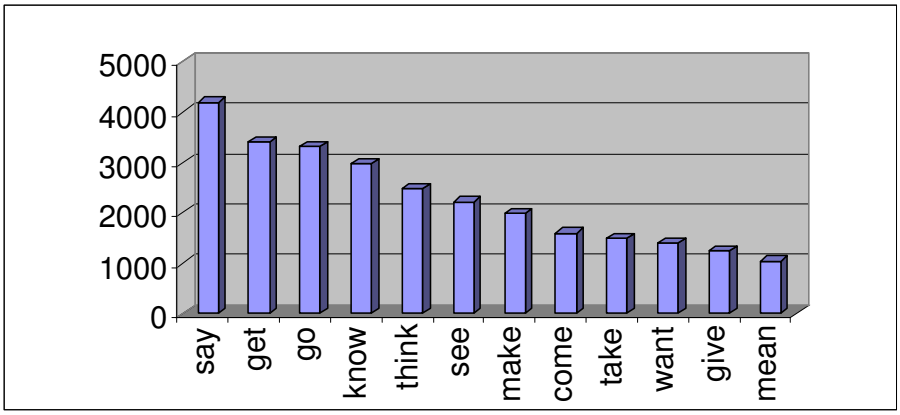


As we see modal verbs occur much more frequently in spoken register than in the written register. *Can* together with *Will/Would* occupy top place on the diagram demonstrating the frequency of modal usage. Especially in spoken English *Can* is more frequent than any other modal.

Unlike lexical verbs modal verbs lack the capacity to express precise meanings without specific syntactic surroundings, such as another verb or sequence following it. They are devoid of any lexical meaning, if they stand alone. As some of this study have already been outlined in the beginning of this chapter, research is dedicated to the syntactic environments where *can* usually occurs. These are the types of units that immediately follow the modal auxiliary *can* and the particular collocations and colligations where *can* is preceded or followed by the other verbs in the infinitive, perfect, passive or progressive. (The terms are defined in the chapter II, 2.1.4 section).

It is interesting to check if *can* appears frequently with the twelve most common lexical verbs in English. The diagram is adopted from *The Student grammar of spoken and written English* (Biber, Conrad and Leech 2005:110).

Figure 2. Frequency per million words of the most common lexical verbs in the LSWE Corpus (Longman Spoken and written English Corpus, 40 million words). (Biber, Conrad and Leech 2005: 110)



Certainly, all of these verbs co-occur with *can* in high percentage and they carry specific messages and have different modality readings. (It will be thoroughly discussed in chapter 3).

1.3.2 Meanings of *Can*

Semantically, interesting issues of vagueness and ambiguity, or polysemy and polyfunctionality, are probably universal, with the expression of modality. To my knowledge, from the 16th century onwards the word 'modal' was used in logic and philosophy to refer to propositions involving the affirmation of possibility and impossibility, existence and non-existence, contingency and necessity, and this is the meaning that has been taken into grammar.

It is well known that the multiple interpretation of modal verbs depends on contexts, and they are indicative not only of a choice of the domain to which the modal will apply, but also of

the way the various modalities may interrelate. One of the main characteristics of modal verbs is their relatively imprecise or indeterminate meaning.

I include *Oxford English Dictionary* on line (2005) to illustrate the some of the variety of meanings, which the English modal verb *can* denotes.

Can: **1.** used to say that it is possible for sb/sth to do sth, or for sth to happen: *I can run fast.* ◇*Can you call back tomorrow?* ◇*He couldn't answer the question.*
2. Used to say that sb knows how to do sth: *Can he cook?* ◇*I could drive a car before I left school.*
4. Used to show that sb is allowed to do sth: *You can take the car, if you want.*
5. (*informal*) used to ask permission to do sth: *Can I read your newspaper?* ◇*Can I take you home?*
8. used to express doubt or surprise: *What can they be doing?* ◇*Can he be serious?*
9. used to say what sb/sth is often like: *He can be very tactless sometimes.* ◇*It can be quite cold here in winter.*
10. used to make suggestions: *We can eat in a restaurant, if you like.* ◇*I can take the car if necessary.*
11. (*informal*) used to say that sb must do sth, usually when you are angry: *You can shut up or get out!* ⇨note at MODAL[1]

(These definitions named by Oxford English Dictionary on line will be classified as Deontic (modulation) and Epistemic (modalization) modality according to systemic functional Grammar).

[1] Entries 3, 6 and 7 are not quoted here since these were irrelevant to the present analysis.

Modals are mainly used when we want to indicate our attitude to what we are saying, or when we are considering how what we say will affect the person we are communicating with. In the example (1) the modals turn an instruction into a polite request:

1. "**Close the door**," Bodo muttered. (A7A 1289) vs. Can you please, close the door?

Furthermore, lexical verbs following modal *can* combine with a number of other parts of speech such as adverbial particles, prepositions, etc and form multiword verbs whose meaning is different from the definitions mentioned above. So *Can* can be part of an idiom or set phrase.

2. **I cannot help** believing that the most discerning public must be interested in this work. (H0N 826)
3. Nevertheless, **I cannot help** wondering about the parcels, for that is something so out of the ordinary, and about the things which are now missing. (AD1 2903)

CHAPTER II

2. Theoretical background

My work falls into two main parts. The first part, consisting of two chapters, is entirely dedicated to selecting the appropriate theoretical background, terms and patterns for my analysis. Simultaneously, it attempts to place the present study in relation to linguistic method in general.

The second part consists of three chapters: analysis, some comparison, summing up the findings and drawing conclusions.

The theory I am referring in my paper time after time, is based on works by Halliday (1994, 2004) and Hunston & Francis (2000).

2.1. Systemic Functional Grammar. – Theory of language as a social process.

Since Systemic Functional Grammar is the model systematically applied through out the research, an attempt is made here to introduce the SFG concept of language.

M.A.K. Halliday in his functional theory of language attempts to explain linguistic structure and linguistic phenomena by reference to the notion that language plays a certain part in our lives that is required to serve certain universal types of demand. The main purpose of language is communication – there are different things that we communicate through a single clause and these different meanings are expressed in different parts of the clauses. Any utterance represents several types of communicative function, which can be grouped into three metafunctions:

- *The Experiential metafunction* (sometimes referred to as the Ideational metafunction, which is a broader term): "We use language to talk about our experience of the world, including the worlds in our own minds, to describe events and states and the entities involved in them." (Thompson 2004:30)
- *The Interpersonal metafunction*: "We also use language to interact with other people, to establish and maintain relations with them, to influence their behaviour, to express our own viewpoint on things in the world, and to elicit or change theirs' (Thompson 2004:30) (Modality is a part of the Interpersonal metafunction and will be discussed in section 2.1.2)
- The *Textual metufunction:* "In using language, we organise our messages in ways that indicate how they fit in with the other messages around them and with the wider context in which we are talking or writing." (Thompson 2004:30)

Table 1. The three types of metafunctions are briefly summarised in this table.

<table>
<tr><td></td><td>John</td><td>can give</td><td>Mary</td><td>the book</td><td>tomorrow</td></tr>
<tr><td>Experiential</td><td>Actor</td><td>Process</td><td>Recipient</td><td>Goal</td><td>Circumstance</td></tr>
<tr><td rowspan="2">Interpersonal</td><td>Subject</td><td>Finite + Predicator</td><td>Indirect Object</td><td>Direct Object</td><td>Adjunct</td></tr>
<tr><td colspan="2">MOOD</td><td colspan="3">R E S I D U E</td></tr>
<tr><td>Textual</td><td colspan="2">Theme</td><td colspan="3">Rheme</td></tr>
</table>

Modal features are often the linguistic markers of particular communicative functions of language. Modality is associated with mood and finite, and thus belongs in the interpersonal metafunction. Since a modal verb is being analyzed here it is the interpersonal metafunction that will be in the focus of my investigation.

2.1.2. THE INTERPERSONAL METAFUNCTION, (clause as exchange)

According to Halliday (2004a:106) the clause is seen as an interactive event involving speaker / writer and addressee(s). The Interpersonal metafunction is used to show there are special linguistic structures that signal interaction in context. Clauses express the writer's assessment of probabilities and her/his attitude, and they explicitly signal the writer's negotiation with reader.

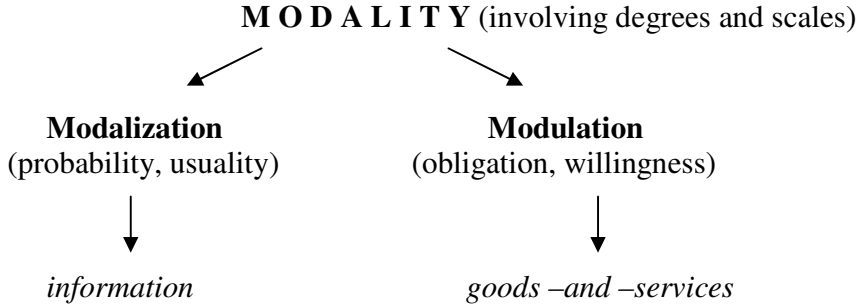
In order to signal interpersonal meaning the English clause is structured in the following way:

- Syntactic resources such as the **Mood** system and Modal Adjuncts
- **Modality** (use of modal auxiliaries, adverbs and adjectives)
- **Appraisal** (evaluative Lexis)

I decided to adopt this system through out the research, therefore I will focus on the negotiation of *goods and services* or *information,* and concentrate on the grammatical resources of the MOOD system (sentence types: - declarative, interrogatives, imperatives, etc.) and the MODALITY system (**Figure 3**, presented below).

Toolan (1998:46) defines Modality as " the linguistic means available for **qualifying** any claim or commitment you make in language". According to Halliday (2004a: 147) the **Modality system** construes the region of uncertainty that lies between 'yes' and 'no'.

Figure 3: demonstrating Modality system in SFG.



(Associated with propositions. Statements/questions) (Associated with proposals, offers, commends)

She can be at home now. *Can I help you, Sir?*
The only the time I could come is on Fridays. *Sorry, could you say it again?*

Modality is used to temper our propositions – **modalization** (**Epistemic** interpretation) or proposals – **modulation** (**Deontic** interpretation). **Modalization** and **modulation** are both important politeness strategies. Politeness is a "system of interpersonal relations to facilitate interaction by minimising the potential for conflict and confrontation inherent in all human interchange" (Lakoff, 1990).

Modalization (Epistemic modality) – is concerned with language as information, with the expression of the degree or nature of the speaker's commitment to the truth of what she/he says. Epistemic modality denotes and encodes the following concepts: possibility, inference, belief, report, conclusion, opinion, commitment, quotation, doubt, speculation, evidence, and certainty.

Modulation (Deontic modality) – is concerned with language as action, mostly with the expression by the speaker of her/his attitude towards possible actions herself or himself and others. Deontic modality covers a variety of notions that share the features of *obligation* and *permission.*

Each modal auxiliary has different senses and most of them can have both a **modalisation** and **modulation** interpretation. Modal meaning can only be understood in relation to use in context.

1. I'll get his number for you and you **<u>can</u> call** him yourself. (CKF 1081)
2. Now there's y-- You **<u>can</u> go** to town on that one. (G5K 68)

With the help of context we are able to understand that the first example has modulation meaning expressing 'potentiality' with some element of permission as well. While the second sentence demonstrating the same combination of *can* and material verb denotes modalized "possibility" in this particular context: 'there is possibility to go to town on this bus or train'

In a restricted set of cases, reading of '*can* can be ambiguous between an epistemic (modalization) and deontic (modulation) readings. In the sentence (3) there are three possible meanings:

3. **You cannot see** it. (HU5 38) - Ability*: 'You are unable to see the object.'*
   - Possibility: *'it is impossible for you to understand it' in my opinion.*
   - Permission*: 'You are not allowed to see it'*

But if we get the context in which situation the above mentioned sentence is used then we will be able to identify whether the author means ability, permission or possibility.

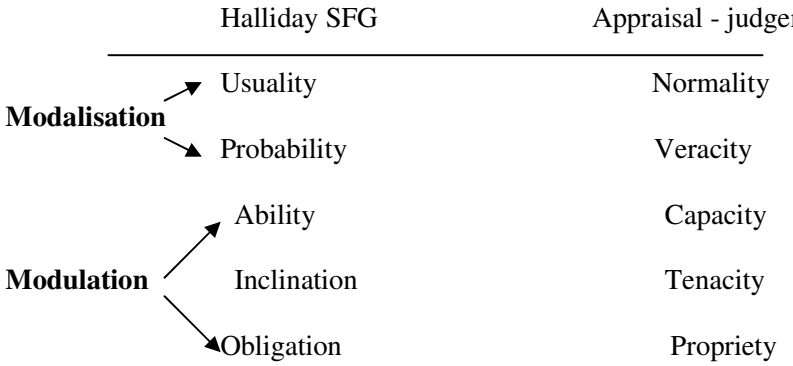
2.1.3. Appraisal Theory: the semantics of evaluation/appraisal - part of the interpersonal function of language in a SF perspective.

"Appraisal theory is, of course located within the framework of Systemic Functional Linguistics" (White: online p3).

Appraisal theory is an extension of the Systemic Functional approach to language use, where the language is seen as a resource for making meaning, as an extremely rich set of grammatical and lexical (and prosodic) resources that is put to use in an infinite number of situational contexts. Appraisal theory is the language of attitudes, engagement and graduation – the speaker's/author's choice of wording. The Appraisal system provides a way into an account of the speakers ' values, attitudes, ideologies and is expressed lexically through words of emotions, judgements and other crucial elements that we constantly negotiate in our exchanges with our interlocutors.

Appraisal is clearly related to modality in that both relate to the speaker's attitude. As with modality appraisal in a text always raises the questions of the source. Chiefly it is connected with judgement – which construes moral evaluations of behavior, the evaluation of human behavior with respect to social rules, norms, expectations, and value systems (Martin 2005:53). Below I have tried to demonstrate the summing up of Appraisal values and Halliday's modality domains.

Figure 4 demonstrates relation between judgement and Halliday's Modality.



Problems in appraisal work. There is no clear borderline between interpersonal and experiential meaning As interpersonal meaning may be coded in terms of experiential meaning. But this simply confirms what Halliday and other SFG specialists have said many times that in wording each clause the speaker simultaneously realizes all three functions/meanings.

Our understanding of the Interpersonal metafunction derives particularly from work of Jim Martin (1992 *English Text: system and structure)* and Peter White (appraisal website: www. grammatics.com/appraisal). Hunston and Thompson (2001: 1-27) replaced the word *appraisal* with *Evaluation*. A strong practical reason for preferring the term is its syntactic and morphological flexibility. It allows us to talk about the values ascribed to the entities and propositions which are evaluated. (Hunston & Thompson 2001:5).

Appraisal theory is relevant to my study, as it is the part of interpersonal metafunction and concerns modality. I find it very useful for my paper to identify what the writer or speaker thinks, feels and how evaluation is negotiated between speaker and hearer(s), taking into account that evaluation can be used sometimes to manipulate the reader, to persuade him/her to see things in a particular way. Let us look at the sentence below:

I can't believe that. – The speaker is expressing her amazement or disagreement, her protest to something. It could be gathered from context of the text whether it is speaker's point of view or the utterance just carries out negative politeness strategy in interactive discourse. That is why evaluation is largely context dependent.

It is not only modal verbs which denote modality in the sentence but other elements including adjuncts and some appraisal elements, which are revealed in the context. So evaluation will come in when I look at the context of the modals and the patterns of wordings that modals are part of.

According to Martin (2005) appraisal features have always been difficult to investigate because they are realized by mixture of lexicogrammatical resources, morphology, prosody (intonation and rhythm) words of all classes. In order to demonstrate how these meanings are in fact grammaticalized we need access to a large corpus. The use of a large corpus leads us in some instances to different observations from those already made by researchers.

2.2. Material and Method

2.2.1. A corpus-based study

The present study is chiefly descriptive. It is based on corpus material from the British National Corpus, which will be described in detail in Section 2.2.3. As I have already mentioned above many linguists have stressed the importance of using language corpora (Aijmer and Altenberg 1991, Chafe 1992, Biber et al 1998, Johansson 1991, Reppen et al 2002, Sinclair 1982 and many others). All these scholars outlined in their works that comprehensive studies of use could not rely on intuition, anecdotal evidence, or small samples; they rather require empirical analysis of large databases of authentic texts, as in the corpus-based approach. (Halliday 2004a: 48) This approach takes advantage of:

* the computer's capacity for fast, accurate, complex analyses;
* the extensive information about language use found in large collections of natural texts from multiple registers;
* the rich descriptions that result from integrating quantitative findings and functional interpretations.

For these reasons, the corpus-based approach has made it possible to conduct new kinds of investigations into language use and to expand the scope of earlier investigations. Corpus-based research can be applied to grammar on the word level, sentence level, and discourse level. The availability of large corpora and computer tools makes it possible to study the patterned ways in which speakers use the grammatical resources of a language – by investigating the frequency distribution of various constructions, the association patterns between grammatical structures and other linguistic factors and the factors that affect choices between structural variants.

The advantage of using the corpus-based method is even greater and more useful for my research. As the aims of the investigation have already been outlined in the beginning of the first chapter I intend to uncover the relation of form to meaning and meaning to situation.

Consequently meaning depends on the syntactic environment in which the modal *can* is used.

A good dictionary supplies a lot of valuable information like how to pronounce word correctly, its etymology and all relevant grammatical information about it including the meaning of course. But the disadvantage of it is that not all the words and phrases can be exemplified in it. Therefore scholars and mainly lexicographers find concordances extremely useful in providing a lot of examples on the subject they search. It helps us to find out frequency as well as syntactic environment search-word appears in.

"*Through concordances it is possible "to get of the parts the others cannot reach", complementing the dictionary and grammar books*" – Scott, Mike (2001:65)

According to Halliday (2004b: 11-38) a corpus makes it possible:

"It amasses large quantities of text and processes to make it accessible for study"

- Patterns in casual conversation – studied at four strata: Lexico grammatical, semantics, discoursal and generic.
- Pattern forming and reforming: collocations, idioms, cliché, proverbial echo.
- Patterns in words and phrases.
- Patterns in grammar

Using a large corpus to study grammar will lead to observations about the language that it has not been possible to make before.

"The facts are constructed by theories; there can be no such thing as a theory-free description of grammar. (Halliday 1994:12)

These all can serve as a quite good support for the method of my analysis, namely support for using "pattern grammar".

2.2.2 Pattern Grammar: A Corpus-Driven Approach to the Lexical Grammar

Pattern grammar is a recent development, – a new view of grammatical structure. It uses or makes considerable use of established grammatical categories and in my opinion it seems Pattern grammar need not be in conflict with theoretical grammar. But the difference is still noticeable as Pattern grammar and its highly complex network of microcategories could not be penetrated without the benefit of a corpus.

"Hunston and Francis, in their work on "pattern grammar" (1999), have shown beyond doubt that corpus is an essential resource for extending our knowledge of the grammar". – Halliday (2004 b:23)

The method of language investigation described in *Pattern Grammar* is theory and corpus driven – (a description of language based on phraseology) and underlines two main assumptions:

1. Concordance lines for individual words are the raw material from investigation their behaviour
2. Patterning can be observed only at large amounts of language corpus.

The approach (Hunston and Francis 2000) uses large amounts of corpus data to make discoveries about lexical items and the specific phraseological and grammatical patterns in which they regularly occur. A corpus observation inevitably leads not only to new observations but also to new methods of language description that will take full account of those observations.

The main point in this work is that no strict distinction can be made between lexicon and grammar, since lexical items must be characterised in terms of their distributions in grammatical patterns. Most patterns occur with particular classes of lexical items, and many patterns are, like lexical items, specific and conventional and therefore must be learned.

Referring to Hunston and Francis (2000:272):

- There is strong association between meaning and pattern.
- Grammar and lexis are one and the same thing.
- A multiplicity of grammars, mapping meaning roles on to lexico-grammatical configurations, might be a useful alternative to a general grammar.

As the book by Hunston & Francis (2000) is the handbook to base my study on I would like to do brief overview of their notion of pattern, which has its roots in the pedagogical language (Hornby 1954) and in corpus linguistics (Sinclair 1991).

"*The pattern of a word can be defined as all the words and structures, which are regularly associated with the word and which contribute to its meaning. A pattern can be identified if a combination of words occurs relatively frequently, if it is dependent on a particular word choice, and if there is a clear meaning associated with it*" – Hunston & Francis (2000: 37).

(The concept and patterns are adopted from Hunston & Francis (2000:45)).

What are Patterns?

- describe the behaviour of words
- consist of word class labels and lexical items: -**N that** : noun followed by that-clause
  -V *for* n: verb followed by 'for', followed by a noun (group)

Pattern Vocabulary

- **v** - verb or verb group
- **n** - noun or noun group
- **adj** – adjective
- **prep** – preposition
- **that** - that-clause
- **v-link** - link verb (*is, seems, …*)
- the 'owner' of the pattern is capitalised: ***the*** **adj N** ***of*** **n**

Here are some Linguistic examples where I show how I work out the patterns:

1. *That is <pause> just a few words <pause> in your mind you* ***can see*** *a person walking along.* (F8M 493) = **V + n + v-ing**
2. Continuing the American theme, visitors to Wroughton can also expect to see a range of Mustangs ... and Canadian-built Harvards. (K1Y 760) = **V + to-inf +Pp**
3. You can buy them in your video store now. (H8M 1121) = **V + n +Pp**

The approach to complementation patterns described in the book focuses on the formal components of a pattern rather than on a structural interpretation of those components. For example, the coding **Vn** is preferred to "verb plus object" or "verb plus complement". Pattern grammar does not use categories such as "direct object" and "indirect object" but just it will be realised as such: **V n n.**

Patterns have a valuable part to play in language theory, in language pedagogy, and in practical investigations of language use. As for me I am interested in collocational patterns especially in fixed phrases which are closely bound together and behave almost like single lexical items. This method helps me to identify which patterns with *can* are most frequent or significant in given set of texts both in written and spoken English. This will in turn allow me to evaluate the patterns.

Pattern Grammar is highly compatible with SFG in that Systemic Functional Grammar also uses the concept of lexico-grammar and does not draw a sharp distinction between lexis and syntax. (Inseparability of grammar and meaning where the meaning of a sentence is made up by a combination of the words and the grammatical structures that are used).

