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NON-FINITE STRUCTURES AS A MEANS OF CONDENSATION IN SCIENTIFIC STYLE

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ABSTRACT

This work deals with one of the specifics of the syntax of scientific style in English, namely, the use of non-finite structures. Main attention will be paid to the use of these structures as a means of condensation, with the aim to find out how the condensity of these structures is achieved and in which cases they can be considered to be alternatives to full clauses. First, this will be done from the theoretical point of view: the three main types of non-finite structures, i.e. infinitive, gerund and participle, will be presented and their condensing uses as nominal, relative and adverbial clauses will be analysed. In the following analysis of a scientific text, the frequency of occurence of the types in the particular functions will be discussed (in this connection some unclear cases for the analysis will be mentioned). The focus will be laid especially on the effectivity of these structures as a means of condensation in scientific style, on the meaning conveyed by them and the factors that influence the possibility of seeing them as condensed full clauses.

SOUHRN

Tato práce se zabývá jedním z nejtypičtějších jevů syntaxe anglického vědeckého stylu, tj. používáním neurčitých tvarů slovesných. Pozornost bude věnována především výskytu těchto tvarů ve funkci větných kondenzátorů, s cílem zjistit jakým způsobem je této kondenzace dosahováno a které tvary lze nahradit vedlejšími nebo hlavními větami. Problematika bude nejprve představena z teoretického hlediska: budou uvedeny tři hlavní typy nefinitních vět (infinitiv, gerundium a participium) a jejich využití jako prostředku kondenzace ve vztažných, nominálních a příslovečných větách. Následný rozbor textu vědeckého stylu zhodnotí frekvenci výskytu různých typů vět v tomto stylu (v této souvislosti budou zmíněny také věty, které mohou být interpretovány více způsoby). Práce bude zkoumat zejména efektivnost použití nefinitních vět jako prostředku větné kondenzace, jejich sémantiku, význam pro daný styl, a faktory, které ovlivňují možnost vyjádření též finitnímivedlejšími nebo hlavními větami.

CONTENTS

1. Introduction

This work is going to concentrate on English non-finite structures as they are used in English scientific style. The main focus will be to explain their frequency in this style as well as to describe their function and effectivity. Since the purpose of the use of non-finite structures in scientific texts is chiefly to condense the sentence structure and make the language more compact, the structures will be studied especially from this point of view. The work will be divided into three parts: first, some introductury remarks on the concept of condensation will be made, then, a theoretical description of non-finite structures as a means of condensation will follow, finally, an analysis of their use in scientific style will be provided.

The first introductory, part of the work will, therefore, focus on the use of the term condensation in general. The meaning and function of condensed structures will be disscussed as well as the use of various condensing devices will be presented. In connection with this, different approaches to condensation will be mentioned.

In the following part, attention will be paid solely to non-finite structures, especially to their uses as a means of condensation. This will be done from the theoretical point of view, with no reference to style. First, the condensed form of these structures will be discussed and the type of meaning conveyed by them will be analysed. After this, the three types of non- finite structures (infinitive, gerund and participle) and their uses (as relative, nominal and adverbial clauses) will be presented. For the sake of clarity of presentation, uses of infinitival, gerundive and participial clauses will be treated separately. Attention will be paid especially to the condensation achieved by these clauses, their semantics as well as the factors which influnce the possibility of paraphrasing them by full clauses.

The analytical part of this work will firstly introduce the specifics of the language of scientific writing and then the use of non-finite structures will be analysed with respect to this. The clauses will be divided according to their types and functions, with the aim to find out which uses are typical of the style, and in which cases non-finite structures are an effective means of condensing sentence structure and can be seen as condensed full clauses.

2 General Remarks on the Concept of Condensation

The treatment of this concept will be started with a general definition found in monolingual dictionaries such as Webster´s English Dictionary or Macmillan English Dictionary: the meaning of the word condensation is here described in one or more of the following ways:

> reduction to a denser form
>
> making something smaller and/or shorter
>
> the state of being compressed or made briefer
>
> the act or result of summarising or compressing something

If there is also a definition of the linguistic use, it tends to be rather general. The online English dictionary MSN-Encarta provides this one:

> compressing a text into a more concise form, usually by reducing its length and removing all that is superfluous, i.e. superfluous words and passages.

Having introduced general definitions, the attention will be now turned to the use of this concept by linguists and grammarians. However, at first it should be mentioned that condensation is by no means a linguistic term to be found in every grammar or dictionary of linguistics. It is missing even in such works as for instance Crystal´s Dictionary of Linguistics and Phonetics (1990) or in the renowned grammars of English by Quirk et al. (1991) and by Huddleston and Pullum (2002), in some of them being replaced by terms of similar meaning as compression, compactness, reduction or dissententialization (the use of these terms will be explained in 2.3). Those authors who do use the term usually relate it to the question of sentence structure, speaking thus about the so-called sentence (i.e syntactic) condensation. Although some of the approaches considerably differ, the basic meaning of the term is preserved in all of them: sentence condensation is perceived as compression/density of sentence structure, typically achieved by means expressing "secondary predication" (this term is used eg. by Dušková (2006) and it refers to predication that is not realized by full clauses having both subject and finite verb). This point will be clarified further in the following chapters.

2.1 The Meaning Conveyed by Condensed Structures

In this chapter, I will remain in rather general terms and will try to exemplify what type of meaning is conveyed by condensed structures and how their use may affect the interpretation of a sentence. Drawing on observations of linguists who have been dealing with this issue to a considerable extent, it will be argued that the key words characterising this meaning are cohesion, compactness and complexity.

Starting with Vachek´s view, he sees sentence condensity as close cohesion (connectedness) of its elements. (1976: 339) He further argues that in English there is a tendency to construe a sentence as one compact whole: one action or process within which all other possible actions or processes are incorporated as its inseparable parts. (p.341) To prove this point, he presents the following example, where the use of condensed structures in the place of full clauses contributes to the compactness and unity of the sentence:

But the old sheep-dog, not looking up, waggled past, flinging out his legs from side to side

On the other hand, the full version of the sentence, using full clauses and the conjunction *and*, would underline the separateness of the actions (*But the old sheep dog did not look up, waggled past and was flinging out his legs from side to side*).

This view of condensation is closely connected to what Mathesius means by his term complex condensation, which he uses paralelly with the traditional one of sentence condensation. As the name suggests, he lays emphasis on the fact that in English means of condensation make it possible to express "entire complexes of thought". (1961: 171) Vachek, borrowing this term from Mathesius, uses the following example

The French plan, viewed in retrospect, might seem to have been designed with the purpose of ensuring a German victory

and explains the notion of complex condensation in terms of structural complexity:

Obviously, in deciphering an English sentence of the above category the reader´s or listener´s attention can and must be concentrated so as to grasp the sentence as one

compact whole, grouped around one single nexus of subject and predicate. The relations of at least some sentence elements to this central nexus must necessarily be of rather complex character. Consequently, the term complex condensation proves to be a very apt designation of the factor lying behind the above-mentioned complex character of the English sentence. (1976: 339)

This can be seen if we change the condensed structures into full clauses: the sentence, although somewhat awkward, becomes more easily understandable (*If we view the French plan in retrospect, it might seem that it was designed with the purpose that it should ensure a German victory*).

The fact that compressed structures are used to express complex meanings is also highlighted by Petrlíková in her treatment of one of the condensing devices, the gerund (see the function and meaning of the form *ensuring* in the preceding example in comparison with its full clause alternative):

Apart from the apparent reduction of the number of finite clauses, the gerund (owing to its qualities) makes it possible to introduce into a sentence (or a clause) a range of various shades, semantic indications or nuances, and thus to make the language as a means of communication more flexible, sensitive and capable of expressing complexity of thought. (27)

Having thus exemplified the general meaning of cohesion, compactness and complexity underlying the concept of condensation, which is shared virtually by all linguists, I will proceed towards more specific issues as well as towards the differences to be found among individual treatments.

2.2 Condensation in its "Broad" and "Narrow" Sense

Linguists differ with respect to what kind of compact structures they view as instances of sentence condensation and what restrictions they impose on the use of the term. Basically, it is possible to divide the approaches into two main streams that will be labelled here "condensation in its broad sense" and "condensation in its narrow (restricted) sense" (the reason for the choice of these terms will be apparent from the following discussion).

First, attention will be turned to the term "condensation" as it is used in its broad sense. The distinguishing feature of this approach is that it considers as condensed all structures which express secondary predication, i.e., structures which show a systematic

correspondence to full clause structures and are analysable into clause elements (for instance, the structure *to go home* in *I want to go home* will be analysed into a verb and an adverbial on the basis of its correspondence to the full clause *I go home*). However, it is not necessary for the structure to have its corresponding grammatical full clause alternative. This view of condensation is held for instance by Dušková, who sees condensation as an equivalent term to secondary predication and perceives as condensed also such structures as deverbal nouns *postponement* or *assurance*. (2006: 542) A similar opinion can be found with Quirk et al. and Huddleston and Pullum. Quirk et. al, using the term compression (which will be considered to be equivalent to condensation, cf. dictionary definition in 2.1), mainly highlights the compressed form of the structure: lack of tense markers, modal auxiliaries, frequent lack of subject, conjunction or even verb in verbless clauses (1991: 995) and, similarly, the term dissententialisation, applied by Huddleston and Pullum, is used meaning "the loss of properties that are associated with a clause standing alone as a full sentence". (2002: 89) Nevertheless, none of these authors require for a compressed/dissententialised structure that it be capable to alternate with a grammatical full clause. Another representative of this approach is Jaroslav Macháček, which can be seen from his treatment of the sentence *I want to go.* He analyses it as an instance of condensing infinitive (the subject of which, being identical with that of the main clause, has been deleted) in spite of the fact that there is no full clause paraphrase available. (123)

In contradiction to this, the approach treating condensation in its narrow sense considers as instances of condensation only those structures that have their grammaticall full clause alternatives cf. I *decided to leave* X *I decided (that) I would leave* or, similarly, structures which are mostly translated by full clauses in languages such as Czech or German, where condensation is not a frequent phenomenon: "By complex condensation we mean the tendency of English to express by non-clausal elements of a main clause those circumstances, which in Czech are, as a rule, expressed by subordinate clauses."(Mathesius, 1961: 171, author's translation). Mathesius then presents a great number of English structures (*Having not seen me for many years …*) which can be translated only by means of full clauses (p. 174-179).

The understanding of the term condensation is even more restricted in Petrlíková´s conception. In her already mentioned treatment of the English gerund, she argues that for

a structure to be considered as condensed it is not only necessary for us to find its theoretical full clause alternative but it must also be possible to use the full clause in the given context without any evident change of meaning. Among obstructive factors that might rule out the alternation she includes the necessity of expressing subject, conjunction, modal, and tense in the full clause or difficulties connected with the syntactic arrangement of the original structure. (p. 17-29)

As is evident from the descriptions above, the approaches seeing the term condensation in its broad sense stress mainly the state of things as it is, that is, the final condensed/compressed form of a sentence, while in the second approach the concept is seen more dynamically as a change (or the result of a change) from one state (full sentence) to another (condensed structure), cf. dictionary definition in 2.1.

For the following reasons it seems more logical to consider as condensed all structures which have a full clause as their underlying structure (approach 1) and not only those which can be alternatively realised by a full clause:

The possibility of understanding the structure in terms of clausal elements already suggests that we are not dealing with a full/complete structure on its own, but a compressed one.

Some of the structures which now lack their full clause alternatives were realised by them in earlier stages of English development. (for this see for instance Macháček, 123) This again shows their underlying structure to be clausal and, therefore, they should be analysed as complex.

Some of the structures are theoretically replaceable by full clauses, however the full clauses are hardly ever used: *the appeal to give blood* X *the appeal that people should give blood* (for this see Quirk et al. 1991: 1271)

Some of the structures, when realised by a full clause, acquire slightly different meaning: *Pat persuaded Liz to interview both candidates* X *Pat persuaded Liz that she should interview both candidates* (Biber et al., 1999: 1201) Biber et al. argue that the meaning conveyed by the full clause is weaker than that of the condensed structure. While the full clause only communicates that Liz accepted the obligation to interview both candidates, the condensed one also entails that she

agreed to do so. (but in connection with this see again Petrlíková and her approach)

Some of the structures differ in American and British English as to whether they permit realization by a full clause: *I want you to go* X *I want that you go* (only American)

Similarly, problems also arise if we want to define condensed structures on the basis of comparing them with their Czech or German translations. Although condensed structures are rare in these languages, they can be and are used: the sentence *Going down the street I met John* can be expressed in Czech by the same means. (Mathesius, 1961: 171-173). How should one then understand the already mentioned Mathesius´ claim that English can within one sentence express many circumstances which must be realized by subordinate clauses in Czech and German? (besides, this also inappropriately suggests that correspondence of condensed structures with a main clause is impossible, but cf. again the already discussed example with "the old sheep dog")

In the light of these findings, I will consider as condensed all structures that show a correspondence to full clause structures. However, it must be acknowledged that the term "condensed" here means rather "having condensed structure" not "condensing a full clause".

In this paper various condensed structures will be introduced, with the aim to find out which of them are used to condense existing full clauses (have full clause paraphrases). I will also see the possibility of realising a condensed structure by a full clause in terms of gradience, ranging from "absolute" full clause alternatives to structures impossible to replace. (cf. the arguments above)

3 Means of Condensation

Although the main means of condensation in the English language are non-finite structures (and the whole paper will be dedicated to these), before starting this discussion, it is useful to briefly mention the uses of other condensing devices, such as "verbless clauses" or "nominalisation". (this will be done solely for illustrative purposes and these structures will not be covered in the text analysis) Besides, mentions concerning the

relations and boundaries between condensing devices as well as condensed and non-condensed structures will be made.

3.1 Verbless clauses

Verbless clauses are considered to be a means of condensation, since they express, in a compressed form, the same content as full subordinate clauses. Although they lack a verb, their structure resembles that of a full clause in that it is analysable into clausal rather than phrasal elements (Huddleston and Pullum, 2002: 393):

Although tired, she continued working
Although she was tired, she continued working

The missing elements are usually a contextually retrievable subject and a form of the verb *be*, therefore, verbless clauses are often regarded as reduced variants of full clauses (but see, for instance, Quirk et al. (1991: 996) for the possibility of the treatment of these clauses as reductions of non-finite clauses).

The most compressed type of a verbless clause is that which is realized only by one phrase, lacking both the subordinator and subject (*Sleepy, she went to bed.*) As Quirk et al. mention, it is especially in this case that there are not clear borderlines between verbless clauses and phrases; for instance, cases of apposition (*John Green, our new English teacher*) or postmodification (*the table in the corner*) may be regarded as both. Similarly, complex transitive sentences such as *I assume her trustworthy* can be analysed as containing a compressed clause, cf. *I assume that she is trustworthy* (Quirk et al., 1991: 997, 1274). In the limited space of this paper, I will not pursue this issue any further, concluding that not all structures present a straightforward analysis and it depends on the linguist's point of view whether they see them as condensed or not.

3.2 Nominalisation

In the traditional view of nominalisaton (cf, Quirk, 1991) as nominalised structures are considered NPs that show a systematic correspondence with a clause structure:

his explanation of the problem

he explains the problem

The head of such NP is as a rule a verbal, deverbal, deadjectival or denominal noun (a noun related to a verb, an adjective or a noun, respectively), the word formation process being that of affixation, conversion or phonological modification (for word formation see Biber et al., 1999: 1696). The NP then appears to be a compressed variant of a clause (cf. the example above) and thus readily serves as a means of complex condensation. However, although the elements of the NP match the elements of the clause (*his – he, explanation – explains, of the problem – the problem*), the nominalised expression still syntactically cannot be analysed into clause elements such as S,V,O, its structure being phrasal (premodifier, head, postmodifier) as in the NP *the Capital of Germany.* (Quirk et al., 1991: 992, 993)

To mention different concepts of the term nominalisaton, for instance, Huddleston treats as nominalised also all clauses that have the same functional potential as Nps, and Jacobsen considers as instances of nominalisation also relative clauses, PPs and adjectives functionining as noun modifiers, since their structure is related to that of NPs. (for more details see Huddleston, 1993: 317, Jacobsen, 1978: 341-400)

3.3 Minor types of condensing devices

In addition to non-finite clauses, verbless clauses and nominalisation, there are also other linguistic means which, according to some linguists, have condensing effect. In this connection Biber et al. (1999) mentions short passive (agentless passive: *The table was painted red*) and cases of situational ellipsis: e.g. (*Coffee?*)

Besides nominalisation, we can as well talk about "adjectivalisation" in case of adjectives derived from verbs (*a surprising conclusion = a conclusion that surprises us*) or even "adverbialisation" in case of adverbs derived from such adjectives (*surprisingly, he knew it = it surprised us that he knew it*). In fact all structures which it is possible to relate to clauses can be treated as condensed; this is evident, for instance, from the structure of complex NPs: *an old wooden table from Spain* can be understood as being derived from the following propositions: *the table is old, the table is wooden, the table is from Spain.* (for complexity in NP cf., for instance, Quirk et al., 1991: 1349)

4 Non-finite Clauses as a Means of Condensation

In their treatment of condensation, linguists, see for instance Vachek (1976) or Mathesius (1961) most often name as condensing devices non-finite structures. This is probably caused by the fact that non-finite structures are used much more frequently than other condensing devices and condensity achieved by them is clearly visible because they often resemble the full-clause structure to a great extent. In view of this, consider the following example of a non-finite structure and its full-clause paraphrase:

It is usual <u>for him to forget about things</u>
It is usual <u>that he forgets about things</u>

The two underlined structures are analysable into the same clausal elements (subject, verb, object), the only difference being in the realization of some of them (grammatically optional subject realised by the PP *for him* X grammatically obligatory subject realised by the NP *he*, non-finite infinitival VP *to forget* X finite VP *forgets*). In this respect non-finite structures such as the one above behave in the same way as clauses and therefore, the term "non-finite clauses" will be used for these structures. (in this, I adopt the approach presented by Quirk et al., 1991: 992)

4.1 Inexplicitness in Non-finite Clauses

The main distinguishing feature of non-finite clauses is that their predicate is realised by a non-finite VP, i.e a VP which is headed by a NF verb: infinitive, gerund or participle. (Quirk et al. 1991: 150 - 151) According to this, we distinguish three types of NF clauses; infinitival, gerundive and participial clauses.