2.2.3. The British National Corpus – BNC

"The only method is to gather instances of the patterns from a corpus and build up the regular relationships through observation of repeated events. The patterns thus established on a basis of recurrence are then evaluated against mental recognition process (also called intuition)." – Sinclair (1999:6).

The study is based on corpus material, and data are retrieved from the British National Corpus, which is the largest structured corpus ever compiled. This 100-million-word representative sample of spoken (10 million words) and written (90 million words) texts of British English makes it possible to explore variation in a wide range of domains and genre types and extend our understanding of how the modal auxiliary *can* is used. The BNC will be the primary source of my research.

"*Now we can study written texts, which will tell us about written language, and we can study spoken texts, which will tell us about spoken language"* – Halliday (2004b: 13).

I am concerned with both written and spoken registers. I have chosen to adopt the term register from what Halliday (1994) refers to as the "*very simple and very powerful… fact that the language we speak or write varies according to the type of situation*". Biber et al 1999 (the Longman Grammar) also use the term register, but in a slightly different way. In order to characterize different types of usage of one particular language, they use the traditional term **register**.

In order to limit the scope and boundaries of my study and allow a certain degree of depth I am not going through different genres although I am aware of the fact that the frequency of modal *can* can vary from e.g. argumentative prose to academic writing or fiction. Furthermore, the comparisons with another corpus or another variety: American, Australian, New Zealand etc; will make the study too big and complicated. The focus will be only on differences between written and spoken sources in contemporary British English, which is indeed very crucial because of particular patterns which do not occur in writing but only in the corpus of spoken language. Spoken language is more suitable to spot the trends in language

change as it includes a significant amount of spontaneous, natural speech: dialogues and conversations.

As early as in 1985 Firth (Halliday 2004 b:32) had defined the value of investigating conversation: *"It is here we shall find the key to a better understanding of what language really is and how it works".*

Later when Sinclair (1966) was working on the study of collocation in spoken corpus wrote: *"A decision I took in 1961 to assemble a corpus of conversation is one of the luckiest I ever made".*

Problems with spoken corpus: the lack of prosodic markers: punctuation, some omission, repetition, false starts in the spoken texts. When corpus linguists want to probe more deeply into the mysteries of spoken language they face these problems while spoken language is represented in writing. Certainly, spoken language is not meant to be written down and any visual representation distorts it in some way or other. (Halliday 2004a: 33).

How are these things problematic for my investigation?

- Meaningless sentences difficult to get the context as there is only abstracts presented in interrupted way:

  1. *We we **can actually** I mean if if* <*unclear*> (JTC 467)
  2. *but he **can do** the* <*unclear*>(FM2 2102)

- Lack of punctuation marks such as comma, fullstop, interrogative mark (sent. 3), repetition (sent. 4) or hesitation marks like *er*/*erm* (sent. 5). All what complicate also situation to explore the meaning of the sentence:

  3. ***Can can** you say more on that* <*unclear*>.(JA5 530)
  4. *Well, if you'll just, if I'm allowed to turn round and consult the chap sitting behind me I **can actually** give you a direct a direct answer.* (KM7 106)
  5. *which the er policy sets at fourteen hundred dwellings, we've heard evidence from York today that er the city **can accommodate** erm more erm houses than was originally envisaged, which brings the residual requirement to erm about the minimum size specified by the County Council as being erm about the right level erm to make a s-- a new settlement self supporting, however, we would point out that there is still the possibility of erm further peripheral development around York,*(HVK 155)

- Wrong grammar (sent. 6, 7) and misspelling of the words (sent. 8):

    6. *Well <pause> well actual fact, unless it's done, the security's fitted at the time of manufacture you **can** actually serious damage the framing.* (KNF 78)
    7. *If I **can** ask you to sign to say you know that.* (JA4 1471)
    8. *we want the grid lines to show then in fact you **can chose** what we want for the outside border one of these <pause> <unclear> <pause>*(JJS 296)

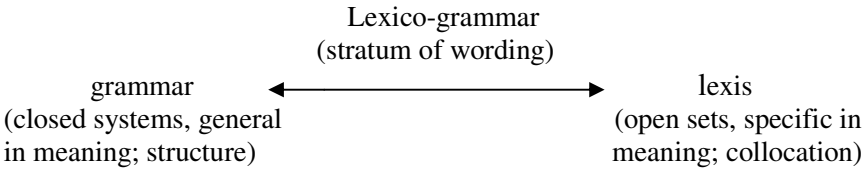
- Spoken language informal elements (sent. 9) and sentences without noun or the agent (sent. 10). Subjectless sentences are relatively easy to come by in certain uses of English. We can roughly characterize the relevant usage as either informal speech or as belonging to abbreviated styles of writing such as the diary or informal notes.

    9. I **cannae** <unclear> can't quite see <unclear>(K6N 634).
    10. ***can hassle** anybody who still around for phone directories and so on.* (FM2 1401)

Before entering into the analysis and discussion, I will formulate a few theoretical assumptions and definitions based on existing literature and in accordance with method I have chosen to conduct the research.

2.2.4. Terms and definitions used in the analysis.

Table 2: Lexico-grammar adopted from Halliday (2004a:43)



The concept of the integrated **lexicogrammar** in systemic functional linguistics (e.g. Halliday 2004: 43) suggests that the grammar and lexicon hold each other together. Corpus research suggests describing the order of real language in terms of **colligability:** grammatical **colligations** and lexical **collocations**.

Since this paper will investigate the modal auxiliary *can* in relation to collocations (main scope) and colligation, which involves the terms: sequences, patterns, and idiom, it is worthwhile to provide working definitions for the key concepts that are used in this study.

Within the area of corpus linguistics **collocation** is defined as a sequence of words or terms which co-occur more often than would be expected by chance. Collocation refers to the restrictions on how words can be used together, for example which prepositions are used with particular verbs, or which verbs and nouns are used together. If the expression is heard often, the words become 'glued' together in our minds. For example: '*can afford'*.

Nation (2001: 324) explained that collocation includes both grammatical and lexical co-occurrence**.** He said that "collocations are closely structured groups whose parts frequently or uniquely occur together. We would also expect collocations to contain some element of grammatical or lexical unpredictability or inflexibility"

Colligation is a term coined by Firth in the late 1950's (Hunston 2001: 15). It was recently revived by Hoey (1998) (in Hunston 2001:15) who defines colligation as follows:

a) the grammatical company a word keeps (or avoids keeping) either within its own group or at a higher rank
(b) the grammatical functions that the word's group prefers
(c) the place in a sequence that a word prefers (or avoids).

While collocation is mainly used to refer to the attraction between lexical items such as "*can afford*", colligation is left to the attraction between grammatical items (or between lexical and grammatical items) such as "*who can afford so much?*".

Associated with colligation is a term called semantic prosody which is used by Louw (1993; 1997 cited in Hunston 2001: 15) "to indicate a meaning which accords to a word because of the environment in which it is usually found".

The terms *sequence* and *pattern* will be used in this paper with different meanings though sometimes they may overlap slightly. 'Sequence' is used to refer to any strings of colligations (either continuous or discontinuous) such as *can be seen* whereas 'pattern' is left only to those strings in which some of the slots can be filled by other paradigmatic constituents such as "*as* + adverb + *as* noun + *can*". A pattern can be identified if a combination of words occurs relatively frequently, if it is dependent on a particular word choice, and if there is a clear meaning associated with it.

Fixed and semi-fixed phrases - these are extended collocations. They can make both our speech and writing sound more natural and interesting. **Idioms** are fixed or semi-fixed collocations with a particular, metaphorical meaning. For the term of idiom, Sinclair's definition (1991: 172) is used: "*An idiom is a group of two or more words, which are chosen together in order to produce a specific meaning or effect in speech or writing*".

All these terms and notions I named above are the main elements of my study in accordance with my attempt in previous chapters to introduce the aim of the research – environments in which modal *can* appears. With the help of the corpus I will be able to observe instances typical for *can* environment displayed in the form of concordance showing its collocations, colligations. All these elements can be treated as single items and investigated quantitatively in their turn.

My interest towards this kind of study was inspired by the source "grammatical words have collocates" (Renouf and Sinclair 1991: 128).

Study of collocations and identification of these features sheds light on better understanding of the English collocations with modal verbs. At the same time it attempts to identify what are the natural combinations with modal *can* and other lexical or grammatical

items regarding the modal. The study partly concerns the issue of modal *can* in phraseology and to see whether there is a strong tendency between modals and the other elements in the immediate environment.

2.5 Extraction of examples

From the BNC I have extracted 1500 sentences that contain the modal *can*. Instances will be analyzed both semantically and syntactically. The syntactic analysis will be used chiefly as support in the semantic analysis and as well as for exploring differences.

Example: The actual sentence containing the modal verb *can* is quoted, and is immediately followed by its identification number or codes in the corpus. The identification number consists of the filename: the three-letter file code e.g. F73 and sentence number: the number where you want to start browsing e.g. 42.

F73 42	Tomorrow I **can** do it

When I am clicking on **can** in the sentence it demonstrates context:

PS1KV 37 Yeah, fine
Andrew 38 So that I take
PS000 <unclear >
Andrew 39 there's a lot of work to do
PS1KV 40 Mm, mm, well, erm,
PS000 <unclear >
Andrew 41 Well, what'll, tomorrow?
PS1KV 42 Tomorrow I **can** do it
Andrew 43 Yeah, erm, I'll put some
PS000 <unclear >
Andrew 44 about half ten
PS1KV 45 Yeah, today?
PS000 <unclear >
Andrew 46 <-l-> tomorrow <-l->
PS1KV 47 <-l-> tomorrow <-l-> , right

The code of the sentence enables us to obtain all the information about author, text sample from which the example has been taken, register: spoken or written, genre: news report, fiction or academic writing and even the sex of the performer.

Figure 5: File information for F73

SARA bibliographical information		
Texttype:	spoken	
Further Information:	[Ralph Gardner High School: talk between teacher and caretaker]. Sample co about 370 words speech recorded in educational context	
PS1KU	46, `Andrew', teacher, male	
PS1KV	40, caretaker, male	
BNC Header information		
Title:	[Ralph Gardner High School: talk between teacher and caretaker]. Sample co about 370 words speech recorded in educational context	
Spoken or Written:	spoken	
Number of Words (tagged item	391	
Average sentence length (<w>-<s>-unit):	5.5857	
Average utterance length (<w> per <u>-unit):	3.7961	
Text type:	spoken context-governed	
Type of interaction:	Dialogue	
Domain:	Educational/Informative	
David Lee's genre classificatior	S_unclassified	
Region where spoken text was captured:	North	
Age of Respondent:	n/a	
Social Class of Respondent:	n/a	
Sex of Respondent:	n/a	
Relationships		
PS1KU PS1KV	colleagu	mutual

As the aims of the study have been outlined in the beginning of the chapter one an attempt will be made to draw a more detailed picture of the data I extracted from the BNC.

In order to study the patterns and syntactic environment of *can* I decided limit my study with 1500 examples from the BNC.

The overall frequency of the modal verb *can* in the BNC is illustrated in **table 3**.

Table 3 demonstrating instances of *Can* for per million words in BNC.

Register:	**Written**	**Spoken**	Totally:
Instances: **Can**	195 402	37 207	**232 609**

In order to limit the scope of my investigation and find examples for closer scrutiny I chose to observe the data produced by British speakers from 1985. Then I selected 1000 examples in the written and 500 in the spoken with *can* at random and sorted them into alphabetical order, using both right sort revealing collocations following the modal and left sort – the unit proceeding the modal. Left Sorting is a very useful tool to discover how many times the modal verb occurs in the passive, what its typical subjects are, whether it is frequently negative and so on.

This set of concordance lines below reveals all the significant patterns with the modal *can:* (Left sorting is with italics whereas the right sorting is highlighted with bold type.

Figure 6. Concordance lines of *can* from written corpus of BNC.

	EES 1001	this is a new savings account which *you*	**open** with one pound " written as input to a
	HAC 7445	That me	**open** up your PC and slot the card in without
	FAD 234	environment); (2) allophones of *ph*	**overlap** phonetically with allophones of other phonemes in
	HRB 867	This parcel I wish sent immediately	**pack** it.
	A04 832	walk off to some sweet village,	**paint** landskips and enjoy the fag-end of life in
	JXV 345	that no harm comes to her.Perh	**pass** that message on for me!"
	HWH 1876	is required is a mechanism by *which* indi	**pay** their tax on this income source at their personal
	AB9 616	on -- I'll ring you back, the *Yard*	**pay** this bill."
	FA8 1124	the organization of knowledge special	**perceive**, though perhaps only dimly, what this
	EEB 867	careful in your choice of word	**pick** between a common and a less common word,

Features that will be recorded and studied:

All types of sentences were included for analysis both affirmatives and negatives: declarative, interrogative, (including tag questions), and exclamatory.

Word classes i.e. nouns (person and things) referring to entities, verbs to processes and adjectives to qualities (of entities and processes) can be viewed in terms of the relations into which they enter: *paradigmatic* (the options that are open to them) and *syntagmatic* relationships of a lexical kind (collocations and sets) and of grammatical kind (structures and systems).

Collocation, or significant co-occurrence of lexical units, assumes that the extent of the environment, the "co-", can be specified. A span of + 2 was chosen for the main presentation of collocational results as a shorter span would miss valuable evidence, and longer one would overlay the relevant patterns with more distant material.

Collocations and colligations:

1. Subject: animate, inanimate, concrete and abstract; relationship of pronoun and modal e.g. *as* adverb *as* noun *can*: (*as far as I can see, as soon as I can, as you can see, as you can imagine).*

Pattern like*:* third person subject**+ can be +** adjective/ past participle. (including anticipatory *it*, existential *there* and pronouns: *one* and *all* in a pattern: *all+ subject+ can + verb+ is*.

2. Verbs of: *Perception, Cognition, Emotive, Verbals, Relationals* and *Materials* indicating different processes[2] from SFG perspective.

3. Well known phrases or fixed expressions: *Can I help you? Can I have a piece of….* and etc.

Idioms and patterings: *can't believe my ears*, *you can bet your life, you can't say fairer (than that)* and so on.

[2] The process types will be discussed in chapter III, section 3.2.

2.2.6. Examples excluded

Among rendomely selected 1500 examples with *can* not all appeared to be relevant to this research. Some are uses of the word *can* as a noun, a meaning not related to the modal auxiliary *can* at all:

1. While Fwinky padded barefoot with a petrol **can** towards the boathouse. (FPF 807)
2. " she said and handed back the now empty **can**. (FR0 80)
3. At least had come armed with the essential spray **can**. (HTL 1981)

There are also several examples where the meaning is quite vague and even after extracting more context from the BNC, it does not become clear exactly what the narator/author meant.

4. Which we must compete, but ones which each **can** the better enjoy, the more others are enjoying them. (CS2 1127)
5. doctor will always do the right thing, but **can** what the right thing is be stipulated in advance. (ASK 952)

Since it was impossible to classify these, 7 examples from the written and 8 examples from the spoken were excluded. The whole research is based on **1485** examples (W- 993; S- 492).

As for contractions my original search did not catch the contracted form of *can+not* {can't}. The number of negatives in my material is too low. However *"**can't***"is searchable with [ca "n't"] and there are 1247.47 instances per million words in the spoken and 199.31 incstances per million words in the written corpora. Unfortunately this was discovered only after the main analysis had been carried out.

The next two chapters III and IV deal with analysis of the modal verb *Can* respectively. Starting with its meanings, remarking on syntactic patterns particular to the collocations or fixed expressions. The main part of each section consists of a detailed discussion of its syntactic environment. At last chapter V presents a comparison between the written and the spoken material.

CHAPTER III:

3. Verb phrases with *can*: patterns and meanings

3.1 The time reference of the modal verb '*Can*'

A verb indicates a temporal relationship by virtue of the three main tenses: past, present, and future tense. Tense is a grammatical category, typically marked by the verb that deictically refers to the time of an event or condition relative to the immediate present. *Can* does not have tense, but it can still have time reference of different kinds. Referring to Mindt's study of modal verbs (1995:76) "*can*" has the following time reference:

A) *Present time orientation*: When the speaker directs orientation towards the present. Present time orientation is very common in conversations, reports and in the situations when hearer and speaker share the experience of simultaneity in time.

1. I am so angry I **can** hardly write [it began, and there was ample evidence in the shaping of the letters that this was indeed so]. (HTR 927)
2. "Not here," Cranston said. "But Piper Alley, Nightshade House. You **can** lead us there?" (H98 1745)
3. "I don't know how you **can** even speak of her in the same breath." (BP1 317)

B) *Future time orientation*: It is often found in expression of future plans, intentions and predictions.

4. "Hope I **can** do the same for you some day." (AC2 2519)
5. Thank her prettily; see if we **can** keep in touch somehow. (HWA 1456)
6. I shall be watching the practical results with interest to see what might be applicable to our work in the Duchy of Cornwall, for I am sure that there will be lessons that we **can** learn. (A7H 729)

C) *Past time orientation*, which is very common in fiction, novels and other narratives.

7. As should be clear, this does not mean that Spenser was "a typical Elizabethan" (if such a creature **can** ever be said to exist). (HH4 1417)
8. **Can** it have changed much -- or did it rain so pre-emptively that he cannot have noticed the lovely inlets at Isleornsay, their green banked lands sloping to soft-coloured waters? (G1Y 1136)

9. In our discussion in Chapter 1 about economy, efficiency and effectiveness, the technical problem was how we **can** meaningfully compare inputs and outputs to produce a measure of efficiency when outputs are not automatically valued by the market price. (GVU 1962)

D) *Timelessness* – in this case the speaker makes statements about facts, which are not restricted to any particular period of time.

10. But then grandiose claims are made for most things you **can** buy connected with mountaineering. (AS3 1496)
11. The cycle **can** continue until professional intervention fails to provide any more. (CGT 1146)
12. Strictly nocturnal predators like the eagle owls **can** entirely miss a common rodent species if that species is diurnal, and in these cases the prey assemblage has an unbalanced species composition compared with the small mammal community actually present. (B2C 628)

Table 5. Distribution of time orientation with *can* in written (1000) and spoken (500) BNC, randomly selected hits.

Time reference:	Present	%	Future	%	Timelessness	%	Past	%
Written corpus	761	76.1	192	19.2	24	2.4	16	1.6
Spoken corpus	303	60.8	165	33.0	11	2.2	13	2.6

The fact that *can* occurs more often in affirmative contexts than in negatives is well known. Although it is also found in interrogative contexts and where it has some other meanings than in ordinary declarative sentences. At the same time this kind of classification of the modal *can* according to sentence type and time reference makes it easy to distinguish between Epistemic and Deontic modality notions. Epistemic and root construals of modals differ from each other in terms of how they interact with tense and aspect, as well as with lexical aspectual classes (aktionsarten).

Relying on my observations and the results from both written and spoken corpora, which will be summed up in chapter IV, I would like to highlight some preliminary points of the investigation.Epistemic values of *Can* are realized in interrogative (function of Epistemic

possibility approaching *may)* and negative polarity contexts (Epistemic necessity approaching *must*). Further, I will try to prove the above mentioned point and provide the reader with evidence.

3.2 Combination with verbs and different types of processes.

"*A verb is a power in all speech,*

Rings through prose and verse.

It brings to birth".

(Elizabeth Jennings, *Parts of speech,* in *Times and seasons*, Aarts and Meyer 1995:1)

Generally *can* co-occurs with all types of verbs but the essential is to investigate which of those is most frequent and typical as well as denoting special messages. *'Can'* lends itself to various pragmatic interpretations by inference, such as Willingness: (I can do all these now, no problem (JP4 352); Command: ("If you're going to be rude you can bugger off." (G0X 3031); Request: (Can you carry on your domestic discussion tonight, yes? (JK9 41); Potential Usuality: (A pure master-servant relationship can be very fine, (GU6 462); and so on. The meanings of *can* are classified as follows in my investigation: Deontic - **Ability, Permission, willingness, possibility**[3] and Epistemic – **Possibility**, of Hasselgård et al (2004:197).

The most frequent verbs with '*can*' in the selected hits of written and spoken corpora are: BE (W- 35.1 %; S-6.8%), DO (W –2.5%; S- 6%), HAVE (W-1.6%; S-3.2%), GET (W-1.3%; S-7.4%) and MAKE (W-1.1%; S-2.6%); FIND (W-0.9%; S-1.6%). Other recurrent verbs with *can*

[3] I will refer to Deontic possibility as **potentiality** to avoid confusion or misunderstanding.

are SEE, HEAR, HELP, SAY, STAND, TELL and many others. Therefore, I decided to classify verbs according to Systemic Functional grammar, which distinguishes the following types of processes: *Mental, Material, Verbal, Relational, Behavioural* and *Existential*. (See further sections 3.4 to 3.9)

According to Halliday (1994:107) a process consists, in principle, of three components:

(i) participants in the process;[4]

(ii) the process itself;

(iii) Circumstances associated with the process.[5]

3.3 Subjects of verb phrases with *can*

For the primary research question of my study I need to look through possible Participants appearing in front of the verb phrases in the data of the BNC. Diversity of the subjects is especially characteristic for material processes as well as verbal and relational. Thus, the subject can be of different types:

Figure 7. Types of Subjects in the different types of processes:

Animate	**Inanimate**
Proper nouns, general nouns, Collectives, – expressed by Pronouns, N, NP or PP.	*abstract notions, concrete objects,* – expressed by pronouns, N, NP or PP

It is very rare to find animate referents expressed by Pp what is extremely common amongst inanimate nouns.

1. Farm workers **can** also *observe* the life-styles afforded by ex-workmates and neighbours who have left farming to seek higher-paid employment elsewhere. (FPR 413)

[4] A different set of labels is required for the participants in the different processes, since their roles are different: Actor – Goal; Senser – Phenomenon; Carrier – Attribute etc.
[5] Circumstances encode the background against which the process takes place: *Time, Place, Manner* etc.

2. In each domain, what counts as being rational **can** *go on* being developed. (G0R 582)

The Subject of the first sentence is animate noun expressed by compound noun or NP, whereas the second is expressed by PP. Sometimes, a lot depends on type of verb, i.e. if we look it from the perspective of Appraisal theory the verbs *observe* and *go on* are very different, as well as they denote different processes. *Observe* means visually perceive (that is why it is mental), while *go on* indicates a process in progress and can be classified as a material verb.

Animate subjects account for **60** per cent in written (600 examples) and **86.8** per cent (434 examples) in the spoken BNC. In the written corpus the majority of subjects are expressed by other means (**26**%) than a personal pronoun (**34**%):

3. That WordScan **can achieve** 100% with some of the tracts we've fed it is testament to the programmers' ability and the use of a dictionary. (HAC 10675)
4. Only the largest banks in the world **can afford** to employ a team of specialists -- lending officers, economists, accountants, engineers, etc. -- to assess economic and financial risks associated with projects in LDCs. (B1W 1831)
5. While such intervention is not without a moral hazard problem, it may still remain the best solution for those seeking income insurance; in other words the government **can handle** the moral hazard problem better than the market can. (HWH 281)
6. While there are many success stories in terms of increased food supply (China for example **can feed** its entire population of 1060 million) such developments have also brought about environmental degradation. (B1E 4)

The subjects and agents of these sentences are NP (3), PP (4), Collective noun (5) and Proper noun (6). In the analysis of most nouns, the distinction between *collective*, *concrete*, *abstract*, *animate* and *inanimate* are unproblematic, but in some cases the borderline is difficult to draw. For example *government* and *country* are common nouns but behave much like collective nouns with respect to some context and plural form. They denote an animate group as illustrated in the examples (5) and (6) above as well. These kinds of collective subjects are common in reports or surveys and these examples are retrieved from ‘the environmental impact in agriculture in the developing world’. The meaning emphasized by the modal auxiliary *can* in these kinds of sentences always depends on context. All examples above have Deontic – ability reading.

The rest of the animate agents are represented by different animate pronouns by 340 examples (34 %) in the written data while the spoken corpus consists of only 1 per cent animate nouns (5 examples) and the rest accounts the occurrences of pronouns as the agent – 83 per cent (415 examples). The level of personal involvement in the spoken material (500 randomly selected hits), is represented in the high results in the *You*- 138 examples (27.6 %), *I* and *We* (12.2 %) domains. The first person pronouns are equally presented in the spoken data by 61 examples. (Since the second person pronoun *YOU* is ambiguous between singular and plural, the forms for the second person are not differentiated according to number).

The proportions among the pronouns were also dramatically uneven in the written corpus of *can*. *You* logged in far ahead at 77 (7.7%) instances out of 1000, followed after a gap by *I*- 87 examples (8.7 %) and then after another large gap by *we* in 62 examples (6.2 %), and *they* in 28 examples (2.8 %).

The inanimate subjects shed light on their potentiality more than ability when they have a Deontic reading, which is quite rare. Totally, there are 64 cases (**12.8** %) of inanimate subjects in spoken and 399 examples (**39.9** %) in the written randomly selected data of the BNC. (The phenomenon that written English has more inanimate subjects than spoken will be discussed and described in section 5.1). There is a difference between inanimate agents too as they can be expressed by inanimate pronouns, nouns, NP, PP. Besides there are two main divisions abstract inanimate nouns: *action, anger, accounts, appeal, attention, cases, mechanism, knowledge, interpretation* and the concrete subjects: *film, coin*, *chromosomes*, *abbreviation, acid, number, hospitals, signs, school, shelter* and so on. Abstract inanimate nouns exceed concrete ones.

7. In achieving that assistance, the two parts of the record industry **can** also contribute. (FP9 889)
8. Measurements **can** also be made in solution, if the solvent absorption in any important region is low, or by a differential method. (HRG 826)

9. If, in spite of all your forward planning, you find you are going to be late, try to telephone the office so that the interview **can** be rescheduled. Being late will count against. (BNA 427)

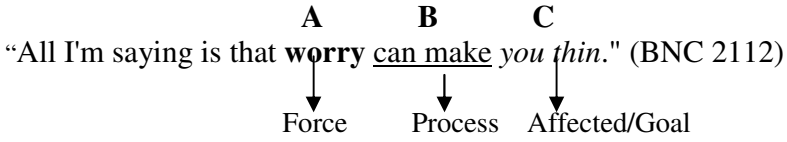
Table 6. Inanimate subjects in written (1000 examples) and spoken (500 examples) of the BNC.

Inanimate	**Abstract**	**Concrete**
Spoken	27 (5.4%)	16 (3.2%)
Written	207 (20.7%)	64 (6.4%)

The NP and PP are extremely frequent in the written corpus, as the language of the spoken corpus is relatively simple.

It can be made a distinction between ability and capability, which is actually a distinction between two types of "ability": ability with animate agents exhibiting purposive behaviour and ability with inanimate agents showing potentiality. Division of inanimate nouns into concrete and abstract is useful in order to account for such natural phenomena as thunder, lightning, electricity, the wind, floods and so on. As agents they are inanimate and their energy, potential or their power can not be intentional. I will refer to them as Force/ Power rather than Agent. Furthermore, such psychological states as *anxiety, fear, worry, joy* must be included in this subdivision as well.

Figure 8. It shows an example of inanimate Subject/**force** in the different types of processes.



The subject of the sentence is quite powerful and can be interpreted as real concrete Agent, indicating superior power. The phrase has deontic ability meaning and the phrase itself can be accepted as metaphoric transfers of category 'normally animate' to 'inanimate'. The affected

participant is that which is affected by the action expressed by the verb. The term used is in SFG is Goal. The process illustrated (**figure 8**) is a relational Attributive (resulting state is expressed by an Attribute).

In addition, there are other inanimate elements in English, which can function as the subject for the process.

10. This approach places a great burden on parents, since it requires tolerance and endless patience; but **it** can bring out the best in the child. (B10 97)

Referring to Hasselgård et al (1998: p322-328), we can distinguish between four different uses of **it**:

- Referential pronoun: When we are replacing inanimate noun with pronoun. 28 examples (2.8%) in written and 6 examples (1,2%) in the spoken data.

  11. And then release his normal leg so that **it can** move freely sideways. (AS0 926)
  12. However, the coefficients of this model are unknown, and so **it can** not be used in the empirical investigation of the risk premium. (FSA 1249)

- Empty it – verbs such as *rain, snow* do not refer to actions that are brought about by somebody or something. But English grammar requires all sentences to have grammatical subject, even where there is not "doer of the action'. We use empty it as a subject in sentence about weather, temperature, time and distance. The term 'empty' indicates that 'it' does not refer to anything. (11 examples (1.1%) in written and 8 examples (1,6%) in spoken corpora).

  13. We lose our temper, feel cornered and frightened, it **can** be the work of an instant. (H98 2751)
  14. This, it **can** be argued, is socially constructed and varies over time. (CRF 1019)

- It in cleft sentence – when we want to give special emphasis to one of the elements in a sentence 'it' is presented as a subject and 'be' as verbal followed by the element we want to emphasize.

The rest of the information is given in a dependent clause introduced by *that, who or which.* It-cleft typically contains given information, but not always. It is presented by 8 examples only in the written corpus of the BNC.

15. It **cannot** be without significance that Ealhmund, slain by Eardwulf's men in 800, was buried at Derby and venerated as a saint in Mercia. (G0G 1145)

- Anticipatory it. – A subject that is realized by a dependent clause is often moved to the end of the sentence because it is easier to read a sentence that starts with short elements. 'It' anticipates the long and heavy subject at the end of the sentence. Syntactic function of 'it' is anticipatory subject (aS). (5 examples in written and only 1 in the spoken material).

16. It **can**, however, be difficult for women to retain their self-confidence at this point. (CCN 998)
17. Make sure you do something that relaxes you; it **can** mean reading the newspaper, taking a walk, talking to people you like, etc.(EB1 1573)

In my material *IT* is represented with 53 examples (5.3%) in the written and 14 examples (2.8%) in the spoken BNC. The same can be said about demonstrative pronouns or referentials, which replace subject such as *this, these, that* accounting 15 examples (1.5%) in the written and 7 examples (1.4%) in the spoken data.

18. **That cannot** have pleased the Megarians or their daughter-cities in the region, like Byzantium. (FBB 105)
19. But it does take time, and I think, you know, this puts the, this gives the framework in which **this can** usually open the opportunities and the <unclear> methodist women are not short of confidence, and I think that's why I married an anglican, you see. <laugh> (J9D 580)

I present the process types in order of frequency in my material. The mental verbs collocate with modal *can* a lot and the mental process comes first for discussion.

3.4 Mental process: Verbs of cognition, perception and emotion.

What makes Mental processes different from all other process types is that they happen in the internal world of our mind. Mental process can be quite diverse. Accordingly, these are additionally subdivided into **perception** (w-2.4%; s-3.4%), **cognition** (w-4.8%; s-6.4%) and **emotion** (w-2.3%; s-0.6%). Mental process verbs are typically stative unlike non-mental processes where verbs are dynamic. (The terms *Stative* and *Dynamic* are adopted from Hasselgård et al 2004:47)

*Perception	You **<u>can</u> see** it originally in the York Minster Library. (JTE 563)
	Now the smell you **<u>can</u> smell** is new oak actually. (JTE 292)
*Cognitive	I **<u>can</u> understand** that, yes. (JTD 533)
	So you **<u>can</u> imagine** what margin that used to be. (JTA 382)
* Affective (emotion)	Walkers **<u>can</u> enjoy** both the dales and the moors. (CJK 1798)
	The ambitious soldier **<u>can</u> expect** a similar progression. (ADB 373)

3.4.1 The Senser + *can* + mental verb + phenomenon

Can occurs as possibility and ability with the verbs of *cognition, perception* and *emotion*: *see, hear, smell, feel, remember, understand, believe.* In such a context the verb phrase as a rule requires an animate subject. There is typically one participant who is conscious, this is the one who sees, feels, thinks, likes, etc and is typically human, but may also be an animal:

1. *Bat can **not** see the sun, and so it doesn't.* (C9R 1241).

Halliday and Mathiessen (2004:201-208) outline that a *mental process* involves at least one human being participant – the one in whose mind the mental process is taking place, who visually perceives, knows, and emotionally suffers or experiences and likes. The Senser or Experiencer of almost all mental perception, emotive and cognitive processes I found in my material is indeed a human being. The Sensers in these mental processes are mostly first and

second person pronouns, predominantly singulars. I can not consider this phenomenon as a characteristic feature of the mental verbs but rather to a little data and genre. As for emotive mental process the verbs like *enjoy, please, dislike, want, delight* in everyday use have a Recipient Experiencer Subject (example 2) or referential *it*, which replaces abstract activity or notion (3).

2. It's, it's what **can please** me. (KGU 956)
3. It **can encourage** foreign tourists to spend their money or it can encourage foreign investment, which will provide income. (K94 1916)

The phenomenon of the mental processes, they differ slightly from each other as the things which are visually perceived are mostly a noun phrase, standing for a person or object that is being looked at, although perception verbs are also, *smell*, *hear*, etc (sent. 4). This is attributed to concrete nouns and this is not surprising since if one sees something visually, then there has to be a concrete object to be seen, such as: lake, child, mirror, etc. However, the phenomenon in a Mental process of cognition (sent. 5) tends to be more abstract than the ones found with mental perception. Things happening in our mind are complex and complicated as well as abstract. These things can be a fact, a process or an entire situation, realized by a clause. Unlike Mental processes of perception and cognition, an affective or emotion process activates both abstract (see sentence 2, above) and concrete (sentence 6) phenomena.

4. I know I'm so-- they they eat you see they've eaten fish and chips and it goes through the air conditioning and it comes into the studio you all you **can smell** is fish and chips. (HV0 792)
5. I can understand that, I **can understand** that. (HVD 134)
6. A certain corrupt pleasure which only we **can enjoy**: the pleasure of memory made sweeter by the fact that such noxious art recalls it. (ASD 454)

The phenomena of Mental process Cognition tend to be concrete when a perception element is involved in the process too: i.e. a cognitive process which is based on visually perceiving something, as in the following examples:

7. If I can, if you **can** just **concentrate** on that figure now. (K6Y 267)
8. But er <unclear> I **can remember** being in Evay and a funeral there and to me it was very strange because they carried the coffin from the kirk right down to the kirkyard at the pier. (K6T 422)

The phenomena in these sentences are put in quite concrete terms. Especially the second sentence refers to an event that took place before, and is running as a film in front of speaker by means of recalling it. It is not abstract imagined or dreamed event. The modality is deontic expressing the speaker's ability to transfer himself/herself in the past and to describe that moment.

3.4.2 Some notes on *can* with perception verbs

The verb *see* is frequently found in combination with *can*. These uses account for 2.5 per cent (25 examples) of the occurrences in 1000 hits of the written and 4.2 percent (21 examples in 500 hits) of the spoken BNC. In written data *See* is used 20 times (2 percent) in passive as well. Typically the verb *see* is found to denote *visual* perception. This is the most central and the most frequent use of the verb *see* and is classified according to Hallidayan grammar as *mental process*. The combination of *can* + *see* visual perception is used to denote ability (w-1.1%; s- 2%).

1. From the corner of my eye I **can** see his partner, tangled with his chair in the dirt behind the portacabin. (H8M 3079)
2. Not that, I **can** see much after six o'clock. (HD7 652)

In addition to the meaning of *ability*, *can* conveys the notion of temporality and duration. It becomes clear if the combination of *can+see* is compared to the simple present with *see* only. The verb see is stative with respect to aspect and aktionsart, but when it is used together with *can* the effect of temporality and duration is added to the meaning. Halliday (1994:115) writes that 'in a material process the unmarked present tense is the Simple Present; we say […..] *I see the stars* (not *I'm seeing the stars*)'.

This does not mean that mental verbs can not occur in the Progressive, but that this is not frequent and as a rule the meaning is different. Therefore the Progressive with verbs of perception is considered marked.

The modal auxiliary: *can* used together with *see* creates the effect of temporality and duration without danger of ambiguity, exemplified by Halliday again (1994:115):

> The present in present [i.e. the present Continues/Progressive] with mental process is rather highly conditioned kind of inceptive aspect [……] is kind of difficult to contextualize, with result that, taken out of context, it is quite likely to be understood as something else (e.g. *I'm seeing the stars* as a material process *I'm interviewing the leading performers).*

Miller and Johnson-Laird (1976:606) and Aijmer (2004) come to a similar conclusion: It is as though its stative quality is borrowed in order to express duration. It is inappropriate to say *He was seeing the mountain* but the sense of the statement is expressed by *he could see the mountain.* (Miller and Johnson-Laird 1976:6006)

I pointed out above that *can* occurs with *see* a lot and with other verbs of perception as well. But the thing is that data from corpus underlines that the combination of *can+see* has very little indication of ability. Sometimes, especially, in questions and negative forms *can see* occurs with the meaning not of 'observe', but of "imagine" or "understand" and even "know".

Referring to Viberg (1984:136) "one of the most striking characteristics of the lexicalization patterns of the verbs of perception is the large amount of polysemy". In fact the verb *see* has not only developed a cognitive meaning extension but it is possible to identify different submeanings within its cognitive uses. Thus, there is also mental process *cognition see,* which is used synonymously to *think, know, consider* and *understand*.

3. I mean, I **can** see that he upset you about something. (ACB 219)
4. It's exactly what I want. I **can** see now that you had to test me. (JYA 3301)
5. Then he said: "I **can** see you are dubious". (HWA 2167)

We can not replace this combination above with just *see*. It will loose its original meaning where *can* employs to emphasize speaker's sympathy and solidarity. Thus, when *see* denotes cognition in combination with *can* the encoded meaning is possibility/potentiality (W-1.4%; s-2.2%).

In studying English is useful to investigate both what English has in common with other languages, and how it differs from them. Actually, there are some languages where one uses modal *can* only to express *ability* or with its perception dimension not as cognition. For example in Russian or in Greek: (Parentheses in the examples below indicate absence of modal *can* in original language)

6. a) Я **вижу** как ты стродоеш – (I (can) see how you suffer) – Russian
   b) Я **могу видьеть** без очков – I can see without spectacles.

7. a) **Μπορώ να δώ** χωρίς γυαλιά. (I can see without glasses) – modern Greek
   b) **Βλέπω**/καταλαβαίνω οτι είσαι ενοχλημένος. (I (can) see/understand that you are upset).

In my native language, Georgian, which does not belong to the family of Indo-European languages, but Ibero-Caucasian, the situation is completely different. Taking into consideration also the fact that Georgian is a synthetic language unlike Russian, (which is analytical) and English (both synthetic and analytical) the use of modal auxiliaries in combination with mental verbs is not explicitly expressed in Georgian sentences but just indirectly hinted or implied. Nevertheless it expresses ability or just possibility of the action.

8. a)**Vxedav** shens ertgulebas[6] - (I (can) **see** your devotion) - Georgian
   b) Me **vxedav** mzes – (I (can) **see** the sun.

Let us look at another Germanic language like English and examine some Norwegian sentences with *can*+mental verb retrieved from The Oslo Multilingual Corpus. It is reasonable to expect that they are used in similar ways in English and Norwegian.

[6] Regretfully, I couldn't find Georgian letters and had to use Latin alphabet to demonstrate Georgian examples.

9. ”Jeg **kan** ennå ikke se noen forbindelse med Pesten”, sier Andrea. (ABR1) –
   ”I **can** not see any connection with the Plague yet!” says Andrea.

10. ”Det er ingen vits i å krangle med ham, siden han **kan se** fienden og ikke jeg.”
    (MAI) - ”There is not arguing with him, since he **can** see the enemy and I can’t.

In the example (9) *can see* is cognitive and synonymous to *know* and it is translated in a same way in Norwegian: *kan se*. In the sentence (10) *can see* may be interpreted as ability, visual perception and translated adequately in Norwegian as well.

I find it strange why *can* is used in the sentence when there is no intention at all of referring to the ability. I will try to find the key for this puzzle. Ability and possibility are similar ideas. If you've got the ability to do something, then it's possible for you to do it - in principle at least, although there might be something that prevents you. And, conversely, if you haven't got the ability to do something, then it isn't possible for you to do it. *Can* is often used to suggest possible future actions. Then *Can* is used to refer to future events, provided the possibility can be seen as present, it means that it is possible for something to occur and that it will or may occur in the future. Thus, it must be pointed out that future tense encodes epistemic possibility, as it is based not on the facts but predictions and plans.

Can can convey an implication of actuality and truth in the sentence as Aijmer (2004:259) points out “the ability stands metonomycally for the actual process” (the cognitive principle *actuality over potentiality*).

Other verbs indicating mental processes and related to cognitive *see* are *understand* and *imagine*. They both indicate the possibility of someone’s capacity to understand, logical confidence but not fact or any kind of talent to imagine or understand. Both verbs are abstract, far from reality.

The second verb, which intercollocates with can a lot, is *to hear* (w- 0.6%; s-0.2%). *To hear* involves ability itself and as a mental verb it is related to visual perception *see*.

11. He **can** hear vowels but no consonants. (ANY 1018)
12. I **can** hear him coming in. See you! (FRS 2100)
13. I can't follow every step of the action, but the flat is so small that I **can** hear the whole voiceover, even with the water running. (HGN 2894)

In all the examples given above action is based on reality and someone's ability to conduct the action, namely to hear vowels, someone's steps when he is returning or noise in the flat. To my observation it is because of the verb *hear* is followed by concrete subject or dynamic verb such as *coming*. It worth looking at another example with *hear* where the action followed by the mental verb is stative and quite abstract in order to be heard. At least it can be only observed.

14. Sometimes I **can hear** Elizabeth smile, even before I hear the smile changing the shape of her voice. (G0X 2750)

To see and *to hear* are two completely different senses and abilities that is why it sounds little bit strange to hear somebody's smile and it could be considered as notion of possibility based on someone's imagination. However, I have underlined couple of times in previous chapters the importance of context. With the help of context the following *ing*-clause sheds the light on the situation that action is concrete and based on reality and not just imagination.

3.4.3 Syntactic patterns with mental verbs

There are different constructions and patterns related to *can + Mental process verbs* in the corpora I have chosen for analysis.

Table 7. Main syntactic patterns with mental process in my material of the BNC

Patterns	**A.** Can +V	**B.** Can+V+NP/PP	**C.** Can+V+(to)v-inf	**D.** Can+V+NP+v-ing	**E.** *Wh/that*-clause
Written	4 (0.4%)	53 (5.3%)	8 (0.8%)	3 (0.3%)	27(2.7%)
Spoken	15 (3%)	23 (4.6%)	2 (0.4%)	3(0.6%)	9(1.8%)

In the previous chapter I underlined that in order to express mental process where *can* is involved and contributes modal meaning, placing an event on the scale between yes and no, we need a Senser, a lexical verb indicating mental process, and a phenomenon.

The first pattern (**A**.) is simply '*Can* + mental verb' which is presented with 4 examples (0.4%) in my written material while in the spoken there are 15 examples (3 %) of it.

1. I'm real excited, **as you can imagine**, and greatly looking forward to the adventure. (HA0 2170)

The most frequent formula will be illustrated in a following way (**B**.) ***Can* + V+ NP/PP**. There are 53 examples in the written corpus (5.3%) and 23 examples (4.6 %) in the spoken part of my material.

2. Yes I **can appreciate** that but at this moment I'm not worried or bothered about any prosecutions in relation to this matter I'm bothered about the ch-- the child's er health. (HMA 65)
3. If I can, if you **can** just **concentrate** on that figure now. (K6Y 267)

But sometimes a whole clause functions as a Phenomenon as it is difficult to put simply in a noun phrase. Then the following patterns occur:

C. *Can* + V + v-inf

4. Therefore, no investor through the exercise of either put or call options **can** hope to influence the market for the underlying shares. (HNM 865).
5. Elizabeth is such a nice woman, she **can** not bear to hurt anyone. (CEX 2734)

D. *Can* + V+ NP+ V-ing

6. I wonder if, it Mr, was it <name> choir or his father or something that had it, I can if I **can** remember somebody saying. (K6K 90)
7. That is <pause> just a few words <pause> in your mind you **can** see a person walking along. (F8M 493)

The construction (**C**) is represented with 2 examples (0.4%) in the spoken corpus and 8 examples (0.8%) in the written corpus of my material. This colligation with mental verbs in most cases refers to deontic modality. There is another pattern with in this group also, like **V+link-v+ v-ed/adj**

8. However, applicants to the Faculties of Music and Veterinary Medicine **can** normally expect to be called for interview, while this may also happen in the case of applicants for degrees in Divinity and Nursing Studies (full details are given in the Faculty Sections). (HTE 519)
9. That's all I **can** think of to be honest with you. (K6Y 197)

The pattern (**C**) more likely depends on context in order to be interpreted as Deontic or Epistemic. The construction (**D**) appears slightly more frequently in the spoken corpus (0.6%) than in the written (0.3%).