The traditional division of verbs, VPs (and clauses) into finite and non-finite reflects the fact that some VPs can express (are marked for) various grammatical categories (i.e. number, tense, person, mood, aspect, voice) and thus match the form of other words in a sentence while others can be marked only for aspect or voice. The use of the term "finite" in fact relates to the general meaning of the word (existing in a limited sense) and "marked for" is used with the meaning of "is limited". For illustration, I include the definition of finiteness by Crystal:

This term suggests that verbs can be limited in some way, and this is in fact what happens when different kinds of endings are used. Finite forms limit the verb to a particular number, tense, person or mood, non-finite forms do not limit the verb in this way. (2003: 212)

In the light of this definition, consider the non-finite VP *to forget* (example above), as opposed to the finite VP *forgets*. The non-finite VP expresses only the verbal category of aspect (here non-progressive, non perfective) and voice (here active) while the finite VP is marked for all of the categories.

Therefore, non-finite clauses are in general less explicit than full (finite) clauses and, as a rule, function as subordinate clauses, their interpretation often being dependent on the context. The connection between non-finiteness (inexplicitness) and subordination is well described by Huddleston and Pullum: they mention that since a subordinate clause is incorporated into the structure of a larger clause it is not necessary for it to be so explicit, the grammatical information needed can be inferred from the main clause. (2002: 89) In spite of this, non-finite clauses can sometimes have, for instance, more temporal or modality interpretations, cf. *This is the place to go to* / *where we must/can/should go to*.

In addition to lacking tense, person, number and mood markers, non-finite clauses are also often subjectless and may lack a subordinator. (but see Jacobs (1995: 50) for the view that non-finite clauses always have a subject, only sometimes it is "understood" rather than "overt") The subject and the subordinator, i.e. the semantic relation of the subordinate clause to the superordinate clause, can usually be inferred from the context such as in *He promised to come* (the subject is *he*) or *Not having her homework, she did not go to school* (the relation is that of reason).

As the examples above showed, NF clauses are an effective means of condensing sentence structure. However, as a result of their compression, their meaning is usually quite inexplicit and more abstract or general than that of full clauses. (This is evident especially in case a full clause paraphrase is possible) In the following chapter, the three types of non-finite clauses (infinitival clauses, gerundive clauses and participial clauses) and their uses will be closely examined, main attention will be naturally paid especially to their effectivity as a means of condensation and paraphrasability by full clauses.

5 Types and Uses of Non-finite clauses

Non-finite clauses will be divided according to two criteria: 1) according to their form (into infinitival, gerundive and participial clauses) 2) according to the type of subordinate clause (into relative, adverbial and nominal clauses). In this I adopt the approach presented by Quirk et al. (1991), but as will be shown, in further subclassifications of the clauses my approach will sometimes differ.

The structure of the presentation will be the following. The main division will be made into infinitival, gerundive and participial clauses, each of these clauses will be then classified as regards their functions. Such approach aims to reflect the semantics of the individual formal types of clauses (infinitival, gerundive, participial) and find out how the meaning of these clauses influences the possibility of seeing them as condensed full clauses.

5.1 Infinitival Clauses

5.1.2 Form and Semantics of Infinitival Clauses

An infinitival clause is a clause headed by an infinitive VP. In contrast to gerund and participle, infinitive VP is the only VP which can express the full range of combinations of verbal categories found in non-finite VPs, i.e. perfective/non-perfective aspect, progressive/non-progressive aspect, active/passive voice. (Quirk et al., 1991: 153)

	non-progressive non-perfective	non-progressive perfective	progressive non-perfective	progressive perfective
active	to do	to have done	to be doing	to have been doing
passive	to be done	to have been done	to be being done	to have been being done

In some grammar books (see for instance Dušková, 2006: 267) to refer to non-perfective and perfective forms the terms "present" and "past" infinitive, respectively are used. This reflects the fact that infinitival non-perfective constructions often express time that is simultaneous with the time expressed in the superordinate clause (*He is believed to steal*) while perfective constructions express anteriority (*He is believed to have stolen it*). Therefore, "past" and "present" here mean past and present with respect to the time reference of the superordinate clause, not of the time of speaking. Since non-finite forms do not carry any grammatical tense markers and the time expressed by them is

contextually bound, for the sake of clarity, I consider it more convenient to use terms which reflect their morphological form, i.e. (non) perfective, (non) progressive. (This terminology is used by Quirk et al., 1991)

The time reference of an infinitival clause is naturally explicitly realised in its full-clause paraphrase. The two examples above could be paraphrased as *It is believed that he steals* and *It is believed that he has stolen/stole it*, respectively. Notice that the distinction between past and present perfect (and similarly that betwen past and past perfect) is neutralised in an infinitival clause. (Quirk et al., 1991: 191) In addition to this, non perfective forms also often express futurity (*I expect him to come/I expect he will come*). Progressive forms are used similarly as in finite clauses: non-perfect progressive infinitive marks a simultaneous ongoing action: *She is glad to be working there/She is glad she is working there*, perfect progressive an anterior action: *She is glad to have been working there/She is glad she was/has been working there*. (Dušková, 2006: 267 – 268)

Besides lacking tense markers, infinitives do not allow any modal auxiliaries. However, infinitival clauses often express modal meanings, especially if they refer to successive actions (i.e. mainly simple non-perfective non-progressive *to* infinitives): *I recommend him to read the book/I recommend that he (should) read the book*. In this case infinitive carries the same meaning as subjunctive or an indicative clause with a modal (*should*). In connection with this, Jacobs argues that *to* infinitival clauses are found in contexts where subjunctive was used in the past. Therefore, their reality status in such sentences is left open. (1995: 85) Similarly, Brazil talks about potentiality (non-actuality) of events expressed by infinitives: "since *to* forms refer to events that are anticipated from the time reference point of another verb, they always leave open the possibility that, when that time comes, the event will not actually take place" (1995: 86). On the other hand, Huddleston and Pullum ascribe the hypothetical meaning of *to* infinitival clauses to the *to* (originally a preposition), which they contain:

Preposition *to* is characteristically associated with a goal, and a metaphorical association between to-infinitivals and goals is to be found in the fact that they commonly involve temporal projection into the future, as with the complements of ask, choose, consent, hesitate, order, persuade, promise, resolve, strive, tell, threaten, and countless other catenatives. Linked with this is the modal feature of potentiality. (2002: 1241)

However, as Huddleston and Pullum further point out, these are only historical tendencies and associations, not a constant meaning, cf. *He forced me to do it*, where the potentiality

is overriden by the semantics of the superordinate verb. This has lead some linguists (see for instance Dušková, 2006: 266) to claim that infinitive itself does not express any modality. If it does, it is the result of its syntactic function and the semantic and lexical context in which it operates. I am not going to fully adopt such approach, since infinitive has a non-factual interpretation also in contexts where indicative or gerundive clauses having no such interpretation can be used: *He tried to whisper* X *He tried whispering*, *I remembered to phone him* X *I remembered phoning him*, *This is the question to discuss/which should* or *must be discussed* X *This is the question which is being discussed*. Therefore, the basic meaning of to infinitive will be considered to be that of non-factuality/potentiality, although in some cases it is overriden by contextual factors.

Thus, the main obstacle to overcome when paraphrasing infinitival clauses by full clauses is the semantic indeterminacy of the former. Since infinitive is tenseless, it often presents more time interpretations. It may refer to either factual or non-factual actions, in case of potential actions there being the question of what modal auxiliary is the most suitable in the full-clause paraphrase. In addition to this, it often lacks a subject: if it is general, there might arise problems as to its realization. (see)And naturally, some uses of infinitive are so well established that they do not allow the use of full clauses at all.

After this general introduction of infinitival clauses, their uses (in relative, adverbial and nominal clauses) will be discussed.

5.1.2 Infinitival Relative Clauses

Infinitival relative clauses, as all relative clauses, are used as noun postmodifiers. They are as a rule condensed relative full clauses and are paraphrasable by them. Their use is very flexible, since they correspond to a wide range of full clauses where the relative pronoun mostly functions as subject, object or adverbial (Quirk, 1991: 1265):

1 SUBJECT: *He needs a girl to love him / He needs a girl who would love him*

2 OBJECT: *He needs a girl to love / He needs a girl whom he would love*

3 ADVERBIAL: *The place to go to is the seaside / The place where we/one will/should/must go to is the seaside*)

Infinitival relative clauses are usually subjectless. The identification of the unexpressed subject is possible from the context, either linguistic or extralinguistic: a) it is the antecedent of the relative clause (ex. 1), b) it is the subject of the superordinate clause (ex.2), c) it is vague, general or the speaker (ex.3). (Dušková, 2006: 567 – 568) In case the subject cannot be derived in this way, it is possible to introduce it in the form of a for phrase (*The place for you to go to is the seaside* / *The place where you should/must go is the seaside*). However, as Biber et. al. (1999: 633 – 634) mention, only about 10 % of infinitival relative clauses have their subjects overtly expressed; in cases of overt S the preference is to use a full clause.

Infinitival relative clauses are mostly used in contexts where they carry modal meanings. In many cases they are paraphrasable by a full clause with *should*: *The man to discuss this with is Mr. Green* / *The man you should discuss this with is Mr. Green* (Close, 1975: 98). Other modals used in full clauses that alternate with infinitival relative clauses are *will*, *would*, *must* or *can* and, not infrequently (cf. ex. 3 above), the meaning of the infinitival clause is so vague that it allows more modal interpretations (Quirk et al, 1991: 1267)

In addition to simple active infinitive, which was found in all examples so far, also simple passive infinitive is quite often used to condense full relative clauses: *The questions to be discussed are the following*/ *The questions which should/will be discussed are the following*. As Dušková (2006: 567) states, this infinitive always has a modal meaning; usually that of possibility, necessity, advisability or simply only futurity.

To sum up, infinitival relative clauses can be considered to be condensed versions of full clauses. Still, when paraphrasing infinitival clauses by full clauses, problems may arise concerning the realization of subject or the realization of the vague meaning of the infinitive, which in a full clause must be made explicit using tense markers and modal auxiliaries.

5.1.3 Infinitival Adverbial Clauses

Infinitival adverbial clauses are similar to infinitival relative clauses in that they can often be considered to be condensed full clauses and have full clause paraphrases. In most cases they express purpose:

He borrowed money (in order, so as) to buy a new dishwasher.
He borrowed money so that he could buy a new dishwasher.

These clauses may be realised by the conjunction *in order to/so as to* and infinitive or only by infinitve. In case the clause is governed by *in order to* or no conjunction is used, it may, even though not very frequently, contain an overt subject. (Huddleston, 2002: 728) In fact, two counter-tendencies are here at work. On the one hand, infinitives with *for* phrase subjects are clumsy and are usually avoided, on the other hand, infinitives are the chief means of realizing purpose clauses and their use leads to sentence condensation, which often cannot be achieved by any other means. This preference for infinitives is stressed by Knotková (1986: 252, 253)

Regarding the meaning conveyed by infinitival purpose clauses, it is again non-factual and modal. In full clauses the modals *may*, *should*, *can*, *could*, *will*, *would* (if the superordinate clause is in present or present perfect or if it refers to the future) and *might*, *should*, *could*, *would* (if the superordinate clause is in past or past perfect) are used (Knotková, 251), while in infinitive such distinction is neutralised and must be inferred from the context.

Infinitival adverbial clauses may also convey what is called by Dušková (2006: 562) "false" purpose in sentences such as *He left for America never to come back.* The clauses are temporally related (there is temporal sequence) and may be paraphrased by coordinated clauses *He left for America and never came back.* Therefore, Close (1975: 74) calls this infinitive "infinitive of consequence" and Thomson and Martinet (1991: 221, 222) "infinitive used as a connective link". Besides, in academic style the purposive function of an initial infinitive is often weakened and the infinitive is also used here more as a cohesive device (conjunct), linking the sentence with the previous discourse, cf. fixed phrases such as *to conclude, to begin with, to sum up.* (Dušková, 2006: 562, 563) These phrases are usually so well established, that they hardly allow any full clause paraphrases. In addition to this, infinitive placed initially may also function as sentential evaluative modifier, i.e. disjunct (*to be honest, to put it in my own words*), in this case being often replaceable by a full clause with *if*: *If I am to/should be honest.* (Dušková, 2006: 563)

The last meaning conveyed by infinitival clauses which is worth closer noticing is that of result in sentences such as *He is too tired to read on*. These non-finite clauses might be

paraphrased by full clauses with "so"..."that": *He is so tired that he cannot read on*. (Knotková, 1986: 250, 251)

Infinitival adverbial clauses are occasionally used to express goal, reason, concession, manner, comparison or measure. In these uses they usually correspond to full clauses carrying the same meaning: *He smiled as if to show me his approval /He smiled as if he wanted to show me his approval*. (Dušková, 2006: 264).

To conclude, infinitival adverbial clauses can usually be paraphrased by full clauses. Factors which may obstruct the paraphrasability are similar to those playing role in relative clauses: infrequent realization of subject in infinitival clause and the necessity to explicitly express tense and mood in full clauses. Nevertheless, the situation here differs from case to case: adverbial clauses of purpose tend to be realised by infinitives and some uses of adverbial infinitives as disjuncts and conjuncts are already so fixed that no full clause alternative is thinkable.

5.1.4 Infinitival Nominal Clauses

Linguists considerably differ in their classifications of infinitival nominal clauses, however, they usually divide them into quite many classes. The groupings are frequently made according to the type of predicate which the clauses follow (verb, adjective, noun) as well as their syntactic functions, i.e. S, O, Cs, Co etc. (for such approach see e.g. Dušková, 2006) . For the purposes of this work, it is not necessary to go into such details and the clauses will be classified basically into three main types: clauses used with verbs, clauses used with adjectives and clauses used with nouns. (In this I more or less reflect the approach of Biber et al. 1999) As regards the syntactic function of the clauses, only two distinct functions will be recognised (that of subject and subject complement). All other clauses will be referred to as clauses in post-predicate position or complement clauses, since they are basically used to complete the meaning of the preceding predicate. (this is again consistent with the approach of Biber et al.)

In this treatment of infinitival nominal clauses main attention will be paid to the semantics of the verbs, adjectives and nouns that take these clauses. As Jacobs (1995: 291-300) mentions, the semantic class of the predicate considerably influences whether the nominal clauses will have the form of an infinitival clause, a full clause or both, and, therefore, it influences the possibility of paraphrasing infinitival clauses by full clauses.

In this connection, Jacobs distinguishes two types of predicates: forward oriented predicates (*want, persuade, eager*) referring to future potential situations, and reactive predicates (*regret, forget, enjoy*) referring to realized experience. As he argues, infinitival clauses, the meaning of which is frequently potential, are best compatible with forward oriented predicates. On the other hand, full clauses, are not commonly used with such predicates, therefore paraphrase in this case is not frequent.

The above mentioned are, naturally, only tendencies; it is by far not unusual to find nominal infinitival clauses in contexts where they refer to factual, realized experience (*He turned out to be a liar*, *It was convenient for him to say so*), this being common especially with perfective infinitive: *He is happy to have done it*. (Quirk et al., 1991: 1062 – 1063; Knotková, 1986: 214)

In this chapter uses of infinitival nominal clauses with respect to the semantics of the predicate will be examined, attention will be paid especially to the question of where both infinitival and full clauses can be used.

5.1.4.1 Infinitival Nominal Clauses used with Verbs

Infinitival nominal clauses used with verbs are most commonly complements. (function of subject is rare)

I will adopt here the division of infinitival clauses according to the semantic class of the verb predicate presented by Biber et al. (Biber et al., 1999: 693 – 716). As Biber et al. argues, infinitival nominal clauses complete a wide range of verbs: communication verbs, mental verbs (expressing desires, intention, decision, effort or perception) causative verbs, verbs of simple occurence and aspectual verbs. On the other hand, full clauses tend to be used especially with communication verbs and mental verbs of cognition. Therefore, it is mainly (but not only) in this case that infinitival clauses are paraphrasable by full clauses.

In the limited space of this paper I will focus only on the main uses of infinitival clauses, that can be seen as condensed full clauses (a detailed list of the verbs and their possible forms of complementation is presented in Appendix 1)

To begin with infinitival clauses used with **communication verbs**, they are commonly found only with suasive speech act verbs, i.e. forward oriented verbs that introduce indirect directives (*order, tell, request*), not factual verbs (this terms are borrowed from Quirk et al., 1991: 180-182) They occur in structures such as *I advise you to apologize to*

him, where the O of the preceding verb functions as the S of the infinitive. (Dušková, 1999: 35) Full clauses complementing these verbs are *that* clauses which have a modal or a subjunctive: *I advise (you) that you (should) apologize to him*. As Quirk mentions, if both types of complementation can be used, full clauses are rather formal variants.(1991: 1216)

Cognitive verbs are verbs of knowing and thinking, frequently expressing beliefs and assumptions. They are typically not forward oriented verbs, nevertheless, a great number of these verbs allow complementation by an infinitival clause: *I assume him to be right* . The structure of such sentences is quite complex: although the *him* in the previous clause syntactically behaves as a single constituent; an object (for instance, it can be passivised), semantically, it only functions as subject of the infinitive. The semantic relationship between sentence elements is explicit in the full-clause alternative: *I assume that he is right*. (Radford, 1988: 317–323) Infinitival clauses after these verbs are preferred to *that* clauses especially in formal contexts and are more often used in passive *He is assumed to be right* with "raised subject" (cf. infinitive with the following verbs of probability and simple fact) The subject of such sentences is usually "a heavy constituent that presents new information" (Biber et al., 1999: 732)

The last type of verbs with which infinitival clauses can often be seen as condensed full clauses are **verbs of probability and simple fact**. With these verbs the infinitives refer either to situations that are, to a certain extent, likely (*seem*) or to simple, given facts (*happen*). Especially the verbs *seem* and *appear* + infinitival/full clause are considerably frequent: *He seems to know it / It seems that he knows it*. Comparing the two sentences, it is evident that the one with infinitive is condensed and its structure is quite complex. The subject of the verb *know* is moved from its position to the position of the subject of the superordinate clause. This movement is traditionally called "subject raising" (Quirk, 1991 Huddleston, 2002, Biber, 1999, Radford, 1988). The structure of the sentence with *that* clause is much clearer, even though its logical subject (*that* clause) is extraposed. As Biber mentions, infinitival clause is the unmarked complementation. (1999: 733)

With the remaining types of verbs (mostly emotive or forward-oriented verbs), paraphrasing infinitival clause by a full clause is rare. It is possible with a few causative verbs (*allow*), verbs of intention or decision (*decide, agree*), or verbs of desire (*prefer, wish*) and after emotive verbs (*verbs of desire*). Its use is less frequent, if it can be used, it

is preferred only under the following conditions: 1) the subject of the inf. is not contextually retrievable (with predicates that do not readily admit the subject of the inf. to be realized) 2) the subject of the inf. is a complex NP 3) the clause has a specific modal meaning 4) the meaning is not forward oriented. (Biber, 756, 757)

Leaving aside complement clauses, infinitive can be realized as the subject of the sentence. As Dušková states, it is found in evaluative and identifying predications, the predicate often being verbonominal with evaluative adjective or noun (2006: 542): *To leave was his wish.* In identifying/specifying sentences, infinitive may also function as subject complement (p. 546): *His wish was to leave.* (since these clauses relate to an adjective or a noun, they will be included in infinitival nominal clauses used with adjectives and nouns)

To conclude, infinitival nominal clauses typically complement forward oriented verbs, therefore, there are not many occurrences of infinitival clauses paraphrasable by full clauses. Those that are are the instances of infinitival clauses found with suasive speech act verbs, cognitive verbs and verbs of probability. With the exception of the first use mentioned, infinitive is a more formal means of complementation.

5.1.4.2 Infinitival Nominal Clauses Used with Adjectives

Clauses with adjective predicates can occur in post-predicate, pre-predicate (as subject) or extraposed (as extraposed subject) position. Clauses functioning as subjects are traditionally (Huddleston, 2002, Quirk, 1991, Dušková, 2006) treated separately and are not considered adjectival complements forming the AdjP. However, the semantics of the adjectives influences the type and interpretation of such clauses (cf. *It is important for him ro read in English/ It is important that he read in English X It is easy for him to read in English/?*) and in this sense the clauses are dependent on them. Therefore they wil not be treated here separately.

Adjectives used with infinitival nominal clauses belong to the following semantic domains: degree of certainty, ability or willingness, personal affective stance, ease or difficulty, evaluation, habitual behaviour, necessity or importance. Full clauses, the meaning of which tends to be factual, are mostly found with affective, evaluative or certainty adjectives. (Biber et al. 1999: 671, 716)

Again, main atention will be paid only to those clauses that are paraphrasable by full clauses. (a detailed list of the adjectives and their possible forms of complementation is presented in Appendix 1)

To begin with **Certainty adjectives,** these are factual in meaning, however, a few of them allow (and some of them require) an infinitival complementation: *He is certain to come.* As Huddleston (2002: 1257, 1258) points out, these adjectives occur with subject raising (cf. verbs of probability and simple fact) and, therefore, the condensed sentences correspond to sentences such as *That he will come is certain /It is certain that he will come* with full clauses functioning as their subject (or, more often, extraposed subject). Infinitive is the unmarked choice; *that* clause is preferred if modality or tense need to be explicitly expressed. (Biber et al. , 1999: 733 – 734)

Affective adjectives convey emotional attitude towards the proposition expressed in the complement clause. Their meaning is generally factual, however, as Quirk (1991: 1228) points out, many of them can be complemented by full clauses as well as infinitival clauses: *I am happy that I am leaving/ I am happy to be leaving.* Infinitival clause (i.e. perfective infinitive) can be used even for expressing anteriority: *I am happy to have left* (Close, 1975: 75 – 76)

Evaluative adjectives express evaluation of or emotional response to the proposition in the subordinate clause. They can be complemented by both infinitival clauses and full clauses, however, sometimes with difference in meaning. As Huddleston (2002: 1253) mentions, full clause (with indicative) "tends to be concerned with facts or propositions, while the infinitival is concerned with situations (actions, events, states, etc.)": *It was good to see him* X *It was good that I saw him*. Therefore, infinitival clauses are often found after modals and are paraphraseable by *if*-clauses: *It would be good to see him / It would be good if I saw him.* Nevertheless, factual interpretation is not impossible: *It is usual for him to be late / It is usual that he is late.* (Quirk, 1991: 1063, 1225, Dušková, 2006: 545 – 546)

Adjectives of necessity or importance express degrees of necessity, desirability or importance. They are forward-oriented and are often complemented by infinitival clauses. The clauses function as subject (extraposed subject) of the sentence and can be paraphrased by *that*-clauses with *should* or subjunctive: *It is necessary (for us) to discuss the problem/ It is necessary that we discuss the problem*. (Quirk, 1991: 1224, 1230,

Huddleston, 2002: 1252 – 1253) Since it is not very common to overtly express the subject of the infinitive (Huddleston, 2002: 1224), in case the subject needs to be explicitly realised, a *that*-clause is preferred.

The uses of infinitival clauses with adjectives of habitual behaviour (*accostumed*), adjectives of ease and difficulty (*easy*) and adjectives of ability or willingness (*able*) do not allow full clause paraphrases. Still, the infinitive with adjectives of ease and difficulty (in post-predicate position) is worth mentioning since it represents a not-yet-discussed type of condensed structure, cf. *The mistake is easy to overlook.* The condensation is achieved by "object-to-subject raising", ie. the object of the infinitive is moved to the S position of the superordinate clause. (Biber et al., 1999: 716 – 717)

To sum up, infinitival clauses tend to refer to potential situations and, therefore, they are best compatible with volitional adjectives, adjectives of ease or difficulty and adjectives of necessity or importance. If they can be paraphrased by full clauses, the full clauses often contain a modal, subjunctive or they are *if*-clauses. Contrastingly, full clauses tend to refer to facts and they are also preferred in case the subject, tense or modality of the clause need to be explicitly realised.

5.1.4.3 Infinitival Nominal Clauses Used with Nouns

Nominal clauses used with noun predicates can be found in the following functions: as the so complement clauses, immediately following the nouns (*His chance to escape*), in identifying construction either as subject (*To ecape was his chance*) or as subject complement (*His chance was to escape*). Semantically, the nominal clause expresses the content of the abstract noun (or describes the noun) and similar nouns are used in both types of constructions. (Biber, 1999: 671)

Infinitives are preferred with forward oriented nouns referring to potential situations. Concerning complement clauses, Biber et al. points out that infinitival clauses are predominantly used after nouns that refer to human goals, opportunities or actions, concerning nominal clauses used in identifying construction, similarly, infinitival clauses often present an aim, plan, strategy, idea or method of doing something (p. 715)

The majority of nouns used with nominal clauses are nominalisations, ie. they are derived from verbs or adjectives, and most of them retain the same complementation: *He is anxious to leave/ His anxiety to leave* (p. 715) Consequently, the possibility of

paraphrasing infinitival clauses by full clauses usually stems from the fact that the original verbs and adjectives allow both types of complementation: *He ordered to go there/ His order to go there/ He ordered that we go there/His order that we go there*. As with verbs and adjectives, infinitival clauses used with nouns tend to be "subjectless" (Huddleston, 2002: 1258), therefore, in case the subject needs to be realised, a *that*-clause is often used.

Due to their frequently potential meaning, infinitival clauses are most often used with verbs, adjectives or nouns that are forward oriented or carry modal meanings (causative verbs, verbs of intention, adjectives of importance or necessity, volitional adjectives, adjectives of ease or difficulty). With these predicates infinitive is often the only possible complementation. However, potentiality is not the ever-present kind of interpretation and infinitival clauses can also occur with some adjectives of certainty, emotive verbs/adjectives or factual verbs, with which their meaning is factual. In case they are paraphraseable by full clauses, there may arise the problem of how to explicitly realise the vagueness of the infinitive (eg. generic S, tense, modality). Therefore, if this needs to be unequivocally expressed, full-clause is preferred.

5.2 Gerundive clauses

5.2.1 Form and Semantics of Gerundive clauses

A gerundive clause is a clause headed by a gerund VP. As infinitive, gerund can express the distinction between perfective and non-perfective aspect and active and passive voice, however, only one form is usually used for both progressive and non-progressive (non-perfective) aspect: (progressive meaning can be explicitly realized, Quirk, (1991: 154) gives the example *You can probably get an extension on the grounds of being teaching*, however, he mentions that such sentences are rare to find)

	non-progressive non-perfective	non-progressive perfective	progressive non-perfective	progressive perfective
active	doing	having done	doing	having been doing
passive	being done	having been done	being done	having been being done

As with infinitive, the meaning of gerund is often vague and the clause sometimes offers more than one interpretation. Simple active non-perfective gerund is the most frequent

one. It usually refers to simultaneous actions and actions with general validity (*I like working with him*) although, as Dušková (2006: 269) mentions, expressing futurity or anteriority is also possible; eg. the sentence *I am angry at your disturbing me* may mean either *I am angry that you (have) disturbed me/were/have been disturbing me* or *I am angry that you disturb/are disturbing me*. However, in case anteriority needs to be explicitly realised, the perfective form is used (*I am angry at your having disturbed me/having been disturbing me*). In addition to this, active infinitive can occassionally acquire passive meaning (*Your socks need washing*), which is normally carried by the passive form.

In contrast to infinitive, which very often refers to potential situations that are yet to come, gerund is more like indicative non-modal finite clauses in that its meaning is usually factual, or, as Jacobs (1995: 299) puts it, it "tends to fit better with realized situations". (reference to the future is possible especially in nominal clauses when complementing some forward-oriented predicates: *I plan staying there two weeks*). Therefore, the uses of gerund that are paraphraseable with full clauses will often require an indicative non-modal clause. As with all types of non-finite clauses, the problems that may arise when looking for a suitable full-clause alternative of a gerundive clause are connected with the explicit realization of subject, tense, modality and also aspect.

Before turning to the types of clauses which can be realized by gerund, it needs to be made clear that gerund, although traditionally classified as a verb, besides verbal properties has got quite a few nominal properties, much more than the previously discussed infinitive. (In fact, some linguists, eg. Knotková (1986: 233) or Jacobs (1995: 82 – 84), label gerund a noun) As regards its verbal properties, gerund, as has been shown above, has the verbal category of voice and aspect and can express temporal relations, besides, as ordinary verbs, it can take a NP as its complement and adverbs as modifiers (*speaking English fluently*). On the other hand, gerund resembles a noun in that it can be preceded by a possessive pronoun (*his speaking English fluently*), often follows a preposition and never a conjunction (*He is proud of his speaking English fluently*) and has the same functional potential as a noun (in a sentence it occurs as S, O, Cs, prepositional complement). (for more details see eg. Knotková (1986: 233 – 235), Huddleston (2002. 312 – 317), Dušková (2006: 569, 570), Quirk (1991: 1290 – 1292)

The resemblance of these clauses to NPs naturally, affects their condensing power and full-clause paraphrasability.

Gerundive clauses are typically nominal clauses or adverbial clauses (not relative clauses). In both types, gerunds, as nouns, frequently occur after a preposition. Since this position is possible for NPs and not full clauses (with the exception of interrogative and exclamative clauses), this naturally imposes problems on their full-clause paraphrasability. For instance, as Petrlíková states, gerunds which function as the (second) prepositional O of ditransitive verbs do not have full-clause alternatives because this function requires realization by a PP. Similarly, gerundive adverbial clauses, which are always introduced by a preposition, are sometimes difficult to paraphrase; this is caused by the fact that not all prepositions have corresponding conjunctions or there is a difference in meaning of the two. (p. 22) In addition to this, gerund (although not as a clause) has the function of premodifier (*dancing lesson*). This function is likewise restricted to phrases, not clauses.

Therefore, when paraphrasing gerund with full clauses, the obstacles are not only connected with the realization of S (which is often covert in gerundive clauses), tense, aspect, or modality but also with the functional potential of gerund, which not always matches that of full clauses.

5.2.2 Gerundive Adverbial clauses

Gerundive adverbial clauses are as a rule adjuncts (namely, adjuncts of time, contingency, reason, purpose, manner, means, comparison or preference). Due to their nominal character, they occur only in the presence of a preposition, which, naturally, makes it quite difficult to see them as a means of condensation of full clauses since full adverbial clauses are mostly introduced by a conjunction. Still, quite a big number of gerundive adverbial clauses can be paraphrased by full clauses; this is thanks to the fact that some prepositions (*before, after, as, rather than*) also function as conjunctions, some (complex) prepositions (*due to, on account of*) may be complemented by *the fact + that* introducing a relative clause, and many prepositions have meanings comparable to conjunctions.

As Petrlíková mentions, gerundive adverbial clauses that seem to be most readily paraphrasable by full-clauses are temporal clauses (with the prepositions *before, after* that can be used also as a conjunction and *in, on/upon* paraphrasable by *when*), clauses of

reason (with the preposition *for* paraphrasable by *because*) and clauses of preference (with the preposition *rather than,* that is also a conjunction): *After helping him she realised it had been a mistake / After she helped him she realised it had been a mistake.* (p. 22 – 23) In addition to this, gerundive clauses of reason introduced by *owing to, due to, on account of* etc. may be paraphrased using the same preposition expanded by *the fact that* (Quirk, 1991: 1105 – 1106) or, simply, by a conjunction with comparable meaning (*because, as, since*).

Other gerundive adverbial clauses frequently offering a full clause alternative are clauses of condition, concession, exception or purpose. These clauses are almost always introduced by a complex preposition: *in the event of, in case of, in spite of, apart from, with the intention of* etc. As has been already pointed out, such prepositions + *(the fact) that* introduce full clauses as well, or conjunction with a similar meaning may be used: *In case of his inviting us, I will probably have to refuse/In case (if) he invites us, I will probably have to refuse.* However, as Quirk (1991: 1098, 1105) mentions, these complex prepositions are "stylistically clumsy", therefore, in many cases full clauses introduced by a simple conjunction (*if, although, though, but*) will be preferred.

Finally, gerundive clauses are often used to express manner, means and various contingency relations, these clauses being introduced by the prepositions *by, by means of, without, far from, in addition to* or *besides*. It is usually difficult or even impossible to paraphrase these clauses by full clauses, especially if we do not want to alter the meaning. As Quirk (1973: 328) states, full clauses of manner can be introduced by *as* or *in the way that* and a few gerundive clauses of manner or means can be paraphrased in this way: *The questions were answered by using the described method/ The questions were answered in the way that the described method was used?*.

Gerundive adverbial clauses can express a great number of semantic relations (except eg. place or result), however, as all non finite clauses, they are not used so frequently and in the same contexts as full-clauses. This is due to their co-occurence only with prepositions (often formal complex prepositions) as well as to their inexplicitness.

To sum up, gerundive adverbial clauses can be considered as condensed full clauses in case the meaning of the preposition contained in the gerundive clause can be realized by a corresponding conjunction (or the structure preposition + *the fact + that* clause). However, more frequently, they tend to be used in different contexts than full-clauses.

5.2.3 Gerundive Nominal Clauses

Gerundive nominal clauses, like infinitival nominal clauses, are found with verb, adjective and noun predicates. Due to their more nominal character, they frequently follow a preposition and, therefore, occur with prepositional verbs, prepositional adjectives and nouns followed by a preposition (in the case of adjectives and nouns this is mostly the only possibility):

VERB + GERUND: *He fears losing the job* (prepositional VERB + GERUND: *He worries about losing the job*)

ADJECTIVE + GERUND: *It is not worth losing the job* (prepositional ADJECTIVE + GERUND: *He is afraid of losing the job*)

NOUN + GERUND (mostly with a preposition): *His fear of losing the job*

As Dušková (573 – 577) mentions, gerundive nominal clauses are frequent in positions where verbal/deverbal nouns are used. Paraphrase by a full clause is also possible, however, as with infinitival nominal clauses, the possibility of a paraphrase depends on the actual predicate used and, to a certain extent, is influenced by its semantics (for instance, aspectual verbs or most verbs of liking take only infinitival and gerundive clause, many communication and cognitive verbs which allow gerunds allow full clauses as well).