The verbs of perception, like *see, hear, taste, feel, smell* rarely occur in the progressive. They refer to a deliberate action rather than involuntary perception.

10. She must **be seeing** him off. (HWE 1757) = (taking leave of)
11. "I shall **be seeing** them at the weekend." (JXY 1414) = (visit them)

But these verbs: *see, hear, taste, feel, smell* have regular dynamic, agentive uses, which combine easily with the Progressive. *Can* with such verbs indicates that we can see, hear, smell etc. something happening at the moment of speaking. In such uses *can* has a grammatical function equivalent to the simple present in statement and indicates ability.

The interpretation of the modal verb + mental verb depends on the syntactic environment in which they appear together. If we look at the two constructions illustrated below as the examples 12) and 13), it is clear that although they seem identical, they do not necessarily mean the same thing.

12. Sometimes I **can** hear Elizabeth smile, even before I hear the smile changing the shape of her voice. (G0X 2750)
13. I **can** hear him coming in. See you! (FRS 2100)

In the first one (*Can*+*Hear*+NP +V-inf) refers to an event and has only not meaning of perception but evidential meaning as well, which refers to a whole completed process with witness happening. But the second pattern (*Can*+*Hear*+NP+V-ing) underlines that the event is in the progress and the outcome is uncertain. It can be his steps but maybe it is someone else.

If the first structure (*Can*+*hear*+NP+V-inf) in the example 12) is substituted with the second pattern (13) (*Can*+*hear*+NP+V-ing), we will have evidence that the process is indeed taking place. Hasselgård, et al (2004:369) write that the verb governs the choice between an *–ing* and an *infinitive* clause. The difference between the two with verbs of perception is that 'the infinitive views the action as completed whole, while the *–ing* construction focuses on the unfolding action, with no attention on its beginning or end'.

With verbs of cognition, especially with the verb *remember* - *ing* and *to*-infinitive mark a difference of time reference. With a *to*-infinitive clause the action expressed is seen as *following* the mental process of remembering or forgetting (sent.14), whereas an – *ing* form marks the action as *previous* to the mental process (sent.15):

14. **Can** the patient **remember to** have the injection and the correct dose? (B0X 1451)
15. "**I can remember** writing an extravagant critique of "Cinderella Rockefeller'". (AB3 298)

Let us replace perception and cognitive verbs with emotive one. Affective verbs do not combine easily with the Progressive, with the exception of *enjoy* which is dynamic and the infinitive almost never follows them.

16. I **can enjoy** watching it for hours." (FSN 996)
17. I **can enjoy** the experience of killing or being wounded fully, because I am not killing or being killed. (AM6 912)

The clause (16) represented by *ing*- clause suggests an interpretation of habitually or actuality. The meaning of the sentence is that I often "watch it" and modal *can* emphasizes my ability to enjoy with this habit of mine. While the clause (17) outlines potentiality and is used in hypothetical meanings. Thus, the latter has Deontic possibility meaning: the speaker has potential to enjoy killing although she has never killed yet. If we omit the modal auxiliary in this sentence, sentence will sound as categorical assertion and will lose its dimension to express just supposition about her potentiality.

E. *Can + V + wh-clause/that-clause*

Can in combination with a verb denoting a mental process appears frequently in the colligation *V+wh-clause*. (6 examples (1.2%) of projection in spoken and 13 examples (1.3%) in the written corpora of the BNC). The figures are almost equal. The *wh*-clause is projected clause and can refer to a question rather than a phenomenon. These constructions have Deontic reading as it is about ability/inability of the subject.

18. So you **can** imagine what margin that used to be. (JTA 382)
19. I **cannot** for the life of me see why they're so resistant to it. (HMP 140)

The most frequent projection is formed in my material by the colligation *can see*, which amounts to 11 (1.1%) from written and 6 (1.2%) from spoken material in total. *See* as Cognition differs from Perception exactly in the way that it can project another clause. In this respect a Cognition process is similar to a Verbal process. Although an important difference is that 'a mental projection is an idea, whereas a verbal one is a locution' (Martin et al 1997:120). (Section 3.6. Verbal processes)

Similarly, in the 13 examples in written and 3 examples in spoken, where a *that*-clause embedded as a Phenomenon, majorities of these examples again start with the collocation *I can (not) see*. That sentence- is introduced by the conjunction *that*. Sometimes, statements are rendered as that-clause although conjunction can be omitted.

20. Then he said: "I **can** see you're dubious. But don't dismiss it. (HWA 2167)
21. But I **cannot**, and I don't think you'd be right to expect my officers to prepare detailed rebuttals. (FMP 978)

The phenomenon - *that*-clause is very often quite abstract as *that* can be used to specify nouns with general meanings such as idea, rumor, objection as in the examples below:

22. We **can hear** that for ourselves in the records that have been issued of Karajan rehearsing the late Mozart symphonies or the Finale of Beethoven's Ninth Symphony. (ADP 199)

A *That*-clause Complement can be used to express factual information, which is reported, perceived, liked or known. It makes proposals and suggestions and describes situations which produce an emotive effect on the subject like in the examples illustrated above with numbers (20) and (21). The choice of the verb with the modal *can* contributes to these meanings.

3.4.4 Idioms/ fixed expressions/ collocations

The English language is abundant with combinations of a lexical verb and preposition, adverbial particles and so on and the combination functions as single unit. The interpretation of an idiomatic element is not fully determined by the interpretation of its parts. A literal interpretation of *can not help laughing* will be person who can not be given assistance but the idiomatic interpretation of *refrain from, avoid doing* meaning is demonstrably distinct. The literal interpretation of the string is determined compositionally, but its idiomatic meaning is not. If another element is added to a word, like prepositions, particles, adverbs and etc., the new meaning takes off in the direction towards different process types. The multi-word verb example (1) is very often followed by a verb leading into emotions, perceptions, and thoughts where it seems fitting to remark that someone *can't help* it.

1. I am bone of her bone, I **cannot** help hearing, I am downstairs alone. (F9M 1260)

I have picked up a few multi-word verbs that have a mental process element from analysed data. So, this section discusses fixed collocations/expressions which have acquired a different meaning when used together.

A. (As) smb. *can +V*

This pattern has been used 8 times in written and 11 times in spoken data. There is an interesting relationship between pronoun subjects and *can+mental verb*. The most frequent pronouns are *I*

and *you*. Referring to Susan Hunston's study (2000): '*Phraseology and the modal verb: a study of pattern and meaning*' the phrases including: *as you can see, as you can imagine and you can't imagine* are used to appeal to a shared experience, shared knowledge or shared values of the speaker and hearer.

You can imagine has been used 4 times in written corpus while in the spoken corpus I found only one example of it.

2. I'm real excited, **as you can imagine**, and greatly looking forward to the adventure. (HA0 2170)
3. **I can imagine** some unpleasant things happening with the sling, too; the sling- bombs have to be on a pretty short fuse if they're to detonate soon enough after they land not to be throw-backable, and I've had a couple of close calls already when they've gone off just after they left the sling. (HWC 1091)
4. **You can imagine** when we used to go to Ipswich to Limmers" there. (G092207)
5. **As you can see** the Parish Council are totally opposed to the siting of the mast in this particular position, and they would welcome any comments you might wish to make in support of their case. (HPK 1284)

These collocations are used to refer to what has been previously said, written or proven in the text. They sum up the conclusion that reader/listener has been guided by the author towards making. All the sentences above have Epistemic reading as they encode possibility of the truth. But I consider they include good deal of deontic willingness to involve somebody as a witness and even in some cases permission (sentence 6).

6. **You can see** what you like. (KM8 1108)

I would like to underline the fact that mental verbs in the expressions (2, 3, 4 and 5) are cognitive. Otherwise verbs of perception would have neither the same function "shared knowledge and values" nor could contain any sign of willingness. The examples (6) and (7) are Deontic as the mental verb and colligation *you can see* indicates visual perception.

7. Yes <"clears throat"> and during the winter holidays I cut er <pause> cut the articles and I now, I, <u>you **can see**</u> the articles I cut during the holidays. (J40 53)

Another type of colligations in my material are *I can understand, remember* which is represented by 9 examples from spoken English while in the written one there are only 3 examples of this kind. The expression is different from those mentioned previously as they emphasize the ability or in the case of negative particle *not* inability of the subject of the sentence. So the collocation has deontic reading.

There are two other expressions connected with emotive mental process: *can stand* and *can bear*. They are partly synonymous and express the emotional attitude of the subject towards something.

8. Elizabeth is such a nice woman; she **can not bear** to hurt anyone. (CEX 2734)
9. Very few **can stand** it." (ABW 2195)
10. I don't think I **can stand** it any more. She's ripped up. (G0X 2955)

I have mentioned above whilst discussing idioms, that the addition of a preposition or adverbial particle triggers the extended meaning in the direction of Material, Mental or other type of process as in the example below.

11. The Diploma in Advanced Legal Studies is closely tied to the LL.M. and M.Sc., although it **can** stand as an independent qualification when it consists of study and examination in three courses selected from the LL.M or M.Sc. (HTD 1200)

This sentence is relational and differs from *stand* in example (10). The verb *stand* is synonymous to the verb *remain* and functions as possible characteristic or attribute for something in the sentence above.

B. ***As/so far as smb. can +V***

The modal pattern "*as* adverb *as* noun *can*" is the most often used pattern related to the modal verb *can.* There are some occurrences of the pattern in the corpora, but only one is related to mental process.

12. Erm they're awfully difficult to cast because the art of bronze founding on that level is at least as far as I **can** see, almost died out, I'm having terrible I've terrible trouble with getting bronze cast. (JTE 257)

The meaning of the verb *see* is synonymous to *know.* This collocation adds uncertainty to the validity of the statement; the knowledge is certain but only under the present circumstances and might not be certain in general which is clear in example above. The collocation functions almost like a modal, thus it has an interpersonal meaning.

3.4. 5 Conclusion

From the 1000 occurrences in written and 500 examples in the spoken data of the BNC, there were 95 examples (**9.5**%) in the written and 52 examples (**10.4**%) in the spoken corpus, denoting Mental process of perception, cognition and emotion. A wide range of different verbs are used to express the process.

Table 8. Mental verbs preceded by *can* in spoken (500 hits) and written (1000 hits) corpora of the BNC

Mental verbs	(frequent)	**S**	**W**	**TOTAL**	
	SEE	10	11	S	W
	Hear	1	5	17	24
PERCEPTION	Smell	2	1	%	
	Observe	0	4		
	Look	4	0	**3.4**	**2.4**
Others: View, Percieve		0	2		
COGNITION	SEE	11	14		
	Remember	7	4	32	48
	Think	7	4	%	
	Understand	3	5		
	Imagine	1	5	**6.2**	**4.8**
	Guess,	1	1		
	Make out	1	0		
Others:	Concentrate	1	0		
Predict, Assume, Consider, Believe, Trust Suppose, Hope, Recall,		0	15		
EMOTIVES: Appreciate, Please, Regret Expect, Attract, Prefer, Bear, Stand, Enjoy, Encourage, Inspire, Sense, Look forward to, Express.				3	23
				%	
				0.6	**2.3**
TOTAL:		52	95	**10.4**	**9.5**

As it is obvious from the **table 8**, which I constructed relying on the results from the BNC data; mental verbs are more frequently used in the spoken register than in the written one. On the other hand this should be surprising because phrases like: *I can see*, *I can understand, you can imagine, you can see* are so called conversational phrases and we use them a lot during interaction with our friends or with people with whom we do not need to be formal. Besides the frequency difference between two corpora there is difference in lexis. Even though spoken language is represented with a high amount of mental verbs, still its lexis remains simple compared to the written data.

The mental verbs vary according to the mental process type in the sentence. Perception encodes ability and thus they have Deontic interpretation. The meanings of cognitive and emotive verbs depend on context, whether it is permission, willingness or possibility. The Senser in all examples is animate. The first and second singular pronouns serve to compose fixed phrases or so called collocational patterns with some mental verbs: *imagine, see, remember, understand*.

The idioms/fixed expressions are represented with 15 examples, (1.5%) in the written and 17 (3.4%) in the spoken register. The most popular collocations are: ***as/you can imagine*** represented by 3 examples and ***as/ you can see*** – 5 examples, ***I can understand*** – 3 examples, ***I can (not) remember*** – 6 examples in the spoken material. The phenomenon is concrete when the mental verb indicates perception quality and even when the cognitive process is based on visual perception i.e. where there is a perception element in the meaning of the verb, otherwise in affected and cognitive mental processes phenomena are quite abstract.

Within the analyses of mental verbs I have picked up 4 major syntactic patterns. (See **Table 7**, section 3.4.3). With verbs of perception and cognition we can make a distinction between a completed action, with the complement expressed by both the bare and *to*- infinitive (C pattern),

and an uncompleted action or action in progress, expressed by an *–ing* clause (D pattern). But emotive verbs with an *ing*-clause suggest habituality or actuality while with the *to*-infinitive clause suggests potentiality and has hypothetical meaning. With verbs of perception (*see*) is used also *–en* clause, adj/v-ed:

1. From the corner of my eye I **can** see his partner tangled with his chair in the dirt behind the portacabin. (H8M 3079)

A Mental process phenomenon is sometimes expressed in a projected clause. Both *wh*-clause and *that*-clause are observed with mental verbs in the corpora. The most popular mental sequence is *I can see/I cannot see*. The amount of projected sentences with the mental verbs is higher in the written data.

Figure 9. *Wh*-clause and *that*-clause with Mental verbs in my material.

	Written	**Spoken**
***Wh**-clause*	13 (1.3%)	6 (1.2%)
***That**-clause*	14 (1.3%)	3 (0.6%)
Total:	**27 (2.6%)**	**9 (1.8%)**

3.5 Material process

Thompson (2004: 91) writes that: 'Material processes form the largest and most diverse category in transitivity'.

A Material process happens in the physical world unlike a mental process, which takes place in the mind of the Senser.

1. Four men **can build** a shed in nine hours. (FY9 586)
2. Oh well you **can call** me back. (HV0 435)

The amount of material verbs in combination with *can* is huge in the BNC (w –**41**%; s-**49.6**%). I discuss only those that present interest for my particular study, i.e. those most frequently collocating with *can.*

Table 9. Most frequent material verbs in my material.

Verbs	**Written**	**%**	**Spoken**	**%**	**Verbs**	**Written**	**%**	**Spoken**	**%**
Do	25	2.5	30	6	Give	4	0.4	9	1.8
Get	13	1.3	37	7.4	Help	8	0.8	7	1.4
Make	11	1.1	13	2.6	Take	11	1.1	2	0.4
Go	9	0.9	12	2.4	Find	9	0.9	8	1.6

3.5.1 Some notes on *can* with material verbs

A great deal of Material verbs are more complicated and complex than mental verbs, which take place, in the internal world, our minds. With all the verbs (**Table 9)** the modal auxiliary *can* has different modality readings as well as carries the different messages in the utterance. In previous chapters I have emphasised the importance of context, how it assists us to reveal different dimensions of the combination of modal and material verb. For example: "*He can come*" – ability, possibility, permission. But the sentence (1) it is possibility that he will come through window.

1. Here's Edward. Open the window and he **can** come in this way. (G0Y 1431)

Let us take verb *DO,* which is most frequently used in the corpora:

2. I **can do** it. (B2F 1365)
3. Hope I **can do** the same for you some day. (AC2 2519)
4. Why do I think I **can do** the job better than the other applicants? (BNA 154)

The sentences (2) and (3) express Deontic modality, although they have different modality meanings. One (2) encodes ability while another (3) indicates more willingness to do something good for someone in return. The last sentence (4) is deontic also but it contributes a strong epistemic sense as well, such as *I think,* which is based on point of view of the speaker more than the reality.

The material verb *bring* mostly appears in the data with potentiality meaning. The agent of material processes frequently is an inanimate concrete subject or abstract notion. In all cases below *bring* is synonymous to *lead to* and *to cause* than to physical motion like in the sentence: "She brings me water".

5. Through all these means small bodies **can** bring to the terrestrial planets volatiles in sufficient. (GW6 468)
6. I feel lonely and neglected. Being sick **can** bring with it a degree of sympathy and attention. (CE1 1644)

A Material verb is traditionally described as *the doing* word of the sentence. To be more precise these are the verbs involving *physical action*: *running, helping, crying, hitting* and so on. It is very interesting to observe different meaning extensions of some material verbs, which sometimes do not reflect a material process. The verb 'find' in the sentence (7) is a material verb indicating physical action 'try to find in order to get information'. Now compare this sentence to another sentence from the corpus (8):

7. Er again I think you **can** find some information on that in Thorn and Henley. (G4W 186)
8. Charter 77 was published ...**I can find** no rest and, I am sure of it. (CCK 845)

In the example (8) modal *can* strengthens emotions of the person and it is more mental and emotive state of the speaker than physical action 'to find'. So the latter can be considered as example of a mental process, which will be synonymous to: *I can not relax.*

On the other hand utterance *I can find no rest* implies strong motion, activity, mobility, flexibility, that someone can not find the place, he/she is stumping up and down, wandering without reason restless. Sometimes, it is very difficult to find the borderline between mental and material processes:

9. Now I **<u>can</u> see** no good reason for that being allowable, I'm not quite sure how you stop it, but I think it-- it's, it's a basic problem with bulk transfer, the individuals do not have a say.(K77 324) = FIND
10. It ke-- Yeah we **<u>can</u>** still **see** the telly. (JNX 619) = WATCH
11. There is and the County Council has indicated that if circumstances change, er then it **<u>can</u> look** at this again. (J9U 370) = REVIEW, DISCUSS
12. You're not supposed to **see** them, but you **<u>can</u>**. (H85 216) = VISIT

The verbs that are prototypical for a certain category like those in the examples above (9, 10, 11 and 12) can be influenced by context; nuances of new meanings can be carried over by other clause constituents, which could make them less straightforward. All these can be used metaphorically to express some completely different meaning than the one expected. A Material process typically involves some kind of physical action. But most of the time people do not use the words indicating indisputably Material processes. The words they use are often a mix of different meanings, creating a sort of cocktail of processes. The truth is that people use real language in ways far more complicated than the ones described in books, which are really difficult to classify.

3.5.2 The Agent +can + material verb + the Goal

Material processes involve at least one participant, the Actor or the action *performer*. Every Material process has an Actor, but this actor is not always explicit, for example in passive constructions or elliptical sentences. Besides the Actor, Material process can also involve a second participant, the entity affected by the process – the Goal. In addition there can occur other

participants as well, such as Range (Scope), Beneficiary and Circumstances. All these elements will be briefly discussed during the analysis although the main interest of my study falls on the Actor.

Within modality in general, first person singular '*I*' occupies a peculiar role. '*I*' is the only person that is more commonly associated with deontic interpretations than with epistemic interpretations, irrespective of register. The reason for this is due to the fact that speakers may talk confidently about their own abilities and inclinations.

1. I don't ask for anything more. **I can wait**. Goodnight, Miss Everdene. (FRE 908).
2. I said didn't I, you were very good at that, but you need to do a few, just occasionally you think wah, **I can do** all these now, no problem. (JP4 352)
3. So people <unclear> oh **I can get** six windows for two hundred pound. (JA4 492)

All these examples serve to illustrate the Agent being the first person pronoun *I* while the combination of *can* + material verb demonstrates speaker's willingness and potentiality. However, as I have pointed out many times above, context is the determining factor to interpret modality meanings of the utterance and even these verbs sometimes have different modality readings.

4. **We can get** excellent rates from insurance companies. (KGU 1017)
5. We'll see if we **can get** you a piano. (HMD 545)

The sentence (5) has an element of the epistemic uncertainty. Generally conditional sentences always carry a strong epistemic sense because they indicate future action based on prediction and plan. Still, it must be classified as deontic because the modal can be paraphrased by "will be able to".

As a result of my work in the BNC I have discovered some tendency in relation with *I* + *can* + material V. Verbs like *accept, agree, assure, advise, help* involve element of willingness

and they are certainly deontic. *I can assure* in the sentence (9) functions to add force to the statement. It is willingness of the speaker to underline the things he is saying.

9. Then she told him calmly, shifting her gaze slightly, "I **can** assure you I'm here for one reason and for one reason only ... in order to help your cousin with her English." (JXT 316)
10. *How much are you smoking?" and I said "About a gram" and he said: "Well, all I **can** advise you is to go out and buy a gram of heroin and just wean yourself off."* (EDC1067).
11. I don't think I **can** accept that it's targeted towards industrial estates, it does not preclude office style campus development being included within it. (JAD 162)

The first person plural pronoun *We* shares the qualities of *I*. But the examples with Epistemic reading are more with *We* than with *I.* The reason is that *We* sometimes is used to refer not concrete people but entity like common society.

12. <pause> If that could be added <pause> that would achieve my objectives <pause> and we can all get on to <pause> the debate about V A T on. (J9M 507)

Sometimes possibility meanings also have slight elements of willingness when a speaker is inviting the reader(s) to participate and act together, according to his suggestion if we analysed it from an appraisal perspective.

13. Then all we can do is act like civilised adults and agree to differ," she said, hearing herself sound like an agony aunt trotting out hackneyed advice. (JY9 639)

The pronoun *You* appears in corpora more frequently with its potentiality/possibility meaning but rarely with ability context.

14. You **can** close it for the moment," Robyn said reluctantly, "until I've decided what to do." (HGT 1363) = Permission
15. You **can** do, I have decided. (HGF 1772) = Permission/Willingness
16. "You **can** take some fresh milk and some of my newly newly baked bread to the garden in the mornings. (FS2 1038) = Permission/Willingness
17. Mm yes, let's see what you **can** do for me first. (JJP 296) = Willingness
18. Er again I think you **can** find some information on that in Thorn and Henley. (G4W 186)= Potentiality

The sentences (14) and (15) express permission. The sentence (16) looks like permission but it is encoded in it willingness more than permission to take things. Underlining qualities like, *fresh milk, my newly baked bread* emphasise an offer. Both sentences (17) and (18) have root possibility meanings and there is a good deal of willingness in (17).

A combination of the second person pronoun *you* with modal *can* is more strictly factual and objective. It emphasizes simply that this is an option that's available.