As already stated, gerundive clauses tend to refer to current, actual or realized actions and, thus, they are quite common with reactive predicates. As Jacobs (1995: 22 .- 23) mentions, the dependence of gerund on the reactive status of the predicate can be best seen with non-prepositional verbs since in case of a preposition the presence of gerund will be explained by the presence of the preposition. In connection with this he also points out that in this use (ie. after reactive non-prepositional verbs) most gerundive clauses allow full clause paraphrases (by indicative that clauses): *I regret telling him about it/ I regret I (have) told him about it* (other such verbs include *appreciate, deny, forget, remember* or *resume*) This naturally does not mean that nominal gerundive clause following a preposition cannot have a full clause alternative, only, it is less frequent.

Occassionally, gerund may be used after a forward-oriented predicate such as *bother, intend, plan* or *propose*. (Huddleston, 1241) Full clause paraphrase, if possible, usually contains a modal or subjunctive: *I propose postponing the meeting/I propose that the meeting be postponed.*

Finally, it needs to be mentioned that gerundive nominal clauses often have quite a general time reference (for instance when they function as subject). Petrlíková (18 – 19) suggests that this may prove to be a problem when looking for a suitable full clause alternative and illustrates this on the following sentence: *I can't think it's very cheerful, living with this stuff on the walls/that/when/if? you live with this stuff on the walls.* In addition to this, gerund after e.g. verbs of liking show similar characteristics: *I don't like his coming late/I don't like it when he comes late?*

As regards the subject of gerundive nominal clauses, as the subject od gerundive adverbial clauses it can take possessive or non possessive form or, alternatively, it can be covert and implied by the linguistic or extralinguistic context. (Dušková, 2006: 571 – 572)

5.2.3.4 Gerundive Nominal Clauses used with Verbs

Gerundive nominal clauses, as infinitival nominal clauses, are used with quite a wide range of verbs. As Biber (1999: 740) states (I will once again adopt his semantic classification of verbs), they occur after aspectual verbs, communication verbs, congnition verbs, verbs of affective stance, verbs of description, verbs of effort, facilitation or hindrance, verbs of (dis)aggreement or (dis)approval, verbs of avoidance and obligation, verbs of offence, punishment and apology and verbs of required action. As already mentioned, that clauses are found mainly after communication verbs and cognitive verbs (a few with emotive meaning), thus, it will be especially after these verbs that gerundive clauses will be paraphraseable by that-clauses.

In contrast to infinitival nominal clauses, gerundive nominal clauses occur with both prepositional and non-prepositional verbs. Paraphrase by a full clause is possible with both types, however, in case of prepositional verbs this depends on whether the particular verb can be used without the preposition (with some verbs, eg. *depend on*, *cure sb of* this is not possible) or, as in the preceding clause, preposition + nominal interrogative clause

or preposition + *the fact that* may be used (*I count on his inviting me/I count on the fact that he (has) invited me*). (Knotková, 1986: 241 – 242)

As Knotková further mentions, full clauses as alternatives of gerundive nominal clauses are more typical of colloquial language. (The list of verbs complemented by gerund together with alternative means of complementationis in Appendix 1)

Gerundive nominal clauses that are most readily paraphrasable by full clauses are those complementing communication verbs and cognitive verbs.

Communication verbs are commonly speech act verbs. Most of the gerundive clauses used with them have reactive meanings, those that allow paraphrase by a full clause are e. g. *admit, acknowledge, deny etc*. Only few verbs belong to suasive verbs (*insist on, recommend, suggest*) and refer to the future: *I propose discussing it in pairs/I propose that we/you (should) discuss it in pairs*. (Quirk, 1991: 1182) As with emotive verbs, the S of the gerund may be either implied or overtly realized: *She acknowledged knowing about it/that she knew/had known about it* X *She acknowledged his knowing about it/ that he knew/had known about it*. (Biber, 1999: 742) Paraphrase by a full clause is difficult after some prepositional verbs: *I was talking to him about our staying in the city/about the fact that we (had) stayed/were staying in the city?*

Cognitive verbs also usually have reactive meanings and the gerund after them often allows a full clause alternative (as with eg. *consider, forget, mean*). The gerund can be again either "subjectless" or with its own subject: *He forgot about (our) inviting them/that he (we) had invited them*. (Biber, 1999: 742) Problem with paraphrasing arises with some prepositional verbs: *He concentrated on working/?*

Other verbs taking gerundive clauses that sometimes allow also full clauses include perception verbs (*I dream of going to Jamaica/that I could go to Jamaica*), a handful of verbs of affective stance (*I regret saying that/ I regret I (have) said that*), verbs of (dis)agreement or (dis)approval (*I agree to her joining us/ that she should join us*) or verbs of offense, punishment or apology (*I apologise for offending/having offended him/ that (if) I (have) offended him*).

On the other hand, a full clause usually cannot be used in place of gerunds complementing verbs of description (many of them are prepositional verbs) and the verbs carrying modal meanings (verbs of effort, facilitation or hindrance, verbs of avoidance and obligation or verbs of required action.

Gerundive clause may also function as subject. As Dušková (2006: 571) points out, gerund (in contrast to infinitive) is here used especially to refer to concrete actualised situations, sometimes with general validity. It is not restricted only to identifying and specifying predications; it co-occurs with a wider range of verbs, mainly those expressing influence on mental and emotional state such as *alarm, depress, surprise*. (cf. also Huddleston, 2002: 1254 – 1255)

Regarding the paraphrasability of gerund by a full-clause, this is possible especially in case the gerund conveys concrete and factual meaning: *Inviting him was a mistake/(The fact) that you/we.. invited him was a mistake/It was a mistake that you/we... invited him*. (Dušková, 2006: 572) Nevertheless, as gerund is preferred in pre-verbal and full-clause (if not introduced by *the fact that*) in final position, this may cause change in FSP of the sentence. (Petrlíková, 19) To paraphrase gerund which refers to generally valid situations is even more problematic, difficulties being caused predominantly by the choice of a suitable conjunction. (cf. 5.2.3)

In the function of subject complement, paraphrase by a full clause is likewise more feasible in case the gerund has factual meaning: *The problem was his drinking/that he drank (was drinking)*. In sentences where it is introduced by the preposition *like* (*This feels like being at home*), full clause alternative is automatically ruled out. (Petrlíková, 19)

Gerundive Nominal Clauses as Complements of Adjectives

As infinitival clauses, gerundive clauses with adjectival predicates are to be found in pre-predicate, post-predicate and extraposed position. However, gerund functioning as subject (or extraposed subject) is not very frequent. It can be used in this way mainly with evaluative and emotive adjectives (paraphrase by a that clause is usually possible): *It was fortunate seeing him there/It was fortunate that I saw him there*, or, occassionally with adjectives of ease and difficulty (no paraphrase is available): *Reading Spanish is easy*. (for more examples see Quirk, 1991: 1230, Huddleston, 2002: 1254 or Jacobs, 1995: 299)

In post predicate position, which is by far the commonest, gerund is used to complement prepositional adjectives (plus the adjectives *busy* and *worth*). As Biber (1999: 749) mentions, it complements predominantly adjectives expressing affective stance or

evaluation. A few adjectives may be used with gerund in both subject and post predicate position cf. the example above and *I was fortunate in seeing him there.*

Gerunds are best compatible with emotive and evaluative adjectives since these adjectives often have reactive meanings and require that the complement clause be factual. As Quirk (1973: 356) and Dušková (2006: 577) mention, for instance with emotive adjectives the complement clause commonly expresses reason: *He was angry at our arriving late/He was angry that (because) we arrived late/(The fact) that we arrived late made him angry.* With these adjectives it is quite often possible to drop the preposition and use a *that* clause. On the other hand, evaluative adjectives frequently refer to situations of general validity (cf. examples by Knotková, 1986: 237 – 238) and the use of that clause is more limited: *He is good at making up excuses/?.* (see Appendix 4 for these adjectives and their use with gerundive and full clauses)

5.2.3.5 Gerundive Nominal Clauses Used with Nouns

Gerundive nominal clauses, as infinitival nominal clauses, when used with noun predicates may function as subject, subject complement, or as immediate complements of the noun (mostly after a preposition). In the function of subject and subject complement, they occur with a wide range of abstract nouns. As already stated, full clause is possible especially in situations the meaning of the gerund is concrete and actualised: *Confiding in him was the mistake/That we, you...confided in him was a mistake, The mistake was confiding in him/The mistake was that we, you...confided in him.*

Gerundive nominal clauses immediately complementing nouns occur chiefly with abstract prepositional nouns, i. e. nouns followed by a preposition. As Petrlíková (20) argues, paraphrase by a full clause is feasible especially with nouns that express "extrinsic modality, or human judgement rather than control of an action (eg. *chance, fear, feeling, hope, idea, impression, probability...*)": *his hope of winning/his hope that he will win.* (this is the main class of nouns taking gerund) In contrast to this, other nouns (*attempt, effort, way*) alternate between gerundive and infinitival complementation and a few nouns (*cost, problem, task*) allow only gerund. (for more examples of nouns and their complementation alternatives see Dušková, 2006: 577 – 578, Knotková, 1986: 235 – 236, Biber, 1999: 654 – 655)

Since overt realization of subject is not common with non-finites (especially in the function of noun complement), in case of need of expressing the subject, *that* clause may be preferred (if possible).

To sum up, gerundive nominal clauses can be perceived as condensers of full clauses: 1) especially when they occur after reactive predicates and/or their meaning is factual (gerund after communication verbs, cognition verbs, emotive and (occassionally) evaluative adjectives, some uses of gerund functioning as subject or subject complement). 2) after some forward-oriented verbs (suasive speech act verbs) 3) after nouns expressing extrinsic modality or human judgement and some evaluative adjectives. In these uses paraphrase by a full clause tends to be possible.

The obstacles to overcome are mainly connected with the nominal character of gerund and the frequent presence of preposition after the predicate being complemented, which must not appear in the corresponding that-clause. (not all predicates allow its dropping) On the other hand, if it is dropped, this may bring about a change in the meaning. In addition to this, gerundive clauses after aspectual verbs, verbs of liking, verbs of effort, facilitation or hindrance, verbs of avoidance and obligation and most uses of gerund having general time reference are usually not possible to paraphrase.

Besides, as was shown on the examples in this chapter, overtly expressing subject, tense, aspect and modality is often a problem when paraprasing non-finite clauses by full-clauses.

5.3 Participial clauses

5.3.1 Form and Semantics of Participial Clauses

A participial clause is a clause headed by participial VP. As other NF phrases, participle disposes of differentiated constructions distinguishing between active/passive voice, perfective/non-perfective aspect or progressive/non-progressive aspect (only the distinction between active non-progressive non-perfective and active progressive non-perfective participle is neutralised). In fact, its forms are identical with those of gerund (with the exception of passive participle which is realised by ed-form), however, as will be shown further, the functional potential of the two considerably differs.

	non-progressive non-perfective	non-progressive perfective	progressive non-perfective	progressive perfective
active	doing	having done	doing	having been doing
passive	done	having been done	being done	having been being done

Grammars traditionally make a clear distinction between the ing-form of participle and the passive ed-form, using the terms "present participle" and "past participle", respectively. The choice of these terms may be explained by the fact that ing clauses are characteristically associated with time that is present relative to that of the previous finite verb: *She left, smiling* while ed-clauses often refer to effects of events accomplished in the past (again with respect to the time of the superordinate clause): *The results obtained by the test are not valid* (Brazil: 1995: 86 – 87). However, since participles are in fact tenseless and their temporal interpretation is dependent on context, the terms "present participle" and "past participle" are misleading. Moreover, as Huddleston (2002: 84) argues, "the traditional distinction...inappropriately suggests a contrast of tense". As is evident from the examples above, the contrast is rather that of voice: the ing clause has active interpretation while the ed clause, expressing a resultant state (not a past action), is passive in meaning. Therefore, the terms active (non-perfective) participle and passive (non-progressive, non-perfective) participle have been chosen here for these forms.

As with all non-finite structures, the meaning expressed by participle is quite general, which naturally causes problems when searching for full clauses of which the participle can be seen as a condensed variant. As already mentioned, active (non perfective) participle (*ing*-form) can be either progressive or non-progressive: *The people working in the firm/ The people who work/are working in the firm*. (Dušková, 2006: 581) Moreover, as Knotková (186: 231) mentions, although the ing participle mostly refers to simultaneous actions, expressing anteriority is not excluded: *Looking at him, I realised he was in big trouble/ When I looked/was looking at him I realised he was in big trouble*. However, to express preceding action/state in most cases perfective participle would be used.

Not unlike gerund, participle is preferred in factual contexts (it seldom refers to the future), therefore, it is paraphrasable by indicative clauses, this usually leaving aside the problem of the choice of modal auxiliaries. Nevertheless, difficulties are connected with realization of subject, which must be present in a full clause and is often only implied in a

participial clause. In addition to this, paraphrasability is often made difficult in cases participial (adverbial) clauses are only loosely attached to the superordinate clause and their semantic relation to them is vague or offers more interpretations.

In the following chapters participial relative, adverbial and nominal clauses will be discussed. The use of participle as noun premodifier (although here we cannot speak of a clause) will also be included since participle in this function can be seen as a means of condensation of relative clauses.

5.3.2 Participial Relative Clauses

As regards participial relative clauses, it is generally claimed that they are condensed relative full clauses and are semantically similar to them:

People living in America
People who live/are living in America

However, by far not all full clauses can be made compressed using a participial clause. As Quirk (1991: 1263) mentions participial clause can substitute only those full clauses in which the relative pronoun functions as subject (cf. the examples above). Alternatively, in case the relative pronoun is object and there is a transitive verb, the clause may be passivised and condensed by means of passive participle: *The solution you presented is interesting/The solution which was presented by you is interesting/The solution presented by you is interesting*. Nevertheless, the clauses are of course not synonymous, then.

Participles occuring in relative clauses can be active or passive, but never perfective. Active participle (the *ing* form) tends to be used for simultaneous actions and does not distinguish between progressive and non progressive aspect: *The cat miowing in the garden is my sister's/The cat that miows/is miowing in the garden is my sister's*. On the other hand, passive participle has both progressive and non-progressive form: non-progressive participle is aspectually neutral (it can have either resultant or processual meaning): *The temperature measured under these conditions/The temperature that was/has been/is measured under these conditions*, progressive participle explicitly marks the state as ongoing: *The temperature being measured under these conditions/The temperature that is measured under these conditions*. (Dušková, 2006: 583) Participial

relative clause rarely expresses anteriority or consequence. However, as Quirk (1263) demonstrates, it is not impossible: *The person writing reports is my colleague / The person who will write/will be writing/writes/is writing/wrote/was writing/reports is my colleague*. Besides, relative clauses referring to future can be condensed by infinitival clauses .

Some grammarians (Jacobsen, 1978: 349) treat participial relative clauses as reduced versions of full clauses (with the relative pronoun and a form of *be* deleted). This view is not quite correct, especcially as regards active participle. As Dušková (581) argues, this is shown by the fact that active participle may also condense full clauses where the verb is in non-progressive aspect: *The furniture belonging to my father/ The furniture which belongs to my father*. Therefore, participial relative clauses should be looked upon as a means of condensation, not reduction.

To sum up, participial relative clauses can be perceived as condensers of full relative clauses and are as a rule paraphrasable by them. The obstacle connected with paraphrasability is mainly the realization of tense and aspect, which are often not explicitly expressed in the participial clause. In addition to this, only such relative clauses in which the relative pronoun functions as subject have participial alternatives.

5.3.3 Participle in the Function of Noun Premodifier

Although the use of participle in this funtion is not clausal, it is often treated as a means of condensation of relative clauses:

The smiling girl
The girl who is smiling

Only active (non-perfective) and passive (non-perfective, non-progressive) participles are possible as noun premodifiers.

As regards active participle, it can (similarly as in relative clauses) refer to both action/state that is generally valid and action/state that is in its process: *a crying child / a child that is crying* X *a squeaking table / a table that sqeaks*. (Dušková, 2006: 580 – 581). In contrast to this, passive participle tends to refer to results of preceding actions: *the destroyed castle / the castle that has been destroyed*, only rarely can it have either

resultant or processual meaning: *an abused girl/ a girl that has been /is being abused*. (Dušková, 2006: 581 – 582) In addition to this, a few ed-participles have active meaning (*escaped, faded, healed, retired, travelled*): *faded leaves/leaves that have faded* (cf. Dušková, 2006: 582, Huddleston, 1993: 321), however, since such cases are so few and occur only in this position, this does not prevent me from using the term "passive participle" in this work.

Participle functioning as a noun premodifier lies towards the borderline with adjectives and cases of the use of participles and deverbal adjectives are often hard to distinguish. The general differentiaiting rule is that an adjective can be intensified and graded: *a very/more interesting film* (adjective) X **a very/more giggling girl* (participle), however, as in the case of gerund and verbal/deverbal noun, there exists no clearcut boundary between adjectives and participles. (for more details see eg. Huddleston, 1993: 318 – 322) As regards condensation, both participles and verbal adjectives can be considered as condensing originally a relative clause (cf. Jacobsen: 1978): *The red car is ours/The car which is red is ours, Do you know the giggling girl?/Do you know the girl who is giggling?*, however, it seems that the more verbal the item is the more natural and probable the paraphrase sounds. Still, even in the last example the relative clause paraphrase is not identical in meaning with the premodifying participle, the difference being caused mainly by different positions and consequent change in informational structure.

5.3.4 Participial Nominal Clauses

Participial nominal clauses, in contrast to infinitival and gerundive nominal clauses, can occur only as complements of verbs:

I caught him getting in the taxi.
I caught him as he was getting in the taxi.

They are found with verbs of perception (*hear, see*), verbs of encounter (*catch, discover, find*), causative verbs (*get, have*) and volitional verbs (*want, need, order*). It is especially in the function of complement of the first two classes of verbs (these verbs are factual in meaning) that some uses of participle allow to be paraphrased by a full clause, introduced either by *as* or *that*: *I found the model destroyed/I found that the model was destroyed*.

(Dušková, 2006: 586, Quirk, 1991: 367) As regards participles used with verbs of volition and causation, only the combination *order* + passive participle seems to have an analogous full clause alternative: *He ordered the walls painted/He ordered that the walls (should) be painted*. (Quirk, 1991: 367) This might be explained by the forward-orientedness and modal meaning of these verbs, cf. their use and full clause paraphrasability with infinitival and gerundive clauses.

As in relative clauses and in the function of noun premodifier, participle used as complement is as a rule only active or passive (verbs of volition take only passive participle in this function). Passive participle can be treated as a further condensation of infinitival clause: *I found it to be broken/I found it broken*. (Knotková, 2006: 228, Quirk,1991: 1207)

5.3.5 Participial Adverbial Clauses

Participial adverbial clauses, unlike gerundive adverbial clauses, are preceded by a conjunction or, more commonly, they occur without any formal signal of subordination. In such case, they are only loosely linked to the preceding clause and can be used to convey a wide range of meanings. As will be shown further, they can function as adjuncts, disjuncts, conjuncts, in some cases they can merely express the meaning found in coordination or, in other cases, they resemble relative clauses. This makes participial clauses an effective means of complex condensation.

Participial adverbial clauses introduced by a conjunction are used to indicate various kinds of semantic relations, mostly those of time, place, condition, concession and comparison. Since the same conjunctions are used in full adverbial clauses, there is usually no problem in seeing these participial adverbial clauses as condensed versions of full clauses: *Although feeling ill/although he was feeling ill, he came*. (concession), cf. Quirk, 1973: 322-329.

Participial adverbial clauses that are loosely incorporated into the sentence structure (no conjunction is present) are traditionally called "supplementive clauses" (Quirk, 1991, Biber 1999, Huddleston, 2002). This name reflects the fact that, as Biber (1999: 820) puts it, the clause typically shows some "circumstance that supplements the action in the main clause".

Supplementive clauses can be used to express one of these meanings: temporal, conditional, concessive, circumstantial, contrastive or causal: *Feeling ill/since she was feeling ill, she did not come* (cause). However, due to the absence of a conjunction, it is much more frequent that the semantic relation is left indeterminate or offers more interpretations: *Having discussed this issue, he proceeded to another problem/ After/When/Since he had discussed this issue, he proceeded to another problem*. In the most extreme cases, the meaning is nothing more than that of addition and the sentence can be paraphrased by coordinated clauses: *He left the room, smiling/and was smiling.* (Knotková, 230, Quirk, 1123)

Although usually classified as adverbial clauses (Quirk, 1991, Biber, 1999), supplementive clauses may also resemble non-restrictive relative clauses and may be parahrasable by them: *This suggestion, presented by Mr. Brown, seems to be of great importance.* (Huddleston, 2002 : 1266)

To conclude the uses of participial adverbial clauses, they also occur as style disjuncts (they describe the manner of presenting the message) and, rarely, as conjuncts (when connecting messages): *speaking honestly* (disjunct), *added to this* (conjunct). Disjuncts can be paraphrased by full clauses introduced by *if*: *Being honest, I do not agree with you/If I am to be honest, I do not agree with you*. (Biber, 1999: 857, Quirk, 1991: 117 – 118)

Interpretation of semantic relation and finding and appropriate conjunction expressing it is not the only difficulty when paraphrasing participial adverbial clauses. Leaving aside the recurrent obstacle connected with realization of tense, aspect and modality, an often discussed question (related to participial adverbial clauses) is the realization and interpretation of their subject.

As Dušková (2006: 583 – 585) mentions, the subject may be overtly expressed (the so-called "absolute construction"): *Her child being ill/Since her child was ill, she could not come*, however, more frequently it is left unrealised. Then, it is either inferred from the text (*Being ill/Since she was ill, she could not come*) or is implied by the situational context, or is general: *The research was carried out using the following method* (=we/the author used the method). It is in the last example that the use of participle is often criticised and is labelled "unattached", "dangling" or "suspended". (although with other types of NF clauses general reference is perfectly normal). Nevertheless, the use is quite

widespread (especially in objective formal writing, where mentioning general subject is undesirable) and makes participle a flexible means of condensation. (Dušková, 2006: 585-586)

To sum up, participial adverbial clauses can be used to condense a wide range of full clauses. Since they frequently lack a conjunction and their meaning is then vague, the difficulties when paraphrasing them by full clauses are mainly connected with introducing a particular conjunction. In addition to this, realization of tense, aspect, modality or general subject may also prove to be a problem.

Now I will move to the analysis of NF clauses in scientific style.

6 The Characterictics of Scientific Style

Scientific texts come from various disciplines (ranging from social sciences to, for instance nuclear physics) and the language in them has got many distinct uses: reporting an experiment, discussing a problem, giving instructions, stating laws, defining concepts etc. (Crystal, 1997: 251)

The scientific text which has been chosen for this linguistic analysis is a part of one chapter (p. 112 – 143) of the book "Sociolinguistics" by R. A. Hudson (1972) and thus it is an example of social sciences. Although texts from different semantic fields may differ in some aspects, (Urbanová and Oakland (2002: 48) stress that texts from social sciences tend to be less objective than eg. those from natural sciences), it is still possible to state the basic features of scientific writing in general, which will be here applied on the text chosen.

The general characteristic of scientific style is that it deals with a specific subject matter (here sociolinguistics) and, therefore, is aimed at a specialised audience. The objective of every scientist is then to present their subject matter precisely and logically (the content is more relevant than the form) and to convey the information in an objective and impersonal way. The consequent danger of abstraction is balanced by the use of demonstrative examples: *words used for addressing the other person (for example, mate, love, darling ...)* - p. 114, the use of explanations: *the term "FACE", which is used in much the same way as in the expressions to lose face and to save face ...* (p. 113) and giving supportive argumentation and references: *Besnier 1994; see also Besnier 1989* (p.

118). This also adds to the objectivity of the text. (Crystal, 1997: 251, Biber et al., 1999: 23)

As regards the semantics of scientific language, this, of course, reflects the nature of the style. As Crystal (2003) mentions, scientific style is semantically quite a "dense style", the majority of words being lexical words. Typical is the use of terminology (in sociolinguistics this is e.g. *discourse structure, speech act, face, turn-taking* etc.) and abstract vocabulary such as *conclusion, strategy, method, way* or *reason* (although in the sociolinguistic text animate nouns such as *speaker, participant, people* or *interactant* also have their place). In addition to this, there is a considerably frequent occurrence of expository verbs (*assume, describe*) and descriptive adjectives functioning as premodifiers (*social circumstances, verbal communication*).

Concerning the grammatical level, scientific style uses quite long and complex structures (this is in accordance with the need to provide complex and detailed information). Subordinate clauses and complex phrases (e.g. NPs containing relative clauses) are frequent in this style. To reduce the length of the sentences, various condensing devices (NF clauses, nominalisation) are employed: *Returning to our second universal, then, we cannot claim ...*(p. 125), *the reasonable assumption that ...*(p. 132), which also contribute to the compactness of structure (cf. Urbanová and Oakland, 2002: 31). Better comprehension and logical organisation of the text is achieved by the use of punctuation and connective devices (*on the other hand, however, in addition to*).

The tendency towards objectivity and impersonality can be seen in the use of impersonal structures. The text analysed shows a high frequency of agentless passives: *the norm is waived under many circumstances* (p. 118), impersonal "there" and "it" constructions: *there are recurrent themes ...* (p. 133), *it is hard to see ...* (p. 136) or, again, subjectless NF clauses. The author quite consistently uses the plural pronoun *we* (not *I*) to refer to himself, and the use of modals and verbs of probability (*tend, seem, appear*) enable him not to say things directly: *the same may be true of other parts of non-verbal behaviour …* (p. 138). For more details on impersonal language cf. Rejtharová, Skálová, 1981: 168 – 169.

Having thus briefly introduced the specifics of scientific style and the general reasons for its preference of non-finite structures, I will now proceed to a detailed analysis of the uses and functions of non finite structures in the scientific text that I have chosen. (The

examples quoted are found under their numbers in Appendix 3, and tables in Appendix 2. Non-finite clauses in the examples will be underlined.)

7 Non-finite Structures in Scientific Style

The text chosen confirms the fact that NF structures are frequently used in scientific style: in the 32 pages of the text there are 556 occurences of NF (all subordinate) clauses. (plus 15 occurrences of participles in the function of premodifier, which will be included in this analysis as well since they can be seen as condensed relative clauses) The number of subordinate full clauses in the text is 623, thus, NF clauses are used with almost the same frequency as full clauses. To demostrate their use even more clearly, let me note that 312 sentences out of all 462 sentences (i.e. 67, 53 %) contain at least one NF clause (but frequently two or even more) This makes the average of more than one NF clause per every sentence.

As the table 1 shows, all types of NF clauses occur in the text. The most common are infinitival clauses (241 instances, i.e. 43.35% of clauses), gerundive and participial clauses display a comparable frequency of occurrence (151 instances, i.e. 27.16% of clauses, and 164 instances, i.e. 29.50% of clauses, respectively). Further division was made into relative clauses (105 instances, i.e. 18.88% of clauses), nominal clauses (295 instances, i.e. 53.06% of clauses), adverbial clauses (104 instances, i.e. 18.71% of clauses) and supplementive clauses (52 instances, i.e. 9.35% of clauses). (The reasons for treating participial supplementive clauses separatelly will be discussed in 7.3.5The high occurrence of nominal clauses is due to the most versatile use of these clauses: they occur with verbal, adjectival as well as nominal predicates, cf. table 2.

The majority of NF clauses (88.5%) are subjectless (their subject can either be inferred from the text, or author or general S is implied) and their form is mostly active (78.96% of clauses). Due to the absence of tense and modality markers (as well as the frequent absence of S, auxiliaries, relative pronoun or conjunction), non-finite clauses are an effective means of reducing long sentences in the text. This is evident especially in case a full clause alternative is possible, cf. *Putting these two characteristics together, we can predict ...* (520) *X If we put these two characteristics together ...* (subject and conjunction must be present in the full clause).

The inexplicitnes of NF clauses results in the fact that they often have vague meaning and offer more than one interpretation (as regards tense, modality, their semantic relation to the superordinate clause): *study _mentioned above_ (478) / that was/has been/is mentioned above, we learn _how to order a meal in a restaurant_ (56) / how we can/should order/how one orders ... , _Having distinguished vocative and referring names_, however, we must also recognise their similarities ...* (548) (temporal relation? causal relation? both?). Although this inexplicitness generally causes no difficulties for the understanding of the text as a whole (it will probably make a little difference for the reader which of the above mentioned interpretations they will choose), it sometimes presents problems concerning the syntactic analysis. Thus, e.g. the NF clause in *other subtopics might cut across these, _spoiling the neat hierarchical organisation implied so far_* (567) may be interpreted as a non-restrictive relative clause (i.e. *which will spoil ...*) but also as an adverbial clause of resultative meaning (i.e. *and this will spoil ...*) Such unclear cases will be given special attention throughout the analysis.

In spite of this, the division of NF clauses into relative, nominal, adverbial and supplementive clauses enables a clearly structured presentation of their uses, therefore, it will be maintained. However, main attention will be paid to the meaning of the clauses, their effectiveness as a means of condensation and the possibility of their paraphrase by a full clause. In this respect, the analysis will be purely qualitative and descriptive. (as argued in ch.2., paraphrasability is a subjective matter that is to be seen in terms of gradience, and cannot be appropriately expressed in numbers)

7.1 Infinitival Clauses

There are 241 instances of infinitival clauses in the text, i.e. infinitival clauses form 43. 35% of all NF clauses.

The analysis of infinitival clauses does not cover fixed uses of infinitives, such as those following *let's, be bound to, be about to* etc., but see Huddleston and Pullum (2002: 1258) for the analysis of *bound* and *about* as adjectives followed by infinitival clauses.

Infinitival clauses in the text can be divided into relative clauses, nominal clauses and adverbial clauses. As regards the form of these clauses, *to*-infinitive is by far the commonest form (237 instances, i.e. 98.34%), the majority of infinitival clauses are active

(92.12%) and subjectless (83.4%), cf. table 3. The clauses will be treated separately, main attention will be paid to their effectivity as sentence condensers.

7.1.1 Infinitival Relative Clauses (17 instances)

Although the use of relative clauses (non-finite and full clauses) is typical of scientific style, infinitival relative clauses form only 7.05% of infinitival clauses and 16.2% of all NF relative clauses found in the text. This is due to the fact that infinitival relative clauses are all only restrictive and their use is semantically limited; i.e. most of them convey modal, non-factual meanings (in this connection see that the majority of full relative clauses in the text are non-modal).

Infinitival relative clauses are used to give descriptions about the noun (pronoun) which they modify:

This is not the place to try to specify the particular kinds of skill needed (5) */where we should try to specify ...* (what kind of place?)

However, since the meaning of infinitive is quite general and there is no relative pronoun present, it is sometimes quite difficult to distinguish infinitival relative clauses from other types of clauses (5 examples in the text). Thus, the last subordinate clause in *The function of style levels is* (…) *to build a wall of behavioural formality to protect the addressee's power face* (15) can be analysed as either relative or as adverbial of purpose, and infinitival clause following *way* as in *Another way to define the relationship between S and X is by ...* (12) is considered indeterminate between relative (*way in which we can define*) and noun complement (cf. Biber et al., 1999: 655). In addition to this, infinitival clauses in phrases as *the right thing to say* (4) or *four possible linguistic universals to be suggested* (10) are treated by Dušková as complements of adjectives. (cf. Dušková, 2006: 566) However, since the meaning of the clauses is relative, they are included here: *the thing which is right to say, linguistic universals that can be suggested.*

As is expectable in scientific style, most infinitival relative clauses occur with abstract nouns (often with general meaning): *object, point, thing, place, characteristic, name, universal, question, way* or indefinite pronouns: *anything, nothing*. The only exception to the rule is the structure *The only primate to have learnt ...* (6) / *who learnt ...*, where the noun is concrete and animate. This is also the only example where perfective infinitive is

found and the clause has clearly factual meaning. In other cases non perfective non progressive infinitive (either active or passive) is used.

Passive clauses represent more than one third of the clauses (6 instances). They are best to be seen as condensed full passive clauses, with the S of the full clause being the noun which it modifies: *Object to be classified* (1) */ that should be /is to be classified, Names to be used* (9) */ that should be/are to be used*. As regards active clauses their subject can be the antecedent noun (3 examples), it can be the same as the S of the superordinate clause (3 examples) or is general, referring to the author or people in general (5 examples). Since *we* is regularly used in the book for the last kind of reference, paraphrasability of such sentences presents no difficulties: *The most important point to notice* (11) */ that we should notice* (or, alternatively, passive paraphrase can be used: *that should be noticed*). There are no examples of clauses with overtly expressed S.

As is evident from the examples above, most infinitival relative clauses have full clause alternatives. It has likewise been shown that the clauses are usually modal in meaning, most frequently coresponding to the meaning of the modal auxiliary *should* or *can, could* (however, both modal and non-modal interpretation is not ruled out: *The common characteristic to be reflected by specific linguistic items is sex* (8) */that is/ is to be/ can be reflected*). Difficulty in paraphrasing infinitival relative clauses occurs in case of structures that are more or less set phrases such as *the right thing to say* (4) or *have nothing to do with* (14). Dušková calls the last example "lexicalised use of infinitive". (2006: 564)

To conclude, infinitival relative clauses are an effective means of sentence condensation since they are used to compress structures that would otherwise have to be expressed by longer full clauses.

7.1.2 Infinitival Adverbial Clauses (37 instances)

Infinitival adverbial clauses represent 15.35% of infinitival clauses and 35.58% of all adverbial clauses. The majority of them (31 clauses, i.e. 83.78%) are clauses of purpose, 3 clauses act as conjuncts, 1 clause is an example of disjunct and 2 clauses have the function of result adverbials. (cf. table 4)

To begin with infinitival adverbial clauses of **purpose**, a straightforward example is a clause for which we can ask "for what purpose?" and is paraphrasable by a full clause introduced by *in order that* or *so that*:

To assure each other that relations are just as they were before the separation, *they wait until they are sure ...* (44) */ In order that they could assure each other ...*

All clauses of this kind use simple (active, non-perfective, non-progressive) infinitive. Their subject is never overtly expressed; it is either inferred from the sentence and the infinitive then nicely avoids its double mentioning (cf. the example above) or is general (*we, people ...*) as in: *This is the basis for most formal politeness, such as standing back to let someone else pass* (21).

In the previous chapter it was shown that infinitival clause of purpose may sometimes also be interpreted as a relative clause. In addition to this, some infinitival clauses of purpose do not express clearly intentional purpose and lie towards the borderline with nominal (complement) clauses. These are namely those which follow the verbs (or nouns) *use* (20 examples), *need* (3 examples) and *attach* (1example), but see Dušková (2006: 559) for other such predicates. There is a gradience in interpretation of these clauses: they range from intentional purpose clauses quite independent of the predicates (*Males use interruptions in order to assert their dominance* (54) */ so that they could assert their dominance*) via intermediate cases (*They use much the same facial expressions as Europeans to express six basic emotions* (46) */ in order that they could express?*) to clauses clearly dependent on the predicates with almost no intentional meaning: *the use of head movements to indicate "yes" or "no"* (49). Instances of the last type are the most numerous ones. Due to their meaning, which is incompatible with *in order that* or *so that,* they do not have full clause alternatives, however, they correspond to *for* + gerund (*the use of head movements for indicating "yes" or "no"*).