19. You **can** buy them in your video store now. (H8M 1121)
20. "Listen. You **can** do it. You can win this. (ASA 1600)

Beside personal pronouns there are some indefinite pronouns which are used as animate agents of the material process. They reveal themselves especially in the spoken register of the BNC.

21. Some **can** stop. (FM0 503)
22. Those are driving quite sensibly and **can** stop. (FM0 511)

The indefinite pronouns like, *one, somebody, someone, anyone, anybody* etc are not concrete, specific agents but the general abstract actors. The modality contributes root potentiality meanings in these sentences.

As for the pronoun *it*; it is used very rarely with material processes (sent. 23). It is characteristic of relational processes more than materials.

23. This approach places a great burden on parents, since it requires tolerance and endless patience; but **it can** bring out the best in the child. (B10 97)

3.5.3 The syntactic patterns of the Material processes

In order to demonstrate different patterns revealed by analysis of material process in the BNC, *Can* + the verb *help* can serve as the useful sample to demonstrate this veracity, how it changes its meaning according to the grammatical pattern it occurs in:

1. "Perhaps I **can** help you. I have many contacts on the island. (JY4 769) = **V+N**
2. Suddenly he said, "I **can** help you plant them! Where's your garden? (FS2 567) = **V+ n + v-inf + n**
3. And we **can** help them with our bearing experience (JTA 531) = **V+Pp**
4. That's a dog lost from Bulwell on Sunday morning it's a Jack Russell with er long hair it's white and black and it's twelve years old and it's a bitch, seven five two seven nine O if er you **can** help there. (KM3 542) = **V+Adv**
5. In particular, the Partnership **can** help to lever funds from other organizations into inner-city investment projects; it can assist in the creation of innovative approaches towards inner-urban renewal; and it can operate as a last-resort funding for worthwhile projects that would not otherwise be implemented. (B1U 858) = **V+to-v-inf+Np**
6. Only you **can** help me to be sure. Will you?" (H8T 2776) = **V+n+to-link-v+adj**
7. Audiences **can not** help but cheer him on. (C9U 1542) = **Idiomatic expression**
8. I am bone of her bone, I **can not** help hearing, I am downstairs alone, (F9M 1260) = **V+v-ing = Idiomatic expression**

A. *Can + V*

The pattern (**A**) is realized into ways: either *can* is followed directly by verb (sent. 9) or standing completely alone (sentences 10, 11)

9. There will be lessons that we **can** learn. (A7H 729)
10. We have done what we **can**. (H90 1920)
11. I will bring you all the money I **can**. (FRE 1563)

The pattern belongs to deontic modality domain and is twice as frequent within in the spoken (6.4%) as in the written (4.3%) data.

B. *Can+ V+conjunction+V*

There is another pattern (**B**) similar to the pattern (**A**) discussed above, which is presented by 5 examples (0.5%) in the written and 4 examples (0.8%) in the spoken material. Here, *can* denotes inclination of the speaker and potentiality.

12. But er we **can go and ask** them, yes. (JTD 246)
13. We **can go and visit** Senga and thaim in Southern Rhodesia. (ALL 2669)
14. *Audiences **can not help but cheer** him on.* (C9U 1542)

The first verbs following the modal auxiliary in these sentences are material indicating physical motion while the second verbs (sentences 12, 14) are mental and verbal. Thus the pattern (**B**) involving different processes simultaneously is the way to compact information in one sentence.

The second most common pattern in the BNC is **C. *V+Np/Pp***, characteristic of transitive verbs, which take a complement. There are 342 (34.2%) examples of this pattern in the written corpus, whereas I have found 197 (39.4%) examples of the same pattern in the spoken register of the BNC.

15. You **can** buy them in your video store now. (H8M 1121)
16. "Listen. You **can** do it. You can win this. (ASA 1600)
17. Although I **can not** find a way of having mixed numbers. (HAC 10750)
18. It is sometimes said of Parliament that, say, it ***can*** make it a crime for a Frenchman to smoke on the streets of Paris, or that it ***cannot*** turn a man into a woman. (C8R 1217)
19. Also, like the liquidator, the administrative receiver **can** compel those involved in the affairs of the company to provide him with information relating to the company's affairs and is also obliged to report to the Secretary of State if he forms the opinion that the conduct of a director makes him unfit to act as a director of a company. (GVG 911)

Sometimes it is really difficult to draw clear line between the different processes. The sentences (17, 18, 19) have very strong relational process element although verbs: *find* and *make* are material unlike the verb *turn*. The expression in the sentence (17) "*can not find the way of*" is quite abstract activity indicating emotional state rather than action but the verb in the present participle 'having" is the indicator of the Possessive relational process. The example (18) is realization of both the Material [it *can* make it a crime] and the relational Attributive process [it *cannot* turn a man into a woman]. If we compare the verb "*make"* from the sentence (18) and the verb "*compel*" (19) they are synonymous in the very contexts and mean "*to force"*. In order to force somebody to do something one needs either to create particular circumstances or carry out the physical measurements. In both cases (18, 19) the Agent conducts the action which can be considered as the Material process.

D. *V + Adj/(v-ed)*

This pattern is represented by 3 examples in both the written (0.3%) and the spoken (0.6%) corpus of the BNC.

20. I **can die** happy now – (JTF 109)
21. It **can make** a barren woman fertile. (H89 412)

Root possibility, potentiality is expressed in these sentences above but the sentence (20) is interesting to draw attention because of the modal meaning. The verb *die* refers to unpleasant material process over which human being can not have control. One can not die according to one's wish unless one commits suicide. There is some kind of FORCE (section 3.3) which can cause the death. One can die because of age, worry, disease etc. Thus, the death is caused by the Force, which has potential to cease someone's existence. In my opinion, the sentence stands somehow between active and passive voices as it is completely neither active (I have not control) nor passive (the verb has not passive construction). Due to the adjective *happy* the person is rendered to have control over his death and gains potentiality. Namely the expression '*I can die happy now*' is metaphorical way to express that one can leave this world with relief, without regretting or remorse. The example (21) shares some characteristics with example (20). It also indicates potentiality of the Force (*it*) which can be associated with some kind of healing medicine enabling a barren woman to be fertile. The power of the Force is revealed by adjective *fertile*. The example (21) does not fall neatly into the category of a material process. Certainly, it involves some kind of physical action, namely the verb *make* but the contribution of the Attribute *fertile* characterising the Carrier is also very vivid and strong in the sentence. The action in this utterance can be paraphrased 'turn somebody into' which leads us to an Attributive Relational process. The example (21) is one of many examples, really doubtful ones; that carry features of both Material and Relational processes and one can never be sure whether their classification is correct.

E. *V + v-ing*

The pattern (**E**) is very popular within Mental process but in relation to Material processes I have found only 2 examples in the written and just 1 in the spoken material.

22. I am bone of her bone, I **can** not help hearing, I am downstairs. (F9M 1260)
23. In each domain, what counts as being rational **can** go on being developed.(G0R 582)

Taking into account the fact that the mental verbs appear in the Progressive very rarely the pattern must have some particular message to convey. Apparently, this is the way to form Progressive with the help of material verb indicating dynamic action such as 'help *(helping).* The Verb *be* is stative itself and in combination with Mental verbs it can not serve as a strong tool to indicate action in the process. Let us compare this pattern: {***Can +V + v-ing***} to the pattern analyzed in the section 3.4.3 - {***Can* + V+ NP+ V-ing**}:

24. I **can** hear him coming in. See you! (FRS 2100)
25. I am bone of her bone, I **can** not help hearing, I am downstairs. (F9M 1260)

On the one hand these two sentences are alike in indication of present Progressive tense. On the other hand they have different constructions and the modal *can* modifies mental verb "hear" in one case (24) and material one in another (25). I talked in the section 3.4.2 that modal *can* assists mental verbs in expressing Progressiveness when they appear together. Progressiveness is associated with reality. The sentence (24) can be interpreted in a following way: Ability of the speaker to hear something which is real action in progress, and possibility of the truth of the utterance that it is exactly the person whom the speaker expects in the process of coming in.
It is very interesting to underline that in the sentence (25) the perception verb itself, stands in progressive; *hearing*. Although verb *help* does not usually occur in combination with *–ing* when it does, it gains unreality meaning. Thus, action in the first one is real whereas the action in the second one is not. Apparently, the speaker is a witness of something unpleasant and as a witness he knows whose voice it is. This is underlined by modal *can* indicating ability to identify the

voice. But how real is the action in the moment? The perception verbs in the present participle denote abstract unreal actions. They indicate mental, emotional and spiritual state of the Agent rather than modifying the action in progress itself. As for the function of the modal *can*, it is purely Deontic, despite the negative particle 'not', which turns the notion of ability into inability as a rule, but it even stronger emphasizes it. This is due to the material verb *help,* which can be paraphrased as: 'I am not able to stop/cease hearing and, which is equal to positive sense of ability: *I can hear*, *I am able to hear*. The modal verb *can* defines not only the verb *help* like in the sentence (26) but perception verb *hear* too.

26. Some people think drugs **can help you** find God, or discover the meaning of life. (A01 110)

In this sentence *can* marks material process and expresses potential action, as this is the literal meaning of *help*, while in (25) *help* is more abstract.

There are some **syntactic patterns** which are observed within the material processes but they are presented in few examples. All the patterns that are less frequent I collected under the pattern **F**. - ***V +to-inf-v*** (w-1.7%; s-0.8%), - ***V + Be +v-ing*** (only one example in the spoken corpus), - ***V +have +v-ed*** (only one example in the written corpus).

27. Through the distinctions he makes between civil association and enterprise association and between the state conceived of as societas and universitas we **can begin to understand** the intellectual foundations of the tension within normativist thought between law and administrative power. (EAJ 607)
28. *what I'm trying to help you practise, cos we're not, we're very good at asking closed questions in conversations but don't very often recognize, but you know, we, we we we, we'll zip backwards and forwards, and that's okay, but I want you to do consciously is know what type of questions you're asking because you **can** sometimes **be hitting** a brick wall and thinking I'm getting anywhere here and it's because you're asking too many closed questions.* (KGU 1631)

29. The fall in birth rate, the growth of the elderly population, the rise in the divorce rate, the increase in the number of one-parent families and other factors leading to lower average household size, along with such developments as the increase in the number of working wives, **cannot have taken place** without having measurable effects on the geographical distribution of population, especially since, as argued in the previous chapter, these changes have tended to occur much more rapidly than the housing stock can adjust to their new requirements. (FP4 709)

The progressive aspect typically adds to the verb meaning of duration, ongoingness, that action in progress. It is important to point out that duration is limited for definite time in progressive. The sentence (28) can be understood as: 'during the process of thinking and searching solutions one realises himself into hitting a brick wall'. The process is Material, involving physical activity of hitting although there is secondary process in the sentence which is going on simultaneously with Material process - the mental process of cognition to find the way out from the difficult situation. The modal auxiliary *can* marks possibility of the action and not usuality. What we call modal certainty is not the hundred per cent certainty of a categorical assertion. An unmodalised declarative constitutes a far stronger statement of fact than any additional expression of certainty can. If for instance I know for a fact that you are hitting the walls when you are trying to find solutions, I simply say: 'you are hitting the brick walls while thinking of solutions'. In the sentence above the speaker is admitting an element of doubt. Modal certainty is therefore, diminished certainty, chosen either because the speaker's state of knowledge has not permitted a plan assertion or because the speaker does not want to exteriorise commitment at any given moment in a particular interpersonal interaction. In many cases, reasons of politeness or the desire to avoid commitment provide the motivation for a modalised rather than a categorical assertion.

The Perfective aspect makes the modality of *can* Epistemic, particularly in interrogative and negative sentences. If the complement of the epistemic modal contains the periphrastic perfect

(have plus the past participle), the complement has a past-shifted interpretation relative to the modal time (29).

G. *Th-clause/Wh-clause*

There are some examples of projection within the Material processes in my material of the BNC: 4 examples (0.4%) in the written and 6 examples (1.2%) in the spoken material.

30. And you **can verify** that the guns are licenced?" (G0P 29)
31. Okay just so I **can assess** whether I can give you reduced cost advice under the legal aid system, are you working at all at the moment? (JNT 9)

Most of the cases of projected clauses are *wh*-clauses in my material. The content of sensing or interacting verbally can sometimes be presented in a separate clause, a projected one, which is typical for the Mental (cognition), and Verbal processes. Material process very rarely can include a projection. As a justification for seeing the examples (30, 31) as material I will start by discussion of the verbs in the sentences. *To verify* (sent. 30) means 'to confirm'. In order to confirm something one needs either to talk which is a Verbal process or there are some other forms of confirmation such as presenting documents and licence, namely 'to show'. In the example (30) the speaker inquires the written document, licence for using the guns. Thus, the process should be considered as a material process, where the agent must conduct physical action of presenting or showing. The verb *assess* (sent.31) is more complicated as it leads us both to mental process of deciding something and to a material 'estimating something' as well. As it is obvious from the context action is related to taxes and costs which gives me right to interpret the process as material, namely as an action of estimating something carefully rather than just making somebody's mind up.

3.5. 4 Idioms/ fixed expressions/ multi-word verbs in the Material process.

The fixed expressions revealed by analyzing the corpora in the BNC are relatively few:

A. *AS FAST AS SMB CAN/ AS SOON AS SMB CAN*

I have already discussed the modal pattern "*as* adverb *as* noun *can*" in section 3.4.4 in relation to Mental processes. But I mentioned that there was only one case (as far as I can see) when the pattern indicates mental process and the rest of occurrences were related to Material and Verbal processes. Here, within Material process, we can outline the following patterns: *as fast as smb can* and *As soon as smb can.*

1. I lower my hand, ride as fast as you **can**! (H9C 2151)
2. He says sometimes it's a pain cos you get up and if I'm late I've got to rush around and go as fast as I **can** to school and you get cold and your fingers start freezing up so it's not much fun. (K27 2584)
3. "No, I'll send a couple of my blokes, as soon as I **can**. Could you do us a real favour. (AB9 1654)
4. In fact, I was thinking I might try and start something along those lines as soon as I **can**. (H8S 3486)

It is noticeable that in these patterns modal auxiliary *can* is not followed by any verb but stands alone. However, the lexical verb which expresses real action stands before the pattern. This is another interpersonal dimension to indicate different meanings, which again depends on the Agent, process, sentence type and certainly on context. These sentences are Deontic. In the first sentence speaker is the first person *I* who gives order to second person *you*. Thus the sentence is imperative, and the speaker allows to the listener – *you,* to ride '*as fast as one can'*. In the second sentence speaker expresses himself/herself with first person pronoun *I* and talking with second person pronoun *you* again. However, the sentence is not imperative but declarative; as the speaker is narrator and in accordance with it she is the conductor of the action. She can not rely on her ability that she will definitely be at school on time, but try 'to go as fast as it is possible

for her'. Her effort depends on circumstances more than on her ability. So, the first sentence expresses permission while the second can be classified as root possibility. Furthermore, if we compare the sentence (2) with those two sentences (3, 4) we will notice that here, the speaker's action to go to school as fast as possible is caused by necessity to be at school on time. In the sentences (3 and 4) there is more willingness of the speaker 'to send' and 'to start' than conditional possibility and potentiality to manage something. In my opinion, both patterns can express different modality meanings: permission (sent. 1), root possibility (2) and willingness (3, 4) that can be constructed by specific Agent, process, sentence type and context.

B. ***DO WHAT SMB CAN+(to-inf)***

The pattern realizes the Material process with the combination of *can* indicator of the mood of the action and *do* – Material verb conductor of physical action. This colligation is very popular in the written corpus of the BNC (5 examples).

5. "I'll obviously do what I **can** to help," she began, sipping her drink. (G1W 76)
6. Still, he thought, I must do what I **can** to protect the lady, to whom I owe so much, and whom I have certainly, for better, for worse, released from sleep and silence (APR 1530)
7. OK. I'll do what I **can**," said Karen slowly. (GUL 364)

The first person pronoun *I* is the Agent in all the examples from the corpus. The pattern is clearly Deontic as it is based on actor's willingness, enthusiasm 'to do her/his best' involving the ability to achieve the goal. This colligation mostly appears within subordinating sentences, where it occupies part of the principle sentence like in the examples (5,6). The example (7) demonstrates the pattern is used in simple sentences as well where the colligation receives new meaning – promise, giving the word. It can not be interpreted as a simple possibility that the speaker will do her best nor ability that she is able to do it but the willingness to do. This is easy to discover especially, if we refer to context preceding and following sentence (7).

[359 Can't I tell my boyfriend Drew?" asked Karen. 360 "No. 361 It could be dangerous for anybody who knows." 362 "I see. 363 OK. 364 **I'll do what I can," said Karen slowly.** 365 "Be very, very careful. 366 You're a brave girl. 367 I'd like to thank you for agreeing to do this."]

C. *ALL + SUBJECT + CAN + V + IS*

This colligation can be considered as a fixed expression as the auxiliary verb in it must be present to highlight the various values of the modality system. There are 4 examples (0.4%) in the written and 2 examples (0.4%) in the spoken data of the BNC. So, the percentage is equal the written and the spoken registers. This colligation is especially popular with the verb *do.*

8. *How much are you smoking?" and I said "About a gram" and he said: "Well, all* ***I can*** *advise you is to go out and buy a gram of heroin and just wean yourself off."* (EDC 1067).
9. Then all we **can** do is act like civilised adults and agree to differ," she said, hearing herself sound like an agony aunt trotting out hackneyed advice. (JY9 639)
10. All I **can** find out from the organisers is that "preliminary judging will take place between 1st June and 14th July and final judging will be completed in August and results announced in early September". (HPK 223)
11. I said All you **can** do basically is go to a solicitor, get a court order, unless I can persuade the lady herself <pause> to let you have the furniture. (KNC 959)

These sentences are of an instructive type and this is the hallmark of deontic modality. They are used to re-order information. The speaker *I,* in relation to listener *you,* is giving instruction, advice to conduct the action (sentences 8, 9) or the speaker *I* is talking about his/her chances to act (sentences 10, 11). What is also worth noticing is that all these sentences are complex in their structure.

12. I'll bring you all the money I **can**. Goodbye!" (FRE 1563)

There are some important differences between this example and the sentences discussed above. First of all this sentence is simple in its structure. The second, the modal auxiliary stands alone and the action is indicated at the beginning of sentence with the future auxiliary element *will* + material verb *bring.* The utterance *I'll bring* sounds as a promise but it is based on the future ulfilment of the action, where future element indicates the potentiality or root possibility.

In the expression '*all the money* it is likely that ellipted verb is a material one *bring* or something like *provide* and *get*.

Another sentence which can be confusing in relation with the colligation: '*ALL + SUBJECT + CAN + V + (IS)'* where *can* together with *all* function as modifiers in the sentence and occupy part of the complement:

13. Yes cos you need <u>all the contacts you **can**</u> (FMD 420)

Thus, to identify the right pattern we need to encode it in the following way: ***ALL + pronoun + can + Verb+ (IS).*** I wrote *pronoun* deliberately instead of a noun because none of the examples include a noun in this position. Then *can* necessarily preceeds the lexical verb in order to indicate the mood of the process. The colligation is purely Deontic as well emphasizing the potentiality.

D. *CAN (not) AFFORD*

The collocation occurs 4 times in both parts of my material. However, the percentage of frequency (0.8%) in the spoken corpus slightly exceeds the frequency (0.4%) in the written one.

14. Thank goodness for my spare tyre, <u>I **can** afford</u> to lose a bit of that. (ACK 2405)
15. My ex-husband if he can afford holidays in Bermuda I'm sure <u>he **can** afford</u> children. (HVC 290)

The collocation *can afford-* selects a sense of *can* that can be paraphrased as "circumstances make something possible or appropriate". The expression has a Deontic reading as it refers to the ability of the subject to pay for something.

The collocation appears with the negative particle *not* only twice in the written data and in both cases the collocation expresses Deontic – inability of the Agents of the material process.

16. Although you may not want to go on a course, or <u>**cannot** afford to</u>, it is a good idea to ask a friend or relative you feel comfortable with to play the part of the interviewer and let you have a dummy run. (BNA 1040)

17. Constructions built so that people who **can not** afford to leave or sail away can feel that they are almost leaving. (AR2 121)

E. ***CAN (NOT) HELP + V-ING/ CAN (NOT) HELP + BUT +V***

The verb *help* appears with different patterns in the data for material processes (discussed in section **3.5.3**). There are 8 examples (0.8%) in the written and 7 examples (1.4%) in the spoken data of the BNC. I mentioned that in idiomatic expressions the meaning of the new unit couldn't be predicted from the meaning of its individual constituents, i.e. the new meaning is idiomatic like: *'can (not) help'*. The leading colligations by far in the written data were with verbs either a present participle (sentence 18,) or with: *but +inf-v* (the sentence 19):

18. Audiences **can not** help but cheer him on. (C9U 1542)
19. I am bone of her bone, I **can not** help hearing, I am downstairs alone. (F9M 1260)

Verbs which follow the pattern *can not help* represent a process which might lead into emotions, perceptions, thoughts, where it seems fitting to remark that someone *can not help it.* The thing is that it is the verb *help* that I count material here, and not the verb following it. Thus, I will classify it as the Material process and bring for proof another idiomatic expression which is similar to *can't help*:

20. The famous sequence where the heroine **can not** stop thinking about the blood-stained knife. (B2Y 214)

The utterances indicate effort to avoid, stop something it is not possible to give it up and in a particular period it continues. The verb *stop* expresses material process.

The idiom *can't help+v-ing* is Deontic where *can* is necessary in order to show inability as the heroine is unable to stop thinking.

3.5.5 Conclusion

The results from the BNC confirm that the modal auxiliary *can* is most frequently used with material verbs. With this use it appears 410 times or accounts for **41** per cent in the written and 248 times accounting for **49.6** per cent in the spoken data.

Sometimes, it is very difficult to find borderline between Mental and material processes. It has been observed that some Mental verbs in combination with *can* indicate material process: (*can see, can look at)* or material verb itself indicate mental process (*I can not help hearing*). Material processes involve the following participants: **The Agent +can + material verb + the Goal.** There can occur other participants: Range (Scope), Beneficiary and Circumstances. It may be noted that the Agent or performer within material processes is realised by both animate and inanimate nouns expressed by nouns, NP, Pp, personal pronouns and indefinite personal pronouns such as *all*, *some, somebody, someone* or demonstrative or referential units like: *that, this, those, these, it* etc.