There are also infinitival adverbial clauses of purpose found in initial position (4 examples). In 3 cases these clauses are used as connective links, i.e. **conjuncts**. The purposive meaning is either quite clearly preserved (*To confirm this, we can ask ...* (30) *=in order to confirm this*) or is overriden by the cohesive function: *To take another*

example (26). The implied S of these clauses is the author (*we*), however, full clause would hardly be used.

Leaving aside adverbial clauses of purpose, one infinitive in the text is used as **disjunct**: *words used for addressing the other person (for example mate, love, darling, <u>not to mention greetings like Hi!</u>)* (22). As Dušková (2006: 563) mentions, this is an example of parenthetic use of infinitive. Full clause alternative is not possible.

The remaining two instances of infinitival adverbial clauses are clauses of **result**: *Sometimes we are too tired <u>to engage in it</u>* (18). These clauses can be seen as a means of condensation of full clauses introduced by *so ... that ...* (*we are so tired that we cannot engage in it*)

To sum up, infinitival adverbial clauses are used to convey various shades of meaning. The majority of them are purpose clauses, however, since a great number of these are close to V or N complementation (eg. infinitive after *use*) or are used for connective purposes, by far not all of them are paraphrasable by full clauses introduced by *in order that* or *so that*. Those that are seem to be an effective means of condensation of the sentence.

7.1.3 Infinitival Nominal Clauses (187 instances)

Infinitival nominal clauses form 77.6% of infinitival clauses and 63.39% of all nominal clauses. They function as complements of verbs, complements of adjectives, complements of nouns or as S or Cs of the sentence. For reasons given in the theoretical part, infinitival nominal clauses functioning as S or Cs will be discussed together with complement uses of infinitive.

7.1.3.1 Infinitival Nominal Clauses used with Verbs (93 instances)

Infinitival nominal clauses used with verbs represent 49.73% of infinitival nominal clauses and 38.59% of all infinitival clauses. All clauses (but one) are found in post-predicate position (as complements), the one clause functions as subject: *To be involved with somebody requires active verbal behaviour* (147).

As is charasteristic of written language (cf. Biber et al., 1999: 710), infinitival nominal clauses in the text are used to complement quite a wide range of verbs belonging to various semantic domains. They most frequently occur with verbs of probability (26

instances) and causative verbs (21 instances), they are rare with aspectual verbs (1 example) and non-existent with perceptive verbs. (for the percentual division of semantic classes and the exact verbs used see table 5)

All infinitival clauses use non-perfective, non-progressive infinitives. There are 9 clauses using passive infinitive: *Power and solidarity tend strongly to be expressed by the same forms …* (93) and 12 infinitives follow verbs in passive: *Every language might be expected to have some way of …* (91). Such passive verbs are **cognitive, causative or communication verbs** and the infinitive used with them is an effective means of condensing the sentence structure and avoiding the mention of experiencer (or agent), cf. the only possible versions with a full clause (in case a full clause is available): *It might be expected that every language has some way of …* (long structure with extraposed S) */ We might expect that every language has some way of …* (experiencer is present). In addition to this, the use of the structure with infinitive allows the retention of the same sentential subject as in *Females normally say Kirei yo, and are said to sound blunt and masculine if …* (87), or enables subject contrast as in *Men are said to prefer a one-to-many-pattern, (...) while women tend to break …* (137)*, which cannot be achieved if a full clause is used.

I will now proceed to a closer discussion of the semantic classes of the verbs used and the effectivity and paraphrasability of infinitive complementing them (sentences with verbs in passive will not be discussed any more).

Infinitival clauses most frequently occur with **verbs of probability**, namely the verbs *appear, seem* and *tend,* e.g. *The conclusion to which we seem to be lead …* (114) This is understandable, since the use of these verbs makes the proposition in the complement clause sound less direct, which is desirable in scientific writing. The structure is similar to the one with passive verbs described above: the infinitive effectively compresses the sentence structure. This can be seen especially with verbs *appear* and *seem*, which allow full clause alternatives, cf.: *No one appears to pay any attention* (73)*, structure with subject raising + infinitive X *It appears that no one pays any attention*, structure with extraposed *that*-clause. However, a full clause paraphrase is not always available, since it can disrupt the structure or informational packaging of the sentence, cf. *These signals are particularly interesting and important because some of them seem to be universal* (117) / *it seems that some of them are universal?, The conclusion to which we seem to be lead*

(114) */ to which it seems that we are lead!?* or is completely impossible as in *What seems to be universally true is that...* (94). This shows the flexibility of infinitival clauses.

Other uses of infinitival clauses which allow full clause paraphrases are some of the infinitives complementing **verbs of modality and causation**, **communication verbs**, **verbs of intention and decision** and **cognitive verbs**. Especially verbs of modality and causation and cognitive verbs are frequent in the text: verbs of modality and causation often convey the meaning of facilitation cf. *language helps to perpetuate ...* (126), cognitive verbs frequently express the author's viewpoint and make the information in the complement clauses sound less direct as in *this should not be taken to imply ...* (68), cf. the meaning of verbs of probability.

Taken from the theoretical point of view, infinitives after the following verbs allow full clause alternatives having comparable meaning: *allow, remind, require* (verbs of modality and causation), *claim, tell, ask* (communication verbs), *decide* (verb of decision), *consider, expect* (cognitive verbs). Since the structuring of sentences (in active) containing infinitival clauses and full clauses is the same in this case, difficulties connected with paraphrasability are of different nature than distortion of sentence structure and informational packaging.

As regards the verbs *allow, remind, require, tell* and *expect*, they are found in sentences such as 1) *Successful performance requires the conductor to keep ...* (125) */ that the conductor keep ... 2) ... told a child to go to school / told a child that he should go to school* (74) or 3) *This example reminds us to treat ...* (139) */reminds us that we should treat ... .* In the first sentence the S of the infinitive (*the conductor*) belongs exclusively to the complement clause and a full clause paraphrase is completely natural. In the second example the NP *a child* functions as both O of the superordinate clause and S of the infinitive, therefore the referent must be mentioned twice if a full clause is used (at first as a NP, then as a pronoun). A full clause is quite undesirable in case it is already a pronoun (example 3) since the same pronoun must be then repeated.

A similar situation arises with infinitives used after the verbs *claim, decide* and *expect* used in sentences such as *Researchers have claimed to be able ...* (111) */ that they are able...* or *We can expect to find ...* (90) */that we will find ...* Here the S of the infinitive is the same as the S of the superordinate clause, so, again one referent (or even the same

pronoun) is used twice if a full clause is chosen. This clumsiness and unnecesary information provided by full clauses again shows the effectivity of NF clauses.

The last group of infinitival clauses found in the text are those complementing **verbs of desire**, **verbs of effort** and one of them an **aspectual verb**. These clauses, although their structure must be looked upon as condensed, do not allow full clause paraphrases. Most of them are subjectless, their subject being inferred from that of the superordinate clause, eg. *People try to seek and give confirmation and support* (133, 134).

Especially verbs of desire are considerably frequent; this is probably due to the fact that the text analysed is from a book on sociolingustics where needs of people (speakers) are being described. Otherwise their use is typical of the language of conversation. (cf. Biber et al., 1999: 710) Regarding the verbs of effort, the verb *try* is very common.

To conclude, a few examples have been given to illustrate the condensation achieved by infinitival clauses complementing verbs and the possibility (both theoretical and practical) of their paraphrasability by full clauses. The flexibility of infinitive was best seen in cases where sentences containing full clauses were available as well, since (mainly due their length and obligatory realisation of S) they were sometimes clumsy and structurally or stylistically inappropriate.

7.1.3.2 Infinitival Nominal Clauses used with Adjectives (57 instances)

Infinitival nominal clauses with adjectival predicates represent 30.48% of infinitival nominal clauses and 23.65% of infinitival clauses. They occur in both post-predicate position (21 instances) and extraposed position as extraposed S of the sentence (36 instances).

Although these clauses are not so frequent as those controlled by verbs, they are by no means rare. This is due to the fact that the meaning of these clauses is static and the adjectives are often used to present the author's stance or attitude towards the following proposition. This is desirable in scientific writing (as opposed to other registers eg. the language of conversation), cf. Biber et al. (1999: 722).

As is expectable, adjectives taking infinitival clauses are most frequently those expressing various kinds of evaluation (16 instances), degrees of ease and difficulty (15 instances) and adjectives having modal meaning, such as those of necessity and importance. There is only one instance of infinitive complementing an emotive adjective; showing personal

emotion is not a typical feature of formal writing. (for the percentual division of semantic classes and the exact adjectives used see table 6 , for the position of infinitival clauses found with the adjectives table 7)

The adjectives most frequently used, i.e. evaluative adjectives, adjectives of ease and difficulty and adjectives of necessity and importance permit (or require) extraposed infinitival clauses, and these clauses are used in the majority of instances in the text, e.g. *It is easy to see how physical distance relates to solidarity ...* (198). The frequent use of these structures again reflects the style analysed: the structure avoids mentioning the experiencer and makes the proposition impersonal. A similar effect is achieved also in cases the variant with object raising occurs, eg. *Solidarity is harder to define ...* (156). In the rest of the examples the S of the infinitive is either overt (7 instances): *It is common for the power-solidarity contrast to be quite crucial* (188), or is implied by the S of the superordinate clause eg. *Why are we willing to do it* (150). All infinitival clauses use non perfective non progressive infinitives, two of them passive infinitives.

As regards paraphrasability, infinitives following adjectives of certainty (*likely*), adjectives of necessity and importance (*important, necessary*) and some evaluative adjectives theoretically allow to be realised by full clauses.

Infinitive occuring with the **certainty adjective** *likely* is found in both post predicate position (5 examples) and extraposed position (1 example). In the first case the structure, meaning, as well as paraphrasability of the clauses strongly resemble those sentences containing probability verbs *appear* and *seem* (cf. the last chapter) eg. *A person who chronically makes himself and others uneasy in interaction and perpetually kills encounters is a faulty interactant, he is likely to have such a baleful effect upon the social life around that he may just as well be called faulty person* (153) /*It is likely that he has...*

. Although full clause is not ruled out, infinitive will be preferred in this case in order to maintain the same subject in all clauses. Similarly, other instances of this use of infinitive in the text are, for structural reasons, not readily paraphrasable: *the Island Carib language of America, whose history is specially likely to show sex differences ...* (155), use in relative clause, *Some people are more likely than others to be stuck for the right thing to say* (148), comparative construction. Thus, the only infinitive which allows the use of a full clause is the one in extraposed position, the paraphrase of which presents no

structural difficulties: *It is likely <u>to be the superior who decides...</u>* (187) */that it will be the superior... .*

Infinitival clauses controlled by **adjectives of necessity and importance** are all found in extraposed position and have full clause alternatives using subjunctive or putative should: *It is important <u>to bear these languages in mind ...</u>* (191) /*that we bear these languages in mind ...* (the full clauses sound more clumsy and the implied general S must be present in them).

Similarly, infinitival clauses that follow **evaluative adjectives** are, with one exception, extraposed clauses and many of them are used to condense full clauses. Their uses in the text can be divided into two groups: 1) those that are factual and are paraphrasable by indicative clauses, e.g. *It is common <u>for the power solidarity contrast to be quite crucial ...</u> /that the power solidarity contrast is quite crucial ...* (188) 2) those that express potentiality and frequently correspond to if clauses, eg. *It would be wrong <u>to give the impression that ...</u>* (180) / *if we gave the impression that ... .*With infinitive following the adjectives *interesting, tempting* and *fruitful,* the meaning is such that a full clause is not available: *It is interesting <u>to learn that some chimpanzees (bonobos) also use eye contact socially...</u>* (174).

Infinitives used with adjectives of ease and difficulty, adjectives expressing modality (except those of necessity and importance) and the emotive adjective do not allow the use of full clauses. Especially clauses controlled by **adjectives of ease and difficulty** (*easy, possible, hard*) are frequent in the text. Their flexibility is shown by the fact that they occur in two types of construction: 1) neutral construction where infinitive is extraposed S, cf. *It is easy t<u>o see how physical distance relates to solidarity ...</u>* (198) 2) construction with object to subject raising as in *These general conclusions are very easy <u>to integrate ...</u>* (168). As the example demonstrates, the second construction is used to create an anaphoric link with the preceding text (notice the anaphoric subject) or in case subject contrast is needed: *Power is self-explanatory but solidarity is harder <u>to define..</u>* (156), cf. the use of clauses with *likely, appear, seem*. In addition to this, two examples were included in which the infinitival clause functions as extraposed object in verbal complementation: eg. *People sometimes find it easier <u>to slip into fixed routines</u>* (202). However, as the full clause paraphrase shows (*People sometimes find that it is easier to slip into fixed routines*), the infinitive is controlled by the adjective.

Infinitives complementing **adjectives of modality** and the one **emotive adjective** occur in personal constructions eg. *Some researchers have claimed to be able to find ...* (162), the S of the infinitive being inferred from the S of the superordinate clause.

To conclude, adjectives that control infinitival clauses predominantly express the author's evaluation or attitude. The text shows a high proportion of impersonal constructions with extraposed infinitival clauses with implied general S (often the author). If such clauses allow full clause paraphrases, these must have the S expressed (often *we*). The effectivity of condensed infinitival clauses is also evident with eg. the predicate *likely*, since the use of longer variant containing a *that* clause often disrupts the sentence structure.

7.1.3.3 Infinitival Nominal Clauses Used with Nouns/Pronouns (37 instances)

Infinitival nominal clauses used with noun predicates form 19.78% of infinitival nominal clauses and 15.35% of all infinitival clauses. They occur as immediate complements of nouns, either restrictive or non restrictive (28 instances), or as Cs with a noun being the S (9 instances). (cf. table 8 for the nouns used)

All clauses use non-progressive non-perfective infinitive, all but one are active. Their subject is mostly implied textually: *He had no reason to speak ...* (212), or is general: *An easy way of measuring these differences is to count ...* (241), only in four cases it is overtly realised by a *for* phrase: *with a strong tendency for given names to be applied ...* (219).

To begin with clauses that immediately follow their noun predicates, the majority of them occur with deverbal or deadjectival nouns: *need, agreement, requirement, reluctance, attempt, tendency, struggle*. The complementation of these nouns matches that of the corresponding verbs and adjectives: full clause paraphrase is available with clauses complementing the nouns *agreement* and *requirement* (*There is not regular requirement for two or more voices not to be going at the same time ...* (213) */ that two or more voices should not be going ...*). An exception to the rule seems to be the structure *the need for individual to make it clear how they see those relations* (218) */ that individual make it clear...* , where the presence of overt S enables full clause paraphrase.

The rest of the nouns used come from various semantic domains: *reason, signal, opportunity, skills, situations*. All the complement clauses (except the one complementing *opportunity*) can be seen as condensed full clauses, cf. *There is no reason to believe...*

(217) */ why we should believe..* . Infinitival clauses used with the nouns *skills* and *situations* represent a different class of complement clauses since they are not contextually required and function as non restrictive appositive clauses: *much more general skills, such as* <u>how to avoid ambiguity</u> (209) */ how we can avoid ambiguity,* or *particular situations (for example* <u>how to conduct a business transaction ...</u> *)* (208) */ how we should conduct a business transaction ...)*. A full clause paraphrase is possible thanks to the use of a WH clause.

As regards infinitival clauses functioning as Cs, they are used to describe subjects that are abstract nouns having general meaning: *consideration, concern, things, effect, function, purpose, way*. These nouns (except *way*) are likewise used with *that*-clauses (usually for describing facts). In contrast to this, the meaning of the infinitive is more abstract and potential, so exact paraphrasing is difficult, cf. *The function of style levels is* <u>to signal the power solidarity relations between S and A</u> (238) X *that they signal ... , Our only concern is* <u>to communicate as efficiently as possible</u> (235) X *that we should communicate ...* Moreover, the use of infinitive sounds more natural and avoids mentioning the subject.

Thus, the effectivity of infinitival nominal clauses occuring with noun predicates can be seen 1) in their non-realisation of S and 2) in the kind of abstract meaning which they convey (in case of clauses that function as Cs), since this cannot be precisely achieved if a full clause is used.

To summarise the uses of infinitival clauses, although quite many of them "allow" full clause paraphrases, infinitives are usually more effective in the text than would be the corresponding full clauses. This is mainly due to the following facts 1) the meaning of infinitive is often abstract, potential and quite flexible, the corresponding full clause must often use a modal or the meaning needed cannot be exactly conveyed at all (cf. mainly infinitive as Cs, in relative clauses) 2) the majority of infinitives are Sless, in case the implied S is the author the Sless infinitive allows to make the information impersonal (cf. e.g. infinitive with evaluative adjectives, in relative clauses, conjuncts), in case the S is implied textually, the use of Sless infinitive avoids double mentioning of one referent (this is best seen in cases of verb complementation) 3) as regards verbal and adjectival complementation, infinitive occurs in structures that do not permit the use of full clauses (e.g. with predicates in passive and the predicates seem, appear or likely), the

restructuring usually means a profound change of the sentence and informational structure or is not possible at all.

7.2 Gerundive clauses

There are 151 occurrences of gerundive clauses in the text, i.e. gerundive clauses represent 27.16% of NF clauses.