An examination of the occurrences shows that 6 syntactic patterns are most frequent in the Material processes (A, B, C, D, E, G).

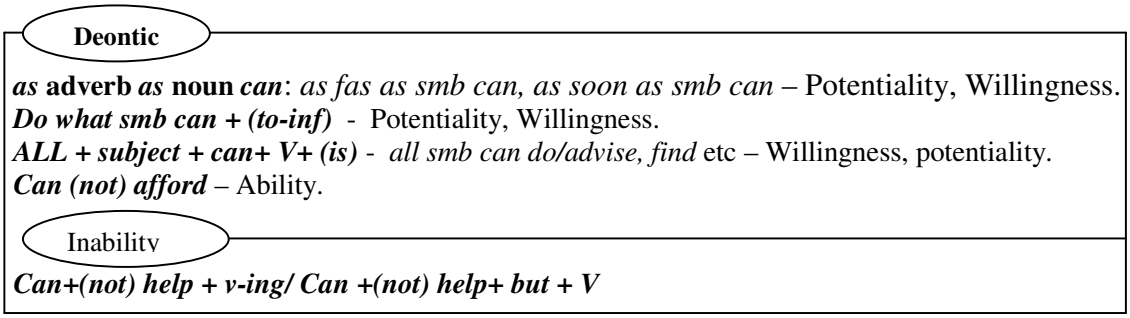
Table 10. The syntactic patterns within the material processes in my material.

	A. *Can + V*	**B. *Can+ V+but/and+V***	**C. *V+Np/Pp***	**D. *V + Adj/(v-ed)***	**E. *V + v-ing***	**G. *Th-/Wh-clause***
Written	3.6 %	0.5 %	34.2 %	0.3 %	0.2 %	0.4 %
Spoken	6.4 %	0.8 %	39.4 %	0.6 %	0.2%	1.2 %

Under the sign (**F**) I collected 3 the least frequent patterns: ***V +to-inf-v*** (w-1.7%; s-0.8%), ***V + Be +v-ing*** (s-0.2%), ***V +have +v-ed*** (w- 0.1%).

A wide range of different **fixed expressions and idioms** in combination with *can* occur denoting the material process in my material of the BNC. All colligations revealed by analysis of the material processes have Deontic interpretations:

Figure 10. Fixed expressions and idioms within the Material processes:



3.6 The Verbal process

A verbal process is the process of communicating and realized by such verbs as *SAY* (W-1.8%; S-1.8%), *ASK* (W-0.2%; S-0.6%), *Tell* (W-1%; S-1%), and other verbs which have a low frequency percentage in the BNC: *announce, assure, report, enquire, persuade, urge* etc.

1. We **can** enquire into the extent to which a form of thought (G0R 538)
2. Unless we **can** persuade them in two years costs have gone up and of course we will. (JA4 1159)
3. You **can** ask them, if it's urgent, then they will do that. (KNF 770)

The verbal process has characteristics of both material and mental processes. Therefore I will touch upon the topic briefly, as I have to repeat the many points discussed in previous sections.

The main participant or **the Sayer** of the verbal process is typically human. This is not surprising, as only humans beings are gifted with verbal speech to talk:

4. A human **can** tell you of this experience verbally; with animals you can only study what they do. (GU8 964)

The Sayer very often is realized by the first and second person pronouns: *I, we* and *you.* The second person pronoun *you* appears slightly more (7 instances) with Verbal verbs than other pronouns in the BNC. Besides, there can be some exceptions when the Sayer can be anything

which puts out a communicative signal (clock, sign, car, the sun, the earth). In these uses the Sayers are used metaphorically, i.e. inanimate things are given qualities of human beings.

> 5. In addition to its magical effects, the clock **can** lash out with its pendulum chains (which are amazingly "elastic"), and it can generate illusory Clone Images of itself. (CLK 1117)

A second essential participant indicating what is said, asked or reported is the **Verbiage**, which often is realized by a NP or by a clause. The latter is very common in reported questions and directives. However in some verbal processes there can be a **Recipient** as well.

Table 11. Verbal process and its participants:

N: sentence in the BNC	Sayer	Verbal pr.	Recipient	Verbiage
(H94 1011) But the rooms are taken,	I	can assure	you.	
(AS0 573)	He	can ask	the school, the major motoring associations, his social worker or his general practitioner	whether he needs attend one of the recognised centres for handicapped drivers.
(KNC 959) Get a court order, unless	I	can persuade	the lady herself <pause>	to let you have the furniture.

The first sentence denotes Deontic modality – the speaker's ability and desire to assure the listener. However, how he will manage it under question he is wholeheartedly committed to the truth of the proposition. In other sentences the speakers are not making categorical assertions, but are rather modifying their commitment to some degree by expressing a judgement or assessment of the truth of the situation. The second sentence sounds like a suggestion to a listener: 'you can go and ask the school or other alternative bodies and authorities to get exact information'. On the other hand if in the second sentence the school was only place 'to ask' the proposition would turn into Deontic permission. But because there are several alternative people to ask different possibilities are presented in the statement. In the last sentence the modal *can* stands in conditional clause and it expresses a relation with reality though the process itself is hypothetical. The speaker just

intervenes in the speech event. The process action is predicted and may be carried out in the immediate future.

3.6.1 Syntactic patterns with Verbal verbs

I counted 39 examples (**3.9**%) denoting a Verbal process in the written corpus and 25 examples (**5**%) in the spoken corpus of the BNC. The most frequently used verbs denoting verbal process in the BNC are *say* and *tell*. They are distinguished by certain semantic properties, which are reflected in the grammar (see the sentences below), which will serve as the best examples to demonstrate various types of patterns occurring in the Verbal processes. Depending partly on the verb, the following patterns can be distinguished:

A. *Can + Verbal V*

The pattern occurs 7 times (0.7%) in the written and 4 times (0.8%) in the spoken material. It represents some fixed expressions where the utterance ends with a verb such as: *all I can conclude*, *all I can say, as far as I can tell/say*, etc.

6. There's no family anywhere, as far as I **can tell**," said the other voice. (G01 3769)
7. I shall take advice. That's all I **can say**. That's f-air." (APR 2315)

Modal verb *can* modifies verbal verbs in the sentence above and the expressions have deontic interpretation of ability. A verb in these fixed expressions not always stands alone but is followed by a complement or other recipients.

B. *V+Np/Pp*

The verb *tell* requires a Recipient as Indirect Object, whereas the verb *say* does not have a Recipient as Indirect object. The verb *say* is followed by the Verbiage. (Sometimes, the Recipient is unrealized in stereotyped expressions such as *tell the truth, tell a lie, tell a story* and also in the elliptical expressions illustrated in the examples 6 and 7 above).

8. I **can tell** *you one thing,* I won't be here to be used as a buffer. (AT7 2886)
9. You **can tell** *me the things* I need to know and I can go away. (FS8 559)
10. So, now that we are becoming friends, you **can tell** *me your name*." (FNT 381)

VS

11. As soon as someone gives you ten to the minus eight, you **can say**, Well if I want to convert that into real money, <unclear> (K6J 213)
12. But you, you **can say**, because people are working more effectively therefore they're more cost effective. (G4X 1974)
13. At least we did have <unclear> boss, sometime <unclear> it's not being good <unclear> you **can say**, they've been good, and they say ah, it's just what Phil wants. (JJ7 396)

This pattern is expressed by different Verbal verbs, represented in the written material with 19 examples (1.9%) and in the spoken with 13 examples (2.6%).

In the sentences with the verb *tell*, again the context is the determiner of the domain of the modality system. All these sentences can be classified as Deontic. In the utterance '*I can tell you one thing'* stress is put in the information will follow after. So it is the vivid desire of the speaker to emphasize the things she is saying to get the listener's full attention. Although, the sentence (10) conveys the speaker's enthusiasm and willingness to know the name of the new friend the proposition sounds like permission. Sentence (9) differs from the two with its potentiality/ root possibility reading. The speaker is neither conductor of the verbal action nor a Sayer. He plays role instructor: the person who gives commends or orders to others to carry out the action. Taking into consideration the fact that the listener is talking about someone's ability and not her/his own the proposition can be classified as potentiality 'to be provided with information the speaker would like to know".

The examples with verb: *say* illustrated above have future reference and underline potentiality. But the colligation *You can say* itself is epistemic, based on a speaker's viewpoint and supposition that someone can say something.

C. *V+n/Np+to-inf*

14. I said All you can do basically is go to a solicitor, get a court order, unless I **can** persuade *the lady herself* <pause> to let you have the furniture. (KNC 959)

The reported directives in the pattern above are expressed very often with the use of verbal verbs like *Persuade, ask, urge, tell* ***+to-v-inf***. This verb *tell* can only indicate reported directives with the help of *to-infinitive*.

15. You **can tell us to** go if you want. (KP1 6929)

There is only one example representing this pattern in the written BNC. *Can* emphasizes deontic modality; ability in sentence (14) and potentiality in sentence (15).

The verb *say* needs another pattern to express the Reported directives. It realizes the Reported statements with this way as well. (See pattern D.)

I have talked about capacity of the Verbal processes to project in section 3.4.3.

D. *V +that-clause*

The patterns *V+ a* modalized *that*-clause is used in two ways:

- Reported directives:

16. Some say that ignorance of the law is no excuse, since any man **can say** that he did not know, and gain exception thereby. (FSE 1300)

- Reported statements:

17. At least we did have <unclear> boss, sometime <unclear> it's not being good <unclear> you **can say**, they've been good, and they say ah, it's just what Phil wants. (JJ7 396)

In the last example, *that* is omitted but understood. Therefore, all the similar examples I consider expression of the pattern: V+*that-clause.* The number of occurrences of this pattern in the BNC is 9 examples, the frequency of it is 0.9 per cent for the written data and 6 examples, 1.2 per cent

for the spoken corpus.

E. *V+ wh-clause*

Another type of projection is formed by so-called question words, which function as subordinator in dependent clauses. The pattern with the Verbal verbs are used to express Reported questions:

18. That's it M A L E so it's perhaps not a bad idea that we spell it differently cos you **can tell** which one you're talking about then. (FMG 178)
19. We **can not say** what the scope of such a review should. (B0H 1771)
20. Because shareholders **can not tell** how hard managers are exerting themselves. (FP21199)

This pattern is characteristic of the Verbal and Mental processes. The *Wh-* clause is a finite clause expressing a nominal entity or abstraction, which depends on clause form itself: a nominal relative clause (sentence 18), indirect interrogative (sentence 19) or indirect exclamation (sentence 20). On the other hand, sentence (20) may be ambiguous: either interrogative or an exclamative interpretation being possible: In the Interrogative interpretation *can* certifies doubts of the speaker about shareholders' knowledge and understanding of the event. The implicit question has Epistemic reading. While in the exclamatory one, managers are exerting themselves really hard and this is a fact. Thus, it is an exclamation by the speaker. *Can not tell* sounds more assertive and indicates Deontic modality about either inability of shareholders to explain it properly (*tell* has metaphorical meaning *to explain* and *describe*) or prohibition to talk about it.

3.6.2 Idioms/ fixed phrases

The degree of semantic cohesion between verb and particle varies considerably from one use to another, and it is difficult to measure the idiomaticity accurately. A simple verb such as '*bring'* can have different meanings in the sentence, different functions and consequently can indicate different processes too.

1. I **can** hardly bring myself to tell you. (H9Y 283)

The expression above provides the meaning that speaker is trying to conduct verbal process of telling. But he is not managing to provide with the information, with the right words and in an appropriate way. The modal auxiliary *can* is a marker of the verbal process *tell*, while the material verb related to physical action of *bringing* just strengthens the meaning of an attempt to carry out the verbal process. Thus, sequence **'to bring oneself to tell smb/ to bring oneself to say smth'** must be a fixed expression, paraphrased as "to manage/ to take courage". With the help of the modal *can* the utterance obtains a Deontic interpretation; even though the subject is not able to do it in a proper way still has potentiality to tell. In my opinion the expression must be considered as the pattern of Verbal process as it functions to manage or fail to carry out verbal action.

Another set of fixed expressions or popular collocations I found in the BNC were:

Willingness **- you/I can tell.**
Potentiality/Root possibility - **all I can say**
Potentiality/Root possibility **- as far as I can say**
Willingness **- I can add.**
Potentiality/root possibility **- I can only say**

In the sequences with first person pronoun *I* and modal *can* in combination with *verbal* verb the speaker clearly gives advice rather than an instruction. These utterances denote deontic domain of modality, namely potentiality/root possibility with a strong element of inclination. But if we replace the personal pronoun *I* with *you* as in the case of '*you can tell*' the expression remains still in Deontic domain but the meaning and the function of *can* turns into permission rather than willingness or root possibility. However, it again depends on the context where the expression occurs. *Unlike "You can tell*" the expression '*You can say'* is purely Epistemic.

3.6.3 Conclusion

The process of saying and communicating – Verbal process, in the spoken material, which is **5** per cent, exceeds the written one containing only of **3.9** per cent.

Figure 11. Verbal verbs in the written and spoken material**.**

VERBS	Written	%	Spoken
Say	**1.8**		**1.8**
Tell	**1**		**1**
Ask	0.2		**0.6**
Talk	0.1		**0.6**
Others:	Converse, Speak, communicate, conclude.		Add, Explain, Promise, count

The verbal process is constructed in the following way: **Sayer** + verbal process + **recipient** + **Verbiage**. **The Sayer** of the verbal process is typically human realised with personal pronouns *I* and *you* in my material. The Sayers can be used metaphorically, i.e. inanimate things gained qualities of human beings.

In some verbal processes there can be a **Recipient** as well. But the essential participant indicating what is said, asked or reported is the **Verbiage**, which is often realized by a NP or by a clause.

It has been shown in the preceeding sections that the written corpus is rich in vocabulary and multiplicity of the patterns as well, whereas the spoken texts are constructed by relatively simple and few patterns. However, due to relatively small corpus material this diversity is invisible within the patterns (**Table 12**) but somehow noticeable in fixed phrases where the spoken language contains simply constructed expressions comparing with the written sequences (**Table 13**).

Table 12. Patterns with *can* within the verbal processes

Patterns:	A. ***Can+v***	B. ***Can+v+Np***	C. ***Can + v+n+to-inf***	D. ***V +that-clause***	E. ***V+ wh-clause***	TOTAL
Written	0.7	1.9	0.1	0.9	0.3	**3.9** %
Spoken	0.8	2.6	**0**	1.2	0.4	**5** %

All the fixed expressions or idioms revealed by study of the verbal processes in my material are Deontic, mostly expressing potentiality of a speaker with a strong element of willingness.

Table 13. Idioms and fixed expression with *can* in the verbal processes. (Raw frequences)

Fixed expressions	Written	Spoken
I can say	2	1
I can add	0	1
You can say	2	2
You can tell	4	1
I can tell you	1	1
As far as I can tell	1	0
All I can say	4	0
Can hardly bring oneself to tell	1	0

3.7 Relational processes

Relational processes, or processes of 'being' or 'becoming' are processes in which a participant is characterized, or identified, or situated circumstantially. The process includes the following Relational verbs: *have, possess, own, suit, contain, belong, stand, turn, get* and so on.

The verb *BE* (W- 5.2 %; S-3.4%) is the typical relational process verb when it functions as a main verb.

The notion of being is reflected in languages in different ways. The participant in a relational process is termed the **Carrier**. The process itself appears to have less meaning than do Material processes and Mental processes, and serves merely to relate the Carrier to its **Attribute**

(Attributive relational process), to a **circumstance** (circumstantial relational process) or to the semantic function expressing **possession** (possessive relational process).

1. She **can be** useful to them. (HD7 1631)
2. All they're doing is asking for something to eat, but it **can be** quite painful. (K1F 3369)
3. Antichrist can be one who subtly tries to take the place of Christ from within the Church <end of voice quality>. (G5K 609)
4. Bargaining **can be** a business-like event, exploring the ground each party wants to cover on every point at issue. (CGD 1027)

From the Attributive process examples it is obvious that there is an intensive relationship between the Carrier and its Attribute. The contribution of the Attribute is to characterize the Carrier (sentences (1, 2), or to identify it (sentences 3, 4). The difference between these two types of Attribute is reflected in the syntax in some ways. (Halliday 2004a: 215). The one of a number of significant distinctions between these two modes is that only the identifying type is reversible: (*A business- like event can be bargaining*). The participants in an Identifying Relational process are called Token and Value (e.g. Thompson 2004:98; Halliday 2004a: 230).

There are a wide variety of verbs in English that express both state and transitions. Thus, the process itself can be expressed either as a state (sent.5) or as a transition (sent. 6).

5. It is gratifying to find that I **can** not only **look** good, but I can look respectable. (HGL 2220)
6. Without goals to strive for our lives **can become** empty, meaningless, and stressful. (EB1 1183)

With dynamic verbs of transition such as above: *become, change, convert into,* and others like: *turn (out), get, grow, run, end up* the Attribute exits as the result of the process. (Sentences 6). As regards sentence (5) as state, the originally mental process verb *look* is synonymous to *seem.* It can be used to lend an additional meaning of 'sensory perception' to the relational process.

Other realizations of transitional process with modal *can* + resulting Attributes include the following:

7. DREAMS CAN COME TRUE (CH1 2843)

In all the cases function of modal *can* as always depends on the context it occurs in. In attributive relational sentences *can* mostly denotes Epistemic possibility, while in the identifying process, especially with dynamic transitional verbs it can have potential of Deontic meanings.

In the Circumstantial relational process of being the circumstantial element plays an essential role to the situation.

8. "I **can be** there at odd times. (CCM 2584)
9. Acceptance of an authority **can be** an act of identification with a group because it can be naturally regarded as expressing trust in the person or institution in authority and a willingness to share the fortunes of the group which are to a large extent determined by the authority. (ANH 280)

There are many types of circumstances, which in this way stand in an intensive relationship with the Carrier. In the sentences (8) there are locations in space and time and in sentence (9) it is circumstance of means.

In possessive relational process the relationship between the two entities is one of possession and the most frequent possessive verb is *HAVE* (W-1.5%; S-1.4%).

11. It **can have** one of several headings; a frilled channelled (GUB 900)
12. In here," he said. "You **can have** 10 minutes. (GWC 40)
13. These **can include** small areas where farming is handicapped but needs to continue in order to conserve the countryside and to preserve its tourist potential or to protect its coastline. B02 71)

3.7. 1 Syntactic patterns with relational verbs.

Relational processes are extremely common in English. There are 91 examples (**9.1**%) of relational process in the written and 26 examples (**5.2**%) in the spoken material.

A. ***Can + relational V***

Unlike other processes this pattern is less frequent in the relational one. This is the case when the sentence ends with a verb, which functions as intransitive. I have collected 2 examples (0.2%)

from the written and 4 examples (0.8%) from the spoken material.

1. This kind of thing has an important influence on the degree to which congestion **can arise**. (J9S 424)
2. Obviously when you're driving along the road the observation y-- wants to be up the road as far as it possibly **can be**. (FM0 572)

The attribute expressions of temporary state is realised by a noun, NP (sent. 3) and Pp (sent 4) such as in the pattern: **B.** ***Can +V + NP/Pp*** or by an adjective (sent. 5) and a participle (sent. 6) such as in the pattern: **C.** ***Can +V +Adj/v-ed***.

3. These **can include** small areas where farming is handicapped but needs to continue in order to conserve the countryside and to preserve its tourist potential or to protect its coastline. (B02 71)
4. But he fell victim of the dawning disenchantment when he declared in an interview: "TWO Tribes'" **can be** number one for nine weeks and then it's toppled by George Michael's ""Careless Whisper'". (AB3 1731)
5. Breathing exercises **can** certainly **be** helpful and the average athlete or singer would be somewhat limited without the control that such exercises bring. (B2G 569)
6. Behaving like that, he **can** hardly **be** surprised if walkers are tempted to march on to his land in the height of the season playing the bagpipes and accompanied by a 70-strong male voice choir. (AS3 834)

Sentences (3) and (5) are Deontic where *can* underlines potentiality whereas sentences (4) and (6) denote epistemic possibility due to the modal *can* again, which marks supposition and speaker's point of view rather than a fact. (The past participle is sometimes very similar to an adjective and frequently it even has adjectival function). Sentence (4) is very interesting as it involves three different processes simultaneously: The mental process of emotion, verbal process and Identifying relational process where *can* marks possibility of the utterance, which is revealed by means of the context. The person, who conducted the verbal process; leads us to the relational process. Here *can* marks the possibility of his subjective point of view and predictions, which consequently ends up with the emotional mental process where his suppositions turn to be incorrect and he fell victim of frustrations and disillusion. Another sentence (6) is relatively easy

to classify as epistemic. It can be paraphrased as “It will be possibly difficult to surprise him.”

7. He **can be** cured!" (APW 1731)

The interpretation of sentence (7) can be that there is a possibility to cure him under special circumstances or by particular care. On the other hand the sentence can be associated with potentiality and deontic modality as well. It was observed by Hunston (2000) in her study: ‘Phraseology and the modal verb’ that third person subject**+ can be +** adjective – when this sequence is used, the meaning is in most cases “often true or true under certain circumstances”. The pattern carries epistemic possibility especially in the case of *can’t* or cannot (see sentences 8 and 9). For particular reasons *can’t* and *cannot* are not separated in the BNC but displayed as CANNOT[7]

8. **He cannot be** good. (G07 4437)

Pattern **B *Can +V + NP/Pp*** occurs 65 times (6.5%) in the written and 16 times (3.2%) in the spoken material while pattern **C *Can +V +Adj/v-ed*** appears in written corpus 24 times (2.4%) and only 6 times (1.2%) in the spoken data. Formation of these patterns mainly depends on the category and the type of verbs as some verbs can easily correlate with both noun and the adjective such as verb *be* for example (9, 10), unlike the verb *have* which is followed by complement (11). Verbs like *arise, occur*, *stand, mean, measure* mostly occur with nouns as well. But there are some verbs like *become, seems, look* which form pattern **C** (12, 13).

9. She **can be** useful to them. (HD7 1631)
10. There again, being "pretty" **can be** one big hassle. (ADG 803)
11. It **can have** one of several headings; (GUB 900)
12. Without goals to strive for our lives **can become** empty, meaningless, and stressful. (EB1 1183)
13. The term indexing language **can seem** rather daunting and has certainly had different. (H99 34)

[7] I could not catch the contraction [can’t] in my material. (See chapter IV: section 4.2 - **Negation**)

Transitional verbs can indicate resulting process (sentence 12). The meaning of the modal auxiliary depends again on the context but actually it may express potentiality or be epistemic.

3.7.2 Conclusion

In 91 examples (9.1%) in the written and 26 examples (5.2%) in the spoken material the verb *can* is found in relational processes.

The verb *be* is the prototypical relational process verb and the combination of *can* and *be* with this sense gives us the following frequency 5.2 per cent in the written and 3.4 per cent in the spoken language. With dynamic verbs of transition such as: *become* (w- 9, s-0)*, change, convert into, turn (out), get, grow, run, end up* the Attribute emerges as the result of the process and modal *can* indicates potentiality (as in example 12 above). Some typically mental verbs are found in relational clauses too: *seem* (w-2, s-0); *look* (w-2, s-1) where modal verb *can* again marks the potentiality/ root possibility, cf. Example 13.

The possessive relationship is that of ownership and the verb *have* (w-1.5%; s-1.4%) is characteristic of this type of process. The function of the modal *can* in the relational process greatly depends on context, particularly when it is a possessive relational process as the verb *have* is related to the notion of permission.

You **can have** as many as you want. (J9X 581)
You **can have** a percentage of the salary, we'll look at in a minute. (JT3 1067)

However, *can+have* occurs with epistemic possibility or deontic potentiality/ root possibility meanings quite often too:

These groups **can also** have different experiences of authority and welfare services. (CR5 536) = Possibility

> Such preventive methods **can clearly** have some impact on the incidence of mental handicap, but this is comparatively small compared with the possible effects of screening techniques in conjunction with abortion. (ANA 647) = Potentiality

The contribution of the Attribute is to characterize the Carrier or to identify it. Most examples of the attributive relational and identifying relational processes have an animate human Attributor. The Carrier can be human as well but frequently is not.

There are mainly 3 types of syntactic patterns within relational processes:

A. ***Can + relational V*** where modal verb *can* marking the relational verb denotes root possibility, potentiality; (W- 2 examples, 0.2%); S- 4 examples, 0.8%)

B. ***Can +V + NP/Pp*** - the attribute expressions of temporary state is realised by a noun where the modal *can* mostly has the epistemic possibility function. (W- 6.5%; S- 3.2%).

C. ***Can +V +Adj/v-ed*** - the attribute expressions of temporary state is realised by adjective where the modal *can* functions in most cases as deontic potentiality. (W- 2.4%; S- 1.2%)

There are no multi-word verbs with prototypically relational process indication in my BNC material.

3.8 Existential processes

An existential process is a process of existing or happening. An existential clause is introduced by unstressed *there* followed by a verb and Nominal Group.

"The word 'there' has two meanings. It can be adverb referring to place = locative or it can be used as an anticipatory subject in sentences about existence = existential. The function of this kind of 'there' –sentences is normally to introduce new information or, to put it differently, to mention something for the first time in a text by stating that it exists." – (Dypedahl et al. 2006:67)

'There' fulfils most of the syntactic requirements for subject, although it can not be replaced by a pronoun, as nominal subjects can, nor does it exhibit the same concord relations as normal Subjects. Thus, *there* is not a participant since it has no semantic content, although it has both a syntactic function as Subject and a textual function as 'presentative' element, since it pushes the real Subject to the right, placing it under stronger focus. The single participant is the **Existent**, which may refer

to a countable entity (sent.1), an uncountable entity (sent. 2) or an event (sent.3).

1. The problems lie in the presupposition that moral duty is an absolute rule in the sense of a rule for which <u>there **can be**</u> no exceptions. (C9B 703)
2. But where constables under common law can be creative in their construction of nebulous charges -- such as that of "obstruction", <u>there **can be**</u> no end to the opportunities for street summonses and arrests. (B24 1955)
3. The third reason why <u>there can **lie**</u> no facile equation of racist and sexual discrimination via the appeal to Fanon concerns the place of sexuality, especially homosexuality, in his own writing. (A6D 1661)

Semantically, an existential clause predicts the existence of something, or that something happened. As a rule, it simply states the existence or non-existence of something sometimes even together with its location in time and place. The Existential process is typically expressed by the verb *be.* But the sentence (3) can serve as evidence that other intransitive verbs which express positional states can be used as well, such as: *lie, stand, hang, remain* etc.

The construction *'there can be'* – is related to root modality, indicating the potentiality of the truth of the utterance. However, all the examples of existential clauses I have found in my material are preceded by negative particle *no* which turns modal *can* into epistemic possibility rather then deontic potentiality. There are only 7 examples (**0.7**%) in the written corpus whereas in the spoken one there are not examples of the existential process at all.

3.8.1 Syntactic patterns in Existential process.

The existential clauses are introduced by unstressed *there* followed by a verb (in most cases *be*) and a Nominal Group. The NG may contain a wide variety of qualifiers and/or be followed by an Adjunct of time and place. I have observed only one pattern ***There +can +V +Np*** within the Existential sentences in my material retrieved from the BNC. The construction *'there can be'* is followed by a NP which is expressed sometimes by no qualifier (sent 1.), Np/Pp (sent.2) or finite clause qualifier (sent.3) like in the sentences below:

1. Whatever disagreement there may be about size, **there can be** no doubt that this sector will not disappear easily and there is every evidence to show that with the economic crises of the 1980s, it has been increasing. (AN3 1545)
2. The third reason why **there can lie** no facile equation of racist and sexual discrimination. (A6D 1661)
3. **There can be** no other climb at this standard which gives such a big-wall feel. (A15 894)

Syntactically, the NG is the notional subject, which has been transferred to the position after the verb, a position usually occupied by a Complement. In all above demonstrated sentences *there* is brought in to fill the subject position. In all these types of existential clauses the NG, which is the notional subject, represents the new information, (this is also observed by Dypedahl et al. 2006:67), and for this reason is usually indefinite. An indefinite subject in initial position will violate the hearer's expectations regarding the development of the message, especially when followed by a verb low in communicative dynamism like *be*. The result is unacceptable or at least strange.

* No doubt that this sector will not disappear easily can be.

Thus, there is often no acceptable alternative to the existential clause. These are 'basic' and vital existentials. But I have discovered other examples of existential clauses where alternatives without *there* are also possible.

4. Soil erosion and degradation **can occur** in peasant and pastoral groups. (APN 325)
5. This kind of thing has an important influence on the degree to which congestion **can arise**. (J9S 424

3.8.2 Idioms and set-expressions

There are no particular types of idioms or set expressions expressing existential process in my material retrieved from the BNC. Though, the collocations like *there can be no doubt, there can be no end* function as special expressions to convey a particular message. In these collocations the modal verb *can* marks Epistemic possibility as it substitutes *must*. However, there is some element of the potentiality too as these utterances are quite assertive and the negative particle *no* preceding a noun emphasizes exactly the noun and not the verb. Furthermore, to classify the expressions as the epistemic helps the paraphrases "it is not possible"/ "there must not be".

'*No'* is often part of habitual collocations. Even though '*no'* does convey a negative sense and connotation it expresses judgement about a thing in these kind of expressions. So it on the contrary invokes positive attitudes. This is partly due to the nouns: *doubt* and *end*, which on in a way imply a negative sense themselves. Thus, *no doubt* carries the positive meaning of "reliability of the source and information" whereas the expression *no end* can have both positive and negative connotations depending on environment it occurs in and can be interpreted as 'endless'.

1. But where constables under common law can be creative in their construction of nebulous charges -- such as that of "obstruction", there **can be** *no end* to the opportunities for street summonses and arrests. (B24 1955)
2. As always, it is the poor who pay the price of conflict – and there **can be** *no end* to conflict in a world where the "have-nots" outnumber the "haves" by four to one. (HH3 6777)

At first glance the connotation of the expression "no end to the opportunities" (sentence 1) should be associated with pleasant notions, although, modifier of "the opportunities" are words with negative connotations. The sentence (2) demonstrates exactly the same negative connotation.

3. The problems lie in the presupposition that moral duty is an absolute rule in the sense of a rule for which <u>there **can be**</u> *no exceptions*. (C9B 703)

The expression '*there can be no exceptions'* carries strong command tone, as if it concerns to law or a rule and it is not allowed to have any changes for it. Although, this collocation is again Epistemic like the rest discussed above substituting epistemic *must*.

3.8.3 Conclusion

The BNC data revealed only 7 examples of the existential process with the modal *can* which was observed only in the written corpus. The verb *be* is the main verb in the existential clauses introduced by "*there*", which fulfills syntactic requirements of the subject. There is only one syntactic pattern found in my material - ***There +can +V +Np***.

Can in the existential processes underlines a potentiality of something existing or happening. However, the negative particle *no* changes deontic dimension of the meaning of *can* to epistemic possibility substituting epistemic *must* in these cases.

There are no particular types of idioms or set expressions expressing the existential process unless we include some habitual collocations such as *there can be no doubt, there can be no end* and *expectations* where *can* is a sign of epistemic modality. These expressions are very common in conversation. Taking into account that there was no example of it in the spoken

register it can be considered as typical of fiction in the written corpus. Particularly existential processes with *can* occur in narrations although may appear in argumentative prose as well, such as newpaper articles.

3.9 Behavioural processes

> ”On the borderline between ’material’ and ’mental’ are the **behavioural** processes: those that represent the outer manifestations of inner workings, the acting out of processes of consciousness [e.g. *people are laughing*] and physiolgical states [e.g. *they are sleeping*]. (Halliday 2004a: 171)

The behavioral process has not clearly defined characteristics of its own; it is partly like the Material (the Process is grammatically more like one of ’doing’, sent.1) and partly the Mental (The participant[8] who is ’behaving’ is typically a conscious being, like the Senser, sent.2, 3).

1. Only a little effort, then you **can lie down** and be comfortable.”; (CEX 2799)
2. I **can smile** --; when people give me something to smile about.”; (FRS 11)
3. I know I am fluent, now, because **I can dream in** it. (FYV 99)

These examples justify that many verbs can have behavioural qualities to be classified as the behavioural process besides that they also occur non-behaviourally.

Progressive is the usual unmarked present tense for behavioural processes; however, like in the examples above we also find a simple present which does not convey habitual meaning. The sentences above express typically human behaviour. The verb *lie down* in the sentence (1) represents bodily posture. *Smile* (sent.2) is a physiological process manifesting state of consciousness, and *dream* (sent.3) expresses process of consciousness represented as form of behaviour. The function of *can* is Deontic; indicating potentiality and ability.

[8] The participant who is behaving is labelled as **Behaver**.

Syntactic patterns and collocations in Behavioural processes are not going to be discussed as I found only one example (sent.4) in my material which I classified as Behavioural process.

4. How **can** you **sit** there, and say nothing? (ANY 2798)

In my opinion, sentence (4) differs from ordinary interrogative question where *can* usually has Epistemic reading. It is rather exclamation; expressing speaker's surprise over a fact that someone was sitting without saying anything. The verb *sit* in this particular case is behaviour; it indicates a real process serving as 'bodily posture and pastime'[9]

Example (4) may be a subject of controversy; referring to Halliday (2004a: 251): "The boundaries of behavioural process are indeterminate".

3. 10 PASSIVE

The speaker's viewpoint or assessment of the situation may be expressed by means of modal verbs, and for the speaker's organization of the message the active and passive voice alternative offers an important choice. Passive constructions are worthy of further attention. Sometimes, the Actor of the action is not explicit or comes at the end of the sentence preceded by the preposition *by*. This is very well reflected in passive constructions where the sentence starts with the Subject but not the Agent itself. In other words, for most situations that involve two or more participants one or the other participant can be taken as the point of departure of the

[9] The term 'bodily postures and pastimes' is adapted from Halliday (2004a: 251)

message. In the active construction, the point of departure, the Theme, coincides with Agent as Subject, while the Affected is in final position and receives end-focus. In passive constructions these correspondences are reversed.

1. They <u>can be manipulated</u> **by** minorities, <u>taken over</u> **by** extremists, <u>motivated</u> **by** the self-interest of organised millions. (FP8 429)

In this case the Agent or the actor participant provides the New information taking up final position; it is focused by using a passive clause with a *by*-phrase as in the example above. The affected now provides the point of departure, coinciding with subject. When the Agent *by*-phrase is omitted in a passive clause, some other element necessarily receives end-focus. This may be a verb, an adjunct, or a Complement:

2. Sometimes walls are deliberately demolished so that the stone <u>can be re-used</u> elsewhere. (F9A 228)

The example above can be used as evidence that the passive is a useful device for focusing on a verb.

From the point of view of the textual organization of what the speaker wants to say, depends on the textual and pragmatic motivations which is beyond of my thesis but I will briefly comment. The agent can be new information and that is why it is placed last in the sentence. However, sometimes, the Agent is not new and is omitted, that is why some other element takes the final position. It is also possible that an element that is not Agent is desired as Theme. The primary purpose of the passive is probably to avoid mentioning an agent as mentioned by Dypedahl et al (2006:107).

Not surprisingly, using the passive without an Agent gives us the choice of not stating who carried out the action. This is an important factor, since in the active this information cannot

be omitted. In my material, Passive constructions are represented with a high number 284 examples (**28.4**%) in the written and relatively small number 10 (**2**%) in the spoken BNC. The frequency highlights the fact that the modal auxiliary *can* is attracted to passive verb phrases, and accordingly modal responsibilities in passive constructions should be a very interesting point for discussion.

The prototypical realization of passive is by means of the auxiliary *BE.* The pattern in passive constructions is ***can be + v-ed*** mostly indicating theoretical possibility associated with potentiality and root domain. The most popular verbs in combination with *be* in passive constructions are *used* (1.5%), *made* (0.8%), *found* (0.3%), *obtained* (0.7%), *given* (0.5%), *taken* (0.5%), *done* (0.3%) and so on. Quite a reasonable number of passive constructions are made up by verbal: *said* (0,7%) and mental: *seen* (2%), *considered* (0.7%), *interpreted* (0.5%) etc denoting different types of processes.

1. One child **can be given** the label of being the naughty one which lets the other children in the family off the hook. (CGT 232)
4. Chromosomes **can be seen** with the aid of a microscope. (GU8 50)
5. Similarly, abandonment **can be viewed** as a shift or a decline in population (CFK 487)
6. The most that **can be said** is that they must have selectional restrictions which are satisfied by the selectee. (FAC 1997)
7. The extent to which these kinds of considerations **can be included** in the accounts depend upon the extent to which they were included in the budget. (GVU 1799)

Sentence (3) contains a material process where the modal *can* marks the ability of either the Subject (Goal) or the Actor; this can be unclear (it is more likely the Actor). A common meaning of *can* in this sequence is “something has a quality which someone can make use of if they wish”. In sentences (4) and (5) we have mental processes in the verb *see* referring to visual perception and the verb *view* indicating cognition in this case. *Can* marks potentiality of the Goal but ability of the Agent that is not expressed in sentence (4) but understood. Sentence (5) by

means of *can* denotes potentiality. In the verbal process (sent. 6) as well as in the possessive relational (7) *can* again expresses the potentiality of the Goal.

As a result in the passive constructions, the permission meaning does not occur, and the ability and potentiality meanings are most common.

Table 14 The passive construction with *can* in my material.

Process	**Written**	**Spoken**
Material process	22.7 %	2 %
Mental process	3.9 %	0
Verbal process	1.5 %	0
Relational process	0.3 %	0
Total	**28.4** %	**2** %

Passive structures are particularly important in certain 'informative' genres, social science, commerce, finances and so on.

CHAPTER IV

4.1. Interrogative mood

The interrogative mood signals the speakers' desire for information, that they are asking a question, that they are 'interrogating' the listeners. The interrogative is marked by starting a clause with an auxiliary verb or an interrogative word: *How* (w-1%; s-0.6%), *What* (w- 0.5%; s-1%); *Who* (w-0.1%, s-0.4%).

1. **Can** we go shopping sometime? (EDJ 2154)
2. What **can** it be then? (H9N 2334)
3. Beyond that, who **can** say? (FSE 1437)
4. "Dear ladies, how **can** I thank you? (HSA 832)

There are 61 examples (**6.1**%) in the written and 129 examples (**25.8**%) of interrogative sentences in the spoken BNC. My results agree with Mindt's study (1995:78) where about 10 per cent of *CAN* occur in an interrogative context. Sometimes, a sentence has declarative form but at the end of it there is a question mark. This is particularly characteristic of the spoken corpus, which contains 2.2 per cent of such sentences (11 examples) whereas in the written corpus only 2 examples (0.2per cent) were found.

Like declaratives interrogative sentences belong to different modality domains and convey different messages. Sentence (1) above, may be interpreted as the asking of permission, but more in a way of courtesy. It would be unusual for this kind of permission to be denied, but it is polite to ask for it before acting. Sometimes, these kinds of permissions or more correctly willingness carry the implication that the person who asks he/she should act himself/herself in order that relevant event may take place.

5. Can I get you another drink? (FS8 3538)
6. What I'd really meant to say was: Can I go home now? (HW8 3193)

These examples are easily distinguishable as the sentence (5) indicates willingness of the speaker, her/his offer to act. It differs from usual permission in the sentence (6) where person addressed is simply expected to give permission and is simply interested in obtaining this as information whether he/she is allowed to go home. In informal English, *can* is often used with the meaning '*to be allowed to'*. In formal English we use MAY. Thus, sentence (6) can be replaced by modal *may* as well: "*May I go home now?"*

Besides willingness and permission, which belong to Deontic modality domain modal *can* expresses: request and order.

7. **Can** you say more on that? (JA5 530)
8. Erm, number five erm <pause> **can** you read that out for me Mandy? (KGT 1180)

In the sentences above *can* is used to ask somebody to do something. This is not a real question - we do not really want to know if the person is able to do something, we want them to do it! So it is a mild command or order to make someone to act. (The use of *can* in this way is informal). I would like to highlight the point I discussed above again and say that examples (9) and (10) below have completely different interpersonal dimensions:

9.**Can** you come and move your car? (FM1 551)
10.**Can** I get you anything, sir?" (ECK 2099)

Although both above presented examples express deontic willingness they have different speech acts: the speaker addresses or compels the addressee to act (sent. 9) thus it is a request whereas the actor of the utterance is the speaker himself (sent. 10) and he offers his help. However, the context is the determiner of the modal meanings:

11. **Can I have** your name and address, please?" (G3S 880) - Willingness
12. "**Can I have** this?" he asked. (G16 1403) – Permission
13."How **can I have** a job there?" (JY6 239) – Possibility

Can in the interrogative sentence can express ability very rarely.

14. But Piper Alley, Nightshade House. You **can** lead us there? (H98 1745)
15. How **can** he avert it? (FYV 117)

The sentences presented above (14, 15) denote potentiality and can be paraphrased as "if it is possible for "

Sometimes interrogative sentences with modal verb *can* function as exclamation to denote surprise, astonishment, disagreement or even discouragement.

16. That's from Rainbow. **Can I believe** my ears? What a betrayal! (HGN 2655)

The speaker obviously tries to make the point that he is surprised and even more he is shocked. So it does not make any difference whether the speaker uses a negative or interrogative form to express his disagreement and surprise with the event or occasion. *Can I believe my ears?* is equal to *I can't believe my ears*. This example has a clear relationship with expressions such as *it can't be true*. The utterance is purely Epistemic.

Whilst analysing interrogative sentences I have noticed that Material process exceeds other types of processes and it is illustrated on the (**table 15**) as a summing up of the results of the interrogative sentences.

Table 15. Process types in the interrogative sentences in my material.

Process types:	**Material**	**Mental**	**Verbal**	**Relational**	TOTAL
Written	40 (4%)	6 (0.6%)	6 (0.6%)	9 (0.9%)	**61** (6.1%)
Spoken	74 (14.8%)	17 (3.4%)	29 (5.8%)	9 (1.8%)	**129** (25.8%)

4.2. Negative sentences and forms of negation

A clause is either positive or negative:

1. **No** plausible argument **can be** advanced to defend the place.(ADB 930)
2. You **can not** see my face; for man shall not see me (ACG 818)
3. I dream of somewhere quiet where **no one can** find me. (A77 410)

The most common way of making a clause negative is to insert the negative particle ***not*** or its contraction ***–n't***, after the operator. Referring to Biber et al. (2002: 352) there are actually two main kinds of clause negation: **not-negation** and **no-negation**. Whereas *not*-negation is formed with *not* or *n't*, *no*-negation is formed with other negative words such as *no, nothing, none, never.*

4. We **can never** be young again. Youth! Ah (GUS 188)
5.It seems all so mysterious -- **I can not** understand why you have heard nothing…… (AMC 1464)
6. "He shrugged. "But I **can** see **no** connection between their presence and the lady's death." (H9C 2699)

There is slight difference between sentences (5) and (6). The sentence (5) expresses an opinion, namely judgement about a person's inability to hear anything. The sentence (6) is a factual description of subject where there is "no connection between their presence and somebody's death".

The overall negation found within all the process types are 142 examples (**14.2**%) in the written and 23 (**4.6**%) in the spoken BNC. Mindt's results (1995:78) 60 per cent affirmative and 40 per cent negative can be used as a proof that with *CAN* affirmative, then the negative sentences are used more frequently than interrogatives. The result of my material is contrary to my expectations as well as the results of Biber et. al (2002: 325) which says: "*Negation is more than twice as common in conversation as it is in the written registers*".

As suggested by Halliday and James (1993:32-66) the amount of negation varies according to the genre. It is highest in conversation, immediately followed by fiction and is relatively low in news and academic writing. My material is perhaps too small[10] for drawing the conclusion that negation is less frequent in spoken than in written. Reasonably, conversations must indeed include most cases of negation than the written registers. Though there are some points in my analysis, which coincide with the results of Biber et al (2002:244): **Not-negation* is far more common than *no-negation. * No-negation* is especially rare in conversation, but it is moderately common in the written registers. The same is outlined in Tottie's work on negation (1991:119) that *not*-negation is much more universally acceptable than *no*-negation, even in written language, where *no*-negation is the prevalent choice.

Table 16. Demonstrating **Negation** in my material

Negation	**NOT**			**NO**				**Others**			
	'Cannot'	'Can not'	'Can't'	No'	'No longer'	thing/body/one		never'	'other'	'Cannae'	
Written	0	**118**		**8**	2	2		10	2		**142**
Spoken	**14**	**1**	0	1			1	1	3	**2**	**23**

Although my results are quite different, **Table 16** undoubtedly supports Biber et.al' s (2002: 244-325) point about negation.