The analysis of gerunds will also include instances of gerunds that are ambiguous between gerund and verbal noun interpretation, e.g. *skilled work involved in* <u>*speaking*</u> (295). It is impossible to draw a borderline between these two forms and in fact most such *ing*-forms can be interpreted as both verbal and nominal, e.g. *speaking* in the example above can be modified by adjective (as a noun): *fluent speaking,* but also by adverb (as a verb): *speaking fluently*. Only compound *ing*-forms such as *hand-shaking* or *sight-seeing*, which do not have any corresponding verb, are considered to be clear cases of nouns and, therefore, will be excluded from the analysis.

Gerundive clauses in the text are adverbial clauses or nominal clauses (complementing verbs, adjectives, nouns or functioning as S). The majority of the clauses (96.69%) are active and in most cases (94.70%) their subject is not overtly realized. (cf. table 9) The clauses will be again discussed separately, attention will be paid especially to their effectivity as a means of condensation.

7.2.1 Gerundive Adverbial Clauses (48 instances)

Gerundive adverbial clauses represent 31.78% of gerundive clauses and 46.15% of all adverbial clauses.

All of these clauses are headed by a preposition:

We shall return to this question in the next section, <u>*after first looking at ...*</u> (273) / *after we first look at ...*

The prepositions used are *by, in, with, without, for, after, before, at, in addition to* and *instead of* and the adverbial clauses express time, reason, purpose, manner, means or various contingency relations. (see table 10 for the exact numbers of prepositions found in the text and their uses)

All occurrences of gerunds are non-progressive non-perfective gerunds, one of them is passive, the rest active. As concerns the realization of S, in most cases it is implied textually and the use of gerund avoids double mentioning of one referent (cf. the example above), in the remaining cases it must be inferred from the context/situation: *One of the easiest ways of showing (...) is by pointing out ...* (272). In three cases the S is overtly realised: *Most interactions in modern cities are unfocussed, with strangers passing in the streets ...* (254). However in such cases (when the S is not a possessive form), the clause may be likewise viewed as participial, with the noun functioning as the head and *ing*-form its postmodifier. (cf. Mathesius, 1961: 178, Dušková, 1999: 26)

To move towards the uses of gerundive adverbial clauses, the majority of them express **manner** (or means) and are introduced by the preposition *by*. Those that are paraprasable by *in the way that* permit the use of a full clause alternative (i.e. the likewise nominalised structure *in the way + that* clause). Again, the paraphrasability must be seen in terms of gradience, there being gerunds that enable it (*We learn how to order a meal in a restaurant by watching other people doing it …* (248) / *in the way that we watch other people doing it...*) but, more commonly, the paraphrase is questionable (*We can now answer this question by pointing ...* (247) / *in the way that we point ...?*) or impossible *We can now go further by showing that ...* (242). The inadequacy of using the structure *in the way that ...* is also increased by the presence of sentences that already contain the NP "the way": *Society controls our speech in two ways. Firstly, by providing ...* (258) / *in the way that it provides ...?*

The meaning of gerundive clauses introduced by *by* is fairly general. This is further proved by the fact that a few of these clauses seem to be paraphrasable by other means than *the way + that* clause: *It is easier and safer to use what you know about buying bus tickets... (for example, by saying Excuse me ...)* (245) /*(for example, you can say Excuse me ...)*, *One of the many other ways in which primates keep group life harmonious is by grooming each other ...* (256) / *that they groom each other... , By using a plural pronoun for you, the speaker protects the other person's power face* (266) / *In case/ when/if he uses ...* In addition to this, a "*by* clause" is also used after one verb in passive to indicate the S of the corresponding active clause: *... which in some cultures is replaced by nose-rubbing or supplemented by kissing or embracing ...* (284, 285).

As regards gerundive **temporal clauses**, most of them use the preposition *in*. However, as the following example shows, the meaning is not always purely temporal: *In asking for a ticket on a bus, it is easier and safer to use what you know ...* (244) */When/in case/if you ask ...* In contrast to this, clauses introduced by the prepositions *after* and *before,* that also function as conjunctions (as well as the causal preposition *for*, corresponding to *because*), have a straightforward full clause paraphrase: *One person, who has the opportunity to plan the entire discourse before starting ...* (279) /*before he starts ...*

Contingency is conveyed by means of the prepositions *with, without, in addition to* and *instead of.* While *in addition to the fact that* and *instead* also occur with full clauses (*In addition to controlling it in two ways, society takes ...* (259) / *In addition to the fact that it controlls it ...*), paraphrasability of clauses headed by *with* or *without* is problematic, cf. *We try to lead our lives without losing our face* (249). A full clause seems to be available in case the "*with/without* clause" is loosely attached to the sentence and has a vague additive meaning: *Sixteen Arabs and sixteen Americans were studied in this way, with Arabs talking to Arabs and Americans to Americans ...* (280, 281) / *Arabs were talking to Arabs and Americans to Americans ...* The full clause is then also a loosely attached clause using no conjunction.

The last type of gerundive adverbial clause to be discussed is that of **purpose** (introduced by the preposition *for*). None of the clauses found in the text express clearly intentional purpose (3 of the 4 examples complement the verb or noun *use*), therefore, no full clause paraphrase is possible, cf. *words used for addressing the other person ...* (251).

It needs to be mentioned in this connection that some other uses of gerundive clauses complementing nouns, verbs and adjectives display the meaning of adverbial clauses e.g. *rule for requesting ...* (332), i.e. rule used for requesting ... (purpose), … *manipulating their audiences into asking …* (304) (result), ... *suitable for establishing rapport ...* (329) (purpose), etc. However, since the adverbial meanings of these clauses are quite blurred and the clauses are clearly dependent on their predicates, they are included here in nominal clauses. (such analysis is, naturally, subjective)

To conclude, gerundive adverbial clauses predominantly express manner, time or contingency and mostly occur with the prepositions *by, in* and *with/without*, respectively. Especially clauses introduced by the prepositions *by* and *with/withou*t convey such kind of (general) meaning that can rarely be exactly paraphrased by using a cunjunction + full

clause (in case the structure *in the way* + *that* clause corresponding to *by* is available, it usually sounds more clumsy). Therefore, gerundive clauses are an effective means (since the only means) of expressing propositions that need to be introduced by a preposition which has no corresponding conjunction.

7.2.2 Gerundive Nominal Clauses (103 instances)

Gerundive nominal clauses represent 68.21% of gerundive clauses and 34.92% of all nominal clauses. They occur as complements of verbs, complements of adjectives, complements of nouns and in the function of S.

7.2.2.1 Gerundive Nominal Clauses Used with Verbs (35 instances)

Gerundive nominal clauses used with verbs form 33.98% of gerundive nominal clauses and 23.18% of gerundive clauses. (29 clauses occur in post-predicate position, 6 clauses are subjects of sentences with verbal predicates)

As the numbers show, this type of gerundive clauses is not so frequent in scientific writing. (compared with infinitival clauses in such function) To begin with complement clauses, considerably numerous are only those that complement verbs of description (this being in accordance with the descriptive and expository character of the style analysed) and aspectual verbs. Marginally, gerundive clauses occur with communication verbs, emotive verbs, cognitive verbs, verbs of avoidance and verbs of effort, facilitation and hindrance. (for the percentual division of semantic classes and the exact verbs used see table 11)

In all clauses the gerund is in its non-perfective non-progressive form. Two uses of gerund are passive (as in *euphemisms that protect the other person from being offended* (294), the others are active. In addition to this, gerundive clauses also occur after two passive verb predicates: *skilled work involved in speaking* (295).

As regards the realization (or rather non-realization and consequent necessary inference) of the S of gerund, this seems to depend on the semantic class of the verb predicate used (cf. the situation with infinitival nominal clauses of this type). For instance, with verbs of facilitation and hindrance (*protect, manipulate*), the implied S of the gerund is the same as the O of the verb predicate (*manipulating their audiences into asking ...* (304), *S=their*

audiences), with aspectual verbs (*stop, begin, finish, start*), emotive verb (*enjoy*) and verb of effort (*put effort into*) the S is inferred from the S of the sentence (*we are about to stop speaking* (310)*, S=we*), with the verb of avoidance (*avoid*) and many descriptive verbs the implied S is general (*activities might include sight-seeing, swimming* (...) *and shopping* (308, 309). Only one gerundive clause has its subject overtly realised: *One of the earliest studies compared two men and two women talking to each other in all possible pairings* (316). As already mentioned, such clause can be likewise interpreted as participial (and from the structural point of view it is ambiguous between nominal and relative clause, however, the relative interpretation is ruled out contextually).

To move to the paraphrasability of the clauses found in the text, only three of them allow the realization by a full clause: one complementing a suasive communication verb (*An American friend, who, despite warnings insisted on talking ...* (301) /*insisted that we talked ...*) and two complementing a verb of description (*Our faceworks consist in recognising these norms and applying them effectively* (296, 297) / *consist in that we recognise these norms and apply them effectively*). The impossibility of paraphrase of the other clauses is due to the following reasons:

there are almost no occurrences of communication and cognitive verbs, i e. verbs that are typically complemented by full clauses

there are occurrences of aspectual verbs, verbs of effort, facilitation and hindrance, one emotive verb and one verb of avoidance, the meaning of which is incompatible with using a full clause

quite a great number of the verbs are prepositional verbs (one cognitive verb – *know about*, descriptive verbs – *consist of/in, concentrate on, be geared to, be involved in*, suasive verb – *insist on*, verbs of effort, facilitation and hindrance – *protect from, manipulate into, put effort into*), which, except *know about/that* and *insist on/that*, do not allow dropping the preposition and using a full clause

many of the gerundive clauses that complement verbs of description, the verb of avoidance and the cognitive verb have general, non factual reference (*Females give priority to solidarity and concentrate on building and maintaining the social bounds ...*(317, 318), this again makes the use of V + *that* clause or V + preposition + *the fact* + *that* clause difficult. For illustration, cf. the general and

concrete use of gerund after the verb *know*: *what you know about <u>buying bus-tickets</u>* (291) / paraphrase? X *e.g. I know about <u>his being ill</u> / I know that (about the fact that)he is ill.* In the second example using a full clause is possible.

  especially in case of general reference, the meaning of the gerundive clauses seems to be closer to NPs than to clauses and such gerunds are often substitutable by NPs. This is most evident in case of "bare" gerunds, i.e. those that are Sless and occur without any complementation and thus are indistinguishable from verbal nouns, e.g. *Activities might include sight-seeing, (...) , <u>swimming, shopping</u>* (308, 309), *skilled work involved in <u>speaking</u>* (295) /speech.

Similarly, as regards gerundive clauses that function as subjects (followed by verbal predicates), all of these have general reference. Using a more informal full clause introduced by *if* or *when* is usually possible: *Talking takes energy / When we talk, it takes energy*, however, this could hardly be appropriate in scientific writing.

Therefore, gerundive nominal clauses used with verbal predicates occur with such semantic classes of verbs and in such contexts, where they are hardly paraphrasable by full clauses. Nevertheless, this shows the effectivity of gerundive clauses: they enable the writer to express the verbal complementation in the form of a clause (a gerundive clause).

7.2.2.2 Gerundive Nominal Clauses used Adjectives (5 instances)

Gerundive nominal clauses used with adjectives form only 4.85% of gerundive nominal clauses and 3.31% of gerundive clauses.

Therefore, the use of gerundive clauses in this function is very rare, e.g. in comparison with the use of infinitival clauses complementing adjectives. This is due to the fact that 1) gerundive clauses predominantly occur only in post-predicate position (i.e. the structure S – linking V - adjective – post-predicate gerundive clause), not extraposed position, therefore their use is more limited (all the five gerundive clauses in the text are found in this position, e.g. *Non verbal cues are important for <u>structuring discourse</u>* (328) 2) gerundive clauses are more or less restricted to affective or evaluative adjectives. Since affective predicates are not typical of scientific style, gerundive clauses in the text occur only as complements of evaluative adjectives (and one adjective of necessity and importance): *wrong, suitable, important* . (cf. table 12)

All instances of gerundive clauses use non-progressive, non-perfective active gerunds. The implied S of the clauses is to be inferred from the sentential S, e.g. *Saussare was wrong in thinking of speech ...* (325), or is general, e.g. *Japanese is an important language for studying ...* (327), i.e. language which is important for studying.

As regards paraphrasability, only the clauses that complement the adjective *wrong* seem to have a full clause alternative with a comparable meaning: *Saussare was wrong in seeing speech as ...* (326) / *when he saw speech as...* The full clause is an adverbial clause, this again proves the fact that there is not a clear boundary between non-finite nominal and adverbial clauses (especially in case of those following a preposition). Similarly, the remaining clauses, i.e. clauses complementing the adjectives *important for* and *suitable for*, are close in meaning to adverbial of purpose. However, these are more readily substitutable by NPs than by full clauses, cf. *an important language for studying the linguistic classification* (327) / *for the study of. ..*, *suitable for establishing rapportt* (329) / *for the establishment of rapport*.

7.2.2.3 Gerundive Nominal Clauses used with Nouns/Pronouns (63 instances)

Gerundive nominal clauses used with nouns/pronouns form 61.16% of nominal gerundive clauses and 41.72% of gerundive clauses. (60 clauses occur in post-predicate position, 3 clauses function as S of the sentence, with a NP being the Cs)

The considerably frequent use of these clauses can be ascribed to the fact that they are used to give information about abstract nouns (e.g. *way, strategy, expression, norm, rule, reason, chance, possibility opportunity,* etc.), which is typical of scientifific writing. In all instances, the gerund is non-perfective and non-progressive, one clause uses passive gerund: *an example of women being treated like children* (347), the rest of them active. As with other NF clauses, the S of the clauses is mostly covert and is implied by the context or is general (often both): *We have a wide range of ways of showing intimacy* (334), S=we. Only in three cases the S is overtly realised, e.g. *the chances of other participants being interested in what is said ...* (362).

To begin with gerundive clauses that occur in post-predicate position, i.e. following their noun predicates, they are used for conveying quite a wide range of semantic relations. As regards the meaning, it is often pointed out in grammars that gerundive clauses tend to be semantically dependent on the nouns (cf. Dušková, 2006: 577) and noun + of construction

is frequently presented as a typical example of this use of gerund (Biber et al., 1999: 653 - 655). Therefore, it is an interesting finding that "only" 18 gerundive clauses in the text are "of clauses", eg. *advantage of signalling ...* (348) and by far not all gerunds can be said to be indispensable for the nouns with which they are used.

To discuss now the meaning and paraphrasability of gerundive clauses in the text in more detail, I will divide these clauses into the following classes: 1) restrictive modifying clauses 2) restrictive complement clauses 3) non-restrictive complement clauses. As will be shown below, there is quite a clear boundary between the restrictive and non-restrictive clauses: restrictive clauses provide contextually important information, e.g. *the gesture of pointing* (382), non-restrictive are more additive and explanatory in meaning e.g. *signals (smiling)* (369). The distinction between modifying and complement clauses is more blurred, therefore, the classification of the restrictive clauses into these two categories is quite subjective. (cf. table 13 for the list of nouns used in these functions)

Restrictive modifying clauses are the already mentioned clauses which are used to provide descriptive information about the noun with which they occur (i.e. they do not actually complete its meaning). They are found with nouns followed by a preposition, typical instances in the text being *rule for, norms for, concepts for, strategy for, gestures for* or *way of*. The connection between the noun and the preposition is quite loose and the meaning of the preposition + *ing* clause is similar to that of relative clause, i.e. it can be seen as a reduction of it: *rule for requesting anything from anybody* (332) / *rule which is used for requesting anything from anybody* (note that the preposition can be thus separated from the noun). In addition to this, the *for* + *ing* clause likewise resembles adverbial clause of purpose (rule serving what purpose?). As regards the paraphrasability of gerund in this use, the only clause allowing a full clause paraphrase is the one following the noun *way*: *Every language might be expected to have some way of signalling differences* (355) / *way in which it signals differences*. (the full clause is a relative clause)

Restrictive complement clauses are the ones that are most commonly discussed by grammarians. They likewise occur with "prepositional nouns", however, there is a closer dependence between the noun and the preposition and the gerundive clauses are typically used to somehow complete the meaning of the noun. Nevertheless, the distinction between modifying and complement clauses in the text is not straightforward: 1) the

above discussed modifying clauses can be marginally treated as complement clauses (not all abstract nouns, e.g. *aim, advantage ...* allow *for + ing* clause) 2) many of the complement clauses are close to being descriptive in meaning, e.g. *skill in speaking* (337)*, substitute for understanding* (356) (what kind of skill, substitute?) 3) the dependence of a preposition on the noun predicate must be seen in terms of gradience, e.g. *advantage of* (strongest dependence)– *effect of* – *gesture of* (lowest dependence*), substitute for* (strongest dependence)– *reason for* – *rule for* – *gesture for* (lowest dependence). Similarly to *for*-clauses, the *of* construction, as in *the gesture of pointing* (382), cannot be seen as dependent on the preceding noun since it can occur with almost any noun.

Instances of prepositional nouns taking restrictive complement clauses in the text are e.g. *skill in, possibility for, advantage of, effect of, substitute for, difficulty in, chance of: There is no difficulty in establishing that speech is structured* (359). The meaning of these gerundive clauses is mostly general and a full clause alternative is again rare. It is possible with two nouns of extrinsic modality: *reason, chance* (*There is no chance of reducing all these structures* (364) /*that all these structures could be reduced, The reason for sticking to a given topic* (360) / *why we stick ...*).