The modal *'can'* can denote either probability or permission in the negative sentences, depending on the context.

7. There's no wind and a boat **can not** be in danger. (JJS 349) – Epistemic certainty
8. But we **can not** move on to his meeting with Esau quite yet. (ACG 826) – Deontic permission
9. "A blind person is a person who **can not** see". (AM6 116) – Deontic inability.

[10] My original search did not catch the contracted form of can+not [can't], so the number of negatives in my material is too low.

'Can not' very often expresses surprise or disagreement with a 3-rd person subject such as in these utterances:

10. **He cannot be** let out of jail after 25 years. (CBC 9882)
11. **He cannot be** a trickster now. (ACG 782)

The speaker is facing the fact that some criminal can be released from prison (sent.10). In the sentence (11) derogatory noun "trickster" emphasizes her emotions of surprise/disagreement. The speaker is not directly imposing the action, but rather referring to a third person, judging his behaviour and implicitly providing his own point of view as to how the action should be or should have been taken.

Negation is very frequent in combinations with *be* (46 examples) and *see* (w-7; s-3) verbs in the BNC.

12. " Orwell acidly remarks."One **can not** really be Catholic and grown up." (CKN 292)
13. But such a phenomenon **can not** be explained by recourse to general principles. (G0D 117)
14. Using the light microscope, one **can not** see individual synapses, but it is possible to stain individual neurons and analyse the structure of their dendrites, hence picking up possible changes. (G14 1122)

In the above demonstrated sentences *can* + *not* belongs to deontic (sent. 12 and 14) and epistemic (sent. 13) domains. However, sentence (14) is ambiguous as it can be understood in two ways:

→ Theoretical possibility that it is not possible to see.
→ It is a rule, inability to see by the tool like microscope.

Generally, *can* in the sense of denial of possibility replaces *must*, logical necessity as in negative clauses above, though in American English *must* is frequently used in this sense. (M. Hundt (1997): about the decrease of the modal *must* and the decline of its deontic usage).

The possibility of using *can* (possibility) to convey the same type of meaning as *must* (necessity) has to do with the fact that *not* negates the modality in the case of *can* whereas it negates the proposition in the case of *must*. In other words, 'not possible that' means the same as 'necessary not' expressing strong or attenuated obligation not to do something or lack of permission.

Some negated modal verbs are used by speakers to avoid committing themselves to an opinion or idea. *Can't think, can't believe* and *I can't say* have this pragmatic function which is called a **hedge**.

15. **I cannot say** that I care for these self-perpetuating societies." (ANL 2788)
16. **I cannot think** of what to say. (HGL 541)
17. **I cannot believe** that you will burn them. (APR 2267)

Investigating negation has not been one of the primary goals of this investigation. However, a relatively large amount of negative sentences in the written corpus have been analyzed. I was concerned only with the simple negative elements, the words **not** and ***no.*** Other negative elements, such as *no, never, nowhere, nobody, nothing* and other words with a negative sense (*hardly, scarcely*) have been estimated but not discussed. The investigation of negation of the modal auxiliary verb *can* suggests that it depends on a feature of individual, lexical verbs (particular meanings or syntactic patterns). Besides, it can be predominant in a particular genre or text type, which could explain the higher or lower negation in them.

CHAPTER V:

5. Summing up the results from the investigation

5.1. Differences between written and spoken data.

This study is based on material drawn from texts in the BNC, which represents different registers of modern British English: 1000 examples were randomly selected from the written corpus and 500 examples randomly selected from the spoken corpus.

Style is an important component whilst using language in speech or writing. We make a number of stylistic choices when producing the text depending on different purposes and factors. The written and the spoken material differ in a number of ways, which I will discuss in this section. The main and most obvious difference between speech and writing is that the written genres are examples of more conscious attention to matters of information structure, producing more elegant variation in the word sequences, patterns. The spoken genres include spontaneous, unplanned face-to-face conversations.

CAN is more frequently used in spoken English (**3745.43** instances per million words) than in written (**2127.51** instances per million words). The majority of the sentences with *can* are affirmative. The written corpus (**79**%) slightly exceeds the spoken one (**68**%) as regards the proportion of affirmative sentences.

Interrogative sentences have a higher frequency in the spoken material (**25.8**%) than in the written one (**6.1**%). It is not surprising as spoken language consists of conversations and dialogues which is the process of interaction of the speaker(s) and hearer(s). There is also quite big a difference in the frequency of negation between the written (**14.2**%) and the spoken (**4.6**%) material, which can be considered a result based on the analysis of relatively little material rather than evidence to draw conclusions from. Furthermore, spoken English tends to be more informal

than written English. It is revealed by use of contractions or expressions characterizing informal language:

1. I **cannae** <unclear> **can't** quite see <unclear>(K6N 634)

In spoken language the subject of the sentence is mostly **animate nouns** (**86.8** %) expressed mostly by personal pronouns (**83**%), simple nouns (**1**%) and indefinite pronouns such as *one, some, someone, somebody* etc (**2.8**%). Whereas in the written corpus the percentage of the animate nouns is still very high (**60**%), the percentage is almost equally shared between personal pronouns (**34**%) and the complex nouns realized by noun and prepositional phrases (**23.9**%), followed by indefinite pronouns (**2.1**%).

Consequently **inanimate** subjects of the written corpus (**33.9**%) exceed the percentage (**12.8**) in the spoken corpus. The inanimate nouns functioning as agents tend to be more abstract (**20.7**%) than concrete (**6.4**%) in the written language. The concrete nouns in the spoken are represented by **3.2** percent whereas abstract is realised by **5.4** per cent. As it was expected *IT* is more used in written (**5.3**%) than in spoken genres (**2.8**%). The same can be said in relation to other referential pronouns such as *that/those, this/these* etc. The written corpus includes more of them (**6.8**%) than the spoken one (**4.2**%).

Table 17. Pronoun + *can.* (Frequency in 1000 hits of written and 500 hits of spoken BNC according to the different types of sentences):

	Written corpus			Spoken corpus		
Sentence:	affirmative	negative	interrogative	affirmative	negative	interrogative
I person **I**	87 **(8.7%)**	14 **(1.4%)**	5 (0.5%)	61 (12.2%)	12 **(2.4%)**	40 (8%)
We	62 (6.2%)	8 (0.8%)	4. (0.4%)	61 (12.2%)	0	21 (4.2%)
II person **You**	77 (7.7%)	10 (1%)	10 **(1%)**	138 **(27.6 %)**	2 (0.4%)	48 **(9,6%)**
They	28 (2.8%)	4(0.4%)	2 (0.2%)	18 (3.6%)	0	2 (0.4%)
III person **She**	7 (0.7%)	3 (0.4%)	0	0	0	0
He	15 (1.5%)	3.(0.3)	1 (0.1%)	12 (2.4%)	0	0

*The highest frequency numbers in the spoken and written corpora are highlighted.

As for verbs in combination with *can*, the spoken language tends to have more *Verbal* and *Mental* processes while *Relational* and *Material* are almost equally popular in both corpora. There is not any example expressing *Existential* as well as *Behavioural* process in the spoken language. Not surprisingly, existential *THERE* is characteristic of the academic prose. The findings reported in this study agree with those of Matthiessen (1999: 16).

Figure 12. Instantiation of PROCESS TYPE [n=2072], absolute numbers and relative frequencies (Table 4-1 is adapted from Matthiessen 1999: 16)

PROCESS TYPE	**#**	**%**
material	1060	51
behavioural	100	5
mental	190	9
verbal	214	10
relational	427	23
existential	36	2
TOTAL	2072	100

Figure 13. Instantiation of process type, absolute numbers and relative frequencies in 1000 clauses of the written and 500 clauses of the spoken data of the BNC[11].

	W	**S**	**W**	**S**
PROCESS TYPE	**#**		**%**	
Material[12]	678	325	67.8	65
Mental	140	65	14	13
Relational	100	35	10	7
Verbal	60	54	6	10.8
Existential	7	0	0.7	0
TOTAL	**1000***	**500****		**100**

*** excluded** 8 elliptical and 7 other sentences where 'can' is a subject = written 985 sentences;
** **excluded** 18 elliptical and 8 other sentences with unclear context = spoken 479 sentences

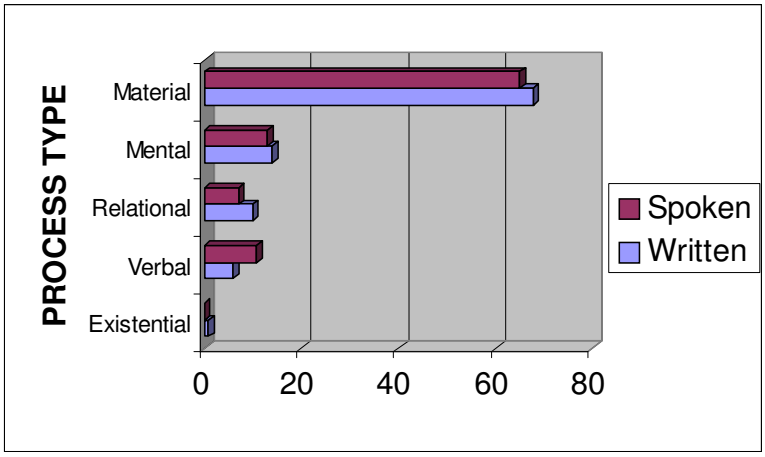
[11] The overall percentage is estimated in 1000 written and 500 spoken examples.

[12] Only example of behavioural process (section 3.9) due to its controversy was added to the number of material processes.

Comparing the results of my analysis with Matthiessen's instantiation of process type (1999:16) revealed some interesting tendencies in my material (**Figure 13**).
Relational Process precedes Verbal in the written corpus while the spoken one is adequate to Matthiessen's sequence of the processes. In Matthiessen's study relational process exceeds both mental and verbal processes as it follows material process which is the most frequent. The result of my investigation showed that mental process occupies second position on the chart of frequency. This slight difference of frequencies between Matthiessen's study and mine is due to the modal *can*. The processes in my research were investigated in relation to the combination of modal *can* and lexical verb.

To make the results of my investigation more visual and vivid for observations the diversity between the two registers was compiled on the **figure 14**.

Figure 14. The overall percentage of different types of processes in the material for investigation.



Taking into the consideration that written genres represent stylistically complete and well-formed texts it should not be surprising that there is a diversity of the patterns between written and the spoken genres either. Although both the spoken and the written genres that have been examined differ in a number of ways, it is clear that the syntactic pattern is generally

simpler and more stereotyped in the spoken than in the written genres. The written genres contain more sophisticated patterns and more conscious attention to matters of information structure, producing more variation in the word order pattern.

Table 18. Patterns with ***can*** in my material.

Process	**% Written**	**Spoken**	**Patterns**	**TOTAL**	
Mental	0.4	3	**1**. ***Can +V***		
Material	3.6	6.4		**4.9**	**11**
Verbal	0.7	0.8			
Relational	0.2	0.8			
Existential	0.7	0	**2. There +*can*+*V* +*N/Np***	**0.7**	**0**
Material	0.5	0.8	**3. V+conjunction+V**	**0.5**	**0.8**
Mental	5.3	4. 6			
Material	34.2	39.4	**4**. ***Can +V*** **+Np/Pp**	**47.9**	**49.8**
Verbal	1.9	2.6			
Relational	6.5	3.2.			
Material	0.3	0. 6			
Relational	2.4	1.2	**5**. ***Can +V*** **+adj/v-ed**	**2.7**	**1.8**
Mental	0.8	0.4			
Material	1.7	0.8	**6**. ***Can +V*** **+to-inf**	**2.6**	**1.2**
Verbal	0.1	0			
Mental	0.3	0.6			
Material	0.2	0.2	**7**. ***Can +V*** **+ing-v**	**0.5**	**0.8**
Material	0.1	0	**8. *Can + have + v-ed*** = *(perfect)*		
	0	0.2	**9. *Can*** **+ v-link + v-ing =** *(progressive)*		
Mental	3.9	0			
Material	22.7	2	**10**. ***Can +Be+v-ed***	**28.4**	**2**
Verbal	1.5	0	(Passive)		
Relational	0.3	0			
Mental	2.7	1.8			
Material	0.4	1.2	**11**. ***Can +V+That/wh-clause***	**4.3**	**4.6**
Verbal	1.2	1.6	(Projection)		
TOTAL	**(926)**	**(361)**	**%**	**92. 6**	**72.2**

Whilst transcribing the patterns in the BNC 74 sentences in the written (59 interrogative, 8 elliptical sentences and 7 sentences with unclear context) and 139 (118 interrogative, 13 Elliptical sentences and 8 sentences which are unclear: no subject indication, grammatically incomplete clause structure) from the spoken corpus were excluded from the analysis.

In English, words can sometimes be omitted from a sentence without changing the meaning of the sentence. The words, which are omitted, are said to be "understood". This type of short form is usually referred to as **ellipsis**; see for instance, examples: (1)-(3):

1. If he can go, then anybody **can** (ATE 301);
2. You're not supposed to see them, but you **can**. (H85 216).
3. That the categorical imperative bids me act in a particular way follows from the impossibility of avoiding the action without acting on a maxim I **cannot** thus will universalised. (CS2 1307)

Fully idiomatic combinations are those in which the meaning of the whole can not be deduced from the parts, as in many of the examples in previous sections: *can not stop/help laughing, get rid of, get on with* etc. The classes of multi-word verbs show that it is by no means easy to establish boundaries between what is idiomatic and what is not. Many verbs, both one-word and multi-word have a number of related meanings.

In spoken English co-ordinated auxiliaries frequently occur in elliptic structures, since the event expressed by the main verb is already known, according to their collocation with different nouns and to the contexts in which they are used. Particularly characteristic of multi-word verbs are their metaphorical extensions of meaning, from concrete to abstract or abstract to concrete; and from one context to another less congruent one. Phrasal verbs in particular lend themselves to metaphorical extension. They consist mostly of common verbs (*go, come, get)* of very general reference, which are easily adaptable to different contexts, and a small number of the adverbial particles (*off, up, out, away, with, down)*, so that they can be made to mean almost anything. When starting my work on this thesis, I had some expectations about the fixed phrases and idioms, which (it has become clear now) were completely different from what the analysis of the examples from the BNC revealed. One of the expectations was that the idioms and fixed expressions would have the highest frequency in the written language. However, the analysis of

the examples revealed that there is only 6 per cent of them in the written whereas in the spoken corpus they account for 8 per cent. Especially common and frequent are expressions related to the mental and verbal processes, such as: *I can tell you, I can say, as you can imagine, as I can see, as you can see* and so on.

The frequency of interrogative sentences in the spoken corpus (25.4 per cent) exceeds greatly that of the written one, namely 6 per cent. Not surprisingly, the spoken language contains most of the cases of the interrogative mood. In scientific or written language however, the questions may arise but they are rarely put on the paper unless they are rhetorical.

5.2. Appraisal perspective: Deontic and Epistemic patterns.

The shades of meaning among modal auxiliaries are multifarious and complex. Their meanings are less explicit than those of the other probability and willingness signals, i.e. they depend to a large extent on the context. The modal auxiliaries imply subjective belief or attitude, as opposed to the apparent objectivity of the modal adjectives and their derivatives. Many English natives are diffident in the expression of their opinions, and tend to insert in their conversations what may be called adverbs of mood and modality, such as *just, rather, quite, probably, almost, never, always, not at all, generally, usually.* These adverbs are then not used in their normal, positive sense but, instead, to attenuate the force of what the speaker is saying.

Different types of modal construction can be used to reinforce the same degree of probability and willingness. But the reinforcement of probability meaning as in the sentence (1) is in fact the most common type.

1. The latest (road III) **can** probably *be identified* with Jack and Hayter's. (H7Y 1132)

Depending on how the modal elements are used the utterance becomes more tentative polite, hesitant, deliberative etc for each additional probability signal, whether it is a statement (sent.2) or a request (sent.3).

2. I don't think I **can** stand it any more. (G0X 2955)
3. **Can** I just stop you there, just for a second? (KM6 21)

Furthermore, modality is expressed in language in a variety of ways: morphological, lexical, syntactic or even through intonation. In the sentences below the 'dubitative' modality is conveyed redundantly by both the lexical meaning of the verbs such as: *think, suppose, believe* and the modal auxiliary *can*.

4. As for the abduction business, I think we **can** say that's over. (CK9 2368)
5. I vow they would not believe it. I **can** hardly believe it. (H82 31)
6. "I suppose Eleanor **can** stay for coffee," (H8F 1982)

The same type of meaning is expressed more than once in these clauses above, and this we refer to as redundancy. The element of uncertainty is expressed both in *can* and in *I think, I suppose.*

In declarative sentences modal auxiliaries normally express the speaker's belief or attitude, whereas in interrogative sentences it is the belief or attitude of the addressed person expressed: *I can help you* (willingness) vs *can I help you?* (willingness, it is meant: I will but do you want me to help you). With regard to deontic values, the auxiliary occurs mostly in requests, suggestions and offers.

According to Facchinetti (2002:) epistemic values of *can* are the least represented and generally limited to interrogative and negative polarity contexts, where the modal is the negative counterpart of either epistemic possibility *may* or epistemic necessity *must*. The results of my analysis corroborated this tendency.

Table 19. MODALITY MEANINGS of *CAN* in my material

Modality: *CAN*	**EPISTEMIC** Possibility	**DEONTIC** Potentiality	Ability	Willingness	Permission
Written	29%	**51.7**%	10.8%	2.8%	5%
Spoken	30%	**43.8**%	4.4%	11.6%	8.6%

As expected the potentiality meaning of *can* is represented with the highest percentage in the BNC and total number of the deontic modality examples exceeds the epistemic one; the latter is slightly higher in the spoken language.

Not surprisingly possibility, permission and willingness meanings occur almost twice as often in the language of conversations and dialogues while the ability meaning is more frequently indicated in the written corpus, where sentences tend to be more assertive.

5.3. CONCLUSION

The starting point of the present investigation was to describe the modal verb *can* semantically, syntactically and to give a broad picture of the situation in the written and spoken modern British English. The aim was to arrive at an overview of possible patterns with *can*, and then account for the way in which usage varies according to contextual influence, syntactic environment, register: written or spoken and meaning of the modality domain. The task has been pursued in Chapters III, IV and V where a full account of all functions of the modal auxiliary *can* was provided on the basis of authentic English examples retrieved from the BNC.

Form, meaning and function are all seen as inter-related. Taking the Systemic-Functional model as its basis, the work also draws on other approaches: like appraisal theory and pattern grammar. SFG with its system of processes and participants has been a useful tool in the analysis

of the syntactic environment *can* occurs in and in distinguishing the meanings and the modality domains of the modal *can*.

The English modal verb *can* was found in combination with a variety of verb types and to appear in a number of syntactic patterns and idiomatic constructions. In the course of analysis it has become clear that the interpretation of the modal verb is dependent on the syntactic environment in which it appears and its context.

The examples are not evenly distributed across the different process types. As expected, material process and mental process of the perception type are the most frequently used in combination with the modal verb and the most frequent function of the modal *can* belongs to the deontic domain, namely potentiality and ability. In this analysis a distinction was made between perception, cognition and emotive mental verbs. This distinction has proved to be useful because with perception verbs, particularly with *see* the modal marks ability and in some cases even indicates evidentiality (***can +v + n+ v-ing***). The combination of *can* and a cognitive verb expresses potentiality and root possibility of the Subject. As for emotive verbs they are mostly context dependent as there are cases when the modal *can* has epistemic reading. In the verbal processes *can* signals willingness and potentiality again. Relatively few examples were found of *can* in the relational and existential clauses where meaning of *can* varies according to the context. There is reason to believe that the behavioural processes are rare. I have touched upon it briefly rather than discussing it as a separate process in details. In my corpus material I have found only one example of behavioural process. However, this example possesses the features of material process as well and was added to the number of material ones. In the behavioural process *can* has its first and primary meaning, ability realised as human behaviour.

One of the interesting points to observe in the work was Passive, which especially in the written corpus is attracted by *can*. In most cases the modal points at potentiality – theoretical possibility and ability. Meanings like willingness, permission were not observed in the passive constructions.

The current analysis of the modal auxiliary *can* contributes to the field of corpus based studies through the classification and analysis of a large number of authentic examples of one of the most frequent modal verbs in English and its meanings. This information should be useful to anyone who is interested in a precise description of the modal verb *can* (dictionaries, electronic corpora and grammars). Acknowledging similarities with other works as to topic and framework the present study has sought to fill the gap in our knowledge of the function and usage of the modal verb *can*.

The main differences between this and other studies are caused by the difference in perspective (SFG) as well as in the selection of material.

The primary intention was to investigate *can* and *could* together and observe similarities and differences between these two. However, it appeared that the simultaneous study of both was beyond the size of the present thesis and the investigation of *could* had to be abandoned for later research.

There are several possible expansions of the present study. The focus has been entirely on the functional aspect of the modal verb *can* but the contrastive analysis between English *can* and Georgian equivalents could be very interesting too. However, there could be some difficulties in conducting this kind of analysis, such as corpus material (there is not Georgian corpus) and specialists who are qualified to check my work. Furthermore, although this investigation was

based on a relatively large amount of data, the relative frequencies in the use of the modal auxiliary would have come out differently based on even larger material. The study could not show the difference between genres, which may add new insights into investigation. It might be interesting to trace the historical development of the meanings of the modal *can* (diachronic analyses). It is also possible that the study of other varieties of English might show some properties (synchronic analysis). Only one variety of English has been examined, mainly present-day British English; thus comparison with other varieties of English would be a natural follow-up.

Otherwise, the thesis covers a wide range of empirical data. The specific analysis of empirical data does not consider these data in isolation but rather as part of an overall analysis of English. The function of my paper is to inform and somehow to enrich the understanding by examining the corpora. My study is descriptive and this work therefore makes no claim to originality in its content. I hope my investigation helps the students to become aware of the resources which English offers, and which may sharpen their curiosity to extend study of modality to deeper and more specialized works.

ELECTRONIC CORPORA

British National Corpus http://www.natcorp.ox.ac.uk/

English-Norwegian Parallel Corpus http://www.hf.uio.no/ilos/OMC/

Oslo Multilingual Corpus http://www.hf.uio.no/ilos/OMC/

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