Non-restrictive complement clauses are only loosely added to the preceding nouns and are mainly used for explanatory and exemplifying purposes. These clauses are marginally discussed by Huddleston and Pullum (2002: 1266) ,who calls the ones not introduced by a preposition supplement clauses. The clauses in the text either follow the preposition *such as* or *like: reflex like sneezing* (330), are separated by a dash or colon: *aspects of speech considered in this chapter – marking relations ...* (365)*,* or are separated in brackets: *physical contact (touching, stroking, grooming)* (366 - 368). As the examples show, the clauses as a rule have general reference and the gerund is frequently indeterminate between gerund and verbal noun interpretation. Still, a full clause paraphrase seems to be feasible in a few instances: *We give out social signals by our mouths (smiling, showing disgust)* (369, 370) / (*we smile, we show disgust)*. Such additive clauses are in fact similar to adverbial clauses introduced by *with/without*, which, when having additive meaning, also allow a full clause paraphrase.

The text displays three examples of gerunds functioning as S followed by a linking V and a NP as the Cs: *Pointing is something that chimpanzees do not do naturally* (392). The

similarity between this clause and the ones described above is that the clause in fact expresses the content of the NP (something that chimpanzees do not do naturally = pointing). Paraphrasability is again hindered by the general reference of these clauses. A somewhat clumsy (and informal) full clause alternative is possible in *Being physically close to another person is also an intrusion ...* (391) / *When we are physically close ..., it is ...*

To conclude, gerundive clauses are used with a wide range of abstract nouns to express various kinds of semantic relations. There are instances of descriptive uses of gerund, gerunds expressing content, gerunds having exemplifying function as well as those functioning as S (in combination with NPs functioning as Cs). The semantics of these clauses as well as their frequent coocurrence with a preposition mostly rules out the possibility of a full clause paraphrase, gerund being the only means of clausal complementation.

To summarise the uses of gerundive clauses, only a small percentage of them can be seen as condensed alternatives of full clauses (i.e. as paraphrasable by them). In fact it was shown that the paraphrasability of gerundive clauses in the text is lower than that of infinitival clauses. This is quite interesting considering the fact that infinitival clauses typically have forward-oriented meanings (which are not very compatible with using a full clause) while gerundive clauses do not. Nevertheless, the frequent impossibility of paraphrase of gerund is due to different reasons: 1) the majority of gerundive clauses have general meaning that can hardly be expressed by a full clause (cf. nominal clauses) 2) many gerundive clauses occur with "prepositional" verbs, adjectives and nouns and are thus closer to NPs than to clauses 3) adverbial gerundive clauses are frequently introduced by the prepositions *with/without* or *by*, which do not have a corresponding conjunction (the occassionally possible paraphrase by *in the way* + *that* clause is clumsy) 4) the text (i.e. scientific style) has very few (or no) occurences of communication verbs, cognitive verbs, emotive adjectives, and nouns of extrinsic modality + gerundive clause, where the gerund is frequently paraphrasable by a full clause.

Although the possibility of parahrase is not frequent, gerund is naturally an effective device of condensing sentence structure (e.g. the writer avoids unnecesary mentioning of known or general subject) and it enables the writer to express the proposition in the form of a (gerundive) clause in cases where full clause is not possible.

7.3 Participial clauses and participial premodifiers

There are 164 instances of participial clauses in the text, i.e. participial clauses form 29.5% of NF clauses. In addition to this, there are 15 occurrences of participial premodifiers, however, since these are not clauses, they are treated separately.

The analysis will cover only "pure participles", premodifying/postmodifying participial adjectives (*interesting, concerned*) or prepositions having participial forms (*given, corresponding to*) will not be included. (the form *including* can have both prepositional and verbal interpretation, in case a verbal interpretation is possible, it is analysed as participle (head of participial clause): *various vocatives ... , including "you"...* (553) / *which/these include you ...*

Participial clauses in the text were divided into restrictive relative clauses, nominal clauses, adverbial clauses and supplementive clauses. (for reasons given in 7.3.5 non-restrictive relative clauses will be included in supplementive clauses) The subject of the clauses is usually unexpressed (in 90.85% of instances). Both active and passive participial clauses are used: 57.32% of the clauses are passive, the remaining clauses are active. (cf. table 14) This is a different situation compared with other NF clauses, which are predominantly active. Another difference will concern the paraphrasability: as will be shown, the majority of participial clauses can be seen as condensed full clauses.

7.3.1 Participial (Restrictive) Relative Clauses (88 instances)

Participial restrictive relative clauses are one the most frequent types of NF clauses in the text. They form 53.66% of participial clauses and 83.81% of all relative clauses. The high percentage of them can be explained by their function: participial clauses are used to provide descriptive information about the noun which they modify, this being typical of the expository character of scientific style

the general skills needed for social interaction (395) / *which are needed for social interaction*

The majority of participles found in the clauses (70) are passive participles (cf. the example above), 2 of them being progressive passive participles, e.g. *similar experiences*

currently being shared (446). The remaining clauses use active participles, e.g. *different norms relating to quantity* (411). The S is always the antecedent noun/pronoun, cf. *the person addressed* (479) = the person who (i.e. the person) is addressed.

As is expectable in scientific style, the nouns that are postmodified by participial relative clauses are predominantly inanimate (frequently abstract) nouns. Those that show more than one occurrence are e.g. *work, rule, norm, information* or *question*. In addition to this, the clauses are used with 15 animate nouns (*person* and *people* are very common) and 7 pronouns. The predicate of the participial clause is typically a stative verb (often of description). Again, some of the verbs occur more than once: *used* (7), *addressed* (7), *based* (6), *needed* (5), *discussed* (4), *followed* (4), etc.

As regards the paraphrasability of participial relative clauses, all of them can be seen as condensed full relative clauses. Passive participial clauses correspond to full clauses with verbs in passive (*words used for addressing* (399) / *that are used for addressing*). In some instances the participial clause refers backwards (*the evidence given above* (396) */ that is/has been/was given above*). Similarly, active participial clauses are paraphrasable by full clauses whose VP may be either progressive or non-progressive: *norms relating to quantity* (411) / *that relate to quantity* X *the voice speaking* (412) / *that is speaking* (the potential ambiguity of examples such as the last one is resolved contextually). However, due to the high frequency of stative verbs, paraphrase using a progressive finite verb is rare.

To sum up, participial (restrictive) relative clauses are an effective means of reducing the length of sentences in scientific writing. The author seems to choose them intentionally to present the information (which would othervise have to be conveyed by a full clause) in a compressed form.

7.3.2 Participle in the Function of Noun Premodifier (15 instances)

The text displays 15 occurrences of premodifying participles. This low frequency of participle in this function is due to the fact that the majority of the -ed and -ing forms functioning as premodifiers in the text have adjectival status (although they are frequently derived from verbs) e.g. *agreed, balanced, focussed, following, given, missing, raised, related, ruling, spoken* etc. There is not a clear borderline between participles and participial adjectives, and dictionaries vary in their treatments of these words. I adopt here

the approach presented by Webster's dictionary (1981). Premodifying participles in the text are to be found in Appendix 3, examples 481 – 495.

All participles in this function are non-progressive, non-perfective participles. As in participial relative clauses, they are quite frequently passive (8 instances). These participles refer either to ongoing states (*preferred relations* (495) / *relations that are preferred*) or have resultative meaning (*reported examples* (494) / *examples that have been reported*). Active participles can be again interpreted as either progressive (*approaching change* (490) / *change that is approaching*) or non-progressive (*referring names* (483) / *names that refer to sth/sb*).

As regards the paraphrasability by a relative clause, theoretically, it is usually possible (i.e. in case the NP is treated in isolation, cf. the examples above), the exceptions are participles that occur in more or less lexicalised phrases (*reported clauses* (488)*, controlling questions* (486), *collecting point* (487)). However, if we study the examples in context, paraphrase by a relative full clause frequently becomes structurally clumsy (*This widely observed fact can be explained ...* (482) / *this fact that is widely observed?*) or, if nothing else, it always changes the FSP of the sentence (*One such difference involves the preferred relations between speaker and addressee* (495) / *relations that are preferred between speaker and addressee*). Therefore, participial premodifiers are more than just an alternative, compressed way of expressing the content of relative clauses.

7.3.3 Participial Nominal Clauses (5 instances)

Participial nominal clauses form only 3.05% of participial clauses and 1.7% of all nominal structures. This is due to the fact that they are restricted to the function of verb complementation and they occur with only a relatively small number of verbal predicates. All clauses in the text use non-progressive, non-perfective participles, four of them being active, one passive. The predicates that take these clauses include one verb of encounter (*leave*), one verb of perception (*watch*), one aspectual verb (*keep*) and one cognitive verb (*think*). (cf. table 15) Full clause is possible only with the last predicate, however, the meaning is shifted: *We may perhaps think of these skills arranged hierarchically* (496) / *we may perhaps think that these skills are arranged hierarchically*.

7.3.4 Participial adverbial clauses (headed by a conjunction/preposition) (19 instances)

Participial adverbial clauses introduced by a conjunction/preposition represent 11.59% of participial structures and 18.27% of all adverbial clauses. Their number is therefore quite low, however, adverbial meanings (though usually of more general nature) are also conveyed by supplementive clauses, which will be here discussed separately in the following chapter.

To start with the form of these clauses, 12 clauses are active, 7 passive. (clauses introduced by the preposition *as* are only passive, clauses introduced by *when* only active) The subject is overtly realised in 2 cases, when the clause is introduced by the preposition *with: tu being used prototypically to a close subordinate, and vous to a distant superior, with other situations resolved in relation to these* (507).

The clauses are used to express the adverbial meanings of condition, manner and time (they are introduced by the conjunctions *if, as* and *when*, respectively) or, in 2 cases, contingency (the clause is introduced by the preposition *with*), cf. table 16 for the frequency of occurrence of these types of clauses. The use of the preposition *with* in a participial clause (cf. *the "distant" form is Taroo ga ki-masi-ta, with the suffix -masi added to the verb* (510)) is clearly an exception to the rule that only gerundive clauses, not participial clauses can be introduced by a preposition (but the *-ed* form, naturally, cannot be analysed as a gerund). However, in this connection note that the participle does not immediately follow the preposition; there is an intervening NP, functioning as the subject of the participial clause, and, structurally, the participle must be viewed as dependent on this NP, not on the preposition. In spite of this, from the functional point of view, the structure must be considered as a whole, and it can be analysed only as a participial adverbial clause.

As regards the paraphrasability of these clauses, it is not difficult to see the correspondence between participial and full clauses introduced by the same conjunction: *Episodes in an individual's past, or personal characteristics that might produce embarrassment if mentioned* (501) / *if they are mentioned.* Again, difficulties may arise concerning the choice of tense or aspect in the full clause: *Arabs confronted each other more directly than Americans when conversing* (514) / *when they conversed/were conversing.* The participial clauses introduced by *with* behave as gerundive clauses of this

type; they correspond to loosely attached full clauses: *the "distant" form is Taroo ga ki-masi-ta,* <u>*with the suffix -masi added to the verb*</u> *(510) / (the suffix -masi is added to the verb),* in this case a non-restrictive relative full clause is also possible *(/where/in which the suffix -masi is added to the verb).*

This shows that participial adverbial clauses are an effective means of condensation, enabling the author to avoid the use of a a "longer" full clause.

7.3.5 Participial Supplementive clauses (52 instances)

Participial supplementive clauses form 31.7% of participial clauses. These clauses are those that are only loosely incorporated in the sentence structure (i.e. no conjunction/preposition is present), therefore their relation to the superordinate clause is usually very vague. Although (as will be shown) some of such clauses can be said to have clearly adverbial meanings and some are interpretable as non restrictive relative clauses, many instances are really indeterminate between these two interpretations, carrying the general additive meaning of accompaniment. Therefore I consider it most convenient to treat them here as a separate class of clauses.

To begin again with the form of these clauses, 35 clauses are active, 17 passive. An overt subject is, for a NF clause, relatively common: 8 instances. (some examples of these will be given below)

Only a few supplementive clauses convey quite concrete adverbial meanings: two supplementive clauses express condition (<u>*Putting these two characteristics together*</u>*, we can predict ... (520) / If we put ...),* four clauses in initial position (including the previous example) can be said to have connective function <u>*Returning to our second universal,*</u> *then, we cannot claim ...* (524). As the example shows, a full clause paraphrase is not always possible. All the remaining clauses (i.e. clauses in middle or final position) are very vague in meaning and they express merely accompaniment (i.e. the meaning is usually that of addition). No conjunction is present, only in three cases the relation of the clause to the rest of the sentence is made more explicit by the use of an adverbial (*again, thus, all the while*): *A girl called (...), made a remark (...), etc.,* <u>*all the while continuing the thread of her conversation about her sister*</u> *(531) / all the while she continued ...*

Concerning the paraphrasability of "additive" supplementive clauses, they primarily correspond to coordinated full clauses, or loosely attached full clauses that are separated

by semi-colon or are in brackets, cf. *The norms (...) are precisely the same as those (...) , tu being used prototypically to a close subordinate, and vous to a distant superior* (543) */, tu is used ... /;tu is used ... /(tu is used ...)*. In many cases the additive participial clause can also be interpreted as (and paraphrased by) a non-restrictive relative clause: this usually happens when the clause can be seen as dependent on some preceding NP (*This pairing is never reversed, linking a close superior to a distant subordinate* (546) */ this pairing, which links... / this pairing is never reversed; it links... , First, there are norms governing the sheer quantity of speech that people produce, varying from very little to very much* (528) */, which varies/(this varies from very little to very much),* or the antecedent may be a whole clause *(information is revealed in small doses, requiring further questioning* (533) */ which requires/ and this requires further questioning*. In this connection also note the fact that even participial clauses containing an overt subject (*both, all, each...*) can be interpreted as non-restrictive relative clauses (cf. Huddleston and Pullum, 2002: 1266): *for example, males say lakáws where females say lakáw, both meaning "he is lifting it"* (537) */both of whom mean ... /; they both mean ...*

The possibility of interpreting many supplementive clauses as both adverbial additive or non-restrictive relative is not very surprising considering the fact that non-restrictive relative clauses in general are typically described as conveying only additional information and their similarity to coordinated clauses is frequently stressed by linguists (see eg. Dušková, 2006). This can be further proved by the fact that even participial clauses that look like clear examples of non restrictive relative clauses almost always allow a marginal possibility of paraphrase by a full main clause (e.g. an additive clause separated in brackets), cf.: *there are in fact several words, varying in terms of formality, but...* (539) */ ,which vary in terms of formality,/ (they vary in terms of formality)*. Therefore, the meaning (and paraphrasability) of participial supplementive clauses must be again seen in terms of gradience, there being instances of participial clauses functioning as prototypical accompanying adverbials (corresponding only to additive main clauses), participial clauses to be interpreted as non-restrictive relative clauses, corresponding to non-restrictive relative full clauses (but, as was shown, main clause paraphrase tends to be possible even in this case), and, most frequently, the participial clauses are indeterminate between these two interpretations (although one of them is sometimes more likely, cf. ex. 546). As a result, any attempt to try to separate adverbial

and non-restrictive relative uses of participial clauses would be highly misleading, and the term suplemmentive clause is a useful cover term for all of these clauses.

To conclude, participial supplementive clauses (mainly due to their lack of conjunctions and frequent covert S) are one of the most valuable means of condensing sentence structure, and the text effectively uses them in place of "more complex" non-restrictive or main (coordinated) full clauses.

To summarise the uses of participial clauses, it was shown that the majority of these clauses (with the exception of nominal clauses and supplementive clauses used as conjuncts) can be paraphrased by full clauses. The NF participial clause is always more compressed than a full clause (it lacks tense markers, and frequently also overt subject and a conjunction/preposition) and, therefore, it is an effective means of condensing the sentence structure. As regards the meaning of these clauses, it tends to be quite inexplicit. Participial supplementive clauses are even so vague in their meaning that they are frequently indeterminate between adverbial additive and non-restrictive relative clause interpretation. However, this indeterminacy is usually resolved contextually (or is irrelevant), and it hardly ever presents any problems for the comprehension of the text. Thus, participial clauses are an effective means of expression: they reduce the length of sentences and contribute to the compactness of the language (which is desirable in scientific writing).

8 Conclusion

The focus of this work was to describe the use of non-finite structures in the English language, especially with regards to their occurrence in the language of scientific style. Main attention was paid to the use of these structures as a means of condensation (i.e. their ability to condense sentence structure and reduce the length of sentences), which is one of the key factors that influence the frequent use of these structures in scientific writing. In this connection, the work aimed to explain how the condensity of such structures is achieved, what type of meaning they express and under which conditions they can be seen as condensed full clauses (either main or subordinate) and are paraphrasable by them. In the first part of this work, this issue was studied from the theoretical point of view, in the second, analytical part, the general findings were applied

to the language of scientific writing and analysis of the uses of non-finite structures in this style was carried out.

The theoretical part was started by a general introduction to the concept of condensation. Meaning, function and types of condensed structures were discussed; in this connection, it was exemplified how these structures contribute to cohesion, compactness and connectedness of a text and enable the writer to express "complexity of thought". Also, different linguistic treatments of the term condensation were presented. Basically, these can be divided into those that regard as condensed all structures which have a compressed form showing a correspondence to a full clause structure, and those which consider to be condensed only structures that can be seen as condensed full clauses and are paraphrasable by them. In this work the first approach was adopted, however, focus was laid especially on which of such condensed structures (i.e. non-finite structures) have full clause alternatives.

The treatment of non-finite structures was introduced by the discussion of the condensed form of these structures and the type of meaning generally conveyed by them. At this point, it was argued that non-finite structures strongly resemble the structure of full clauses in that they are analysable into clause elements and, therefore, the term non-finite clauses was used to refer to them in the work. Nevertheless, the condensed, non-finite clauses are special in that they lack many of the properties of full (finite) clauses, namely, they often lack an overt subject, a subordinator and their VP is never marked for number, person, tense and mood (and sometimes not for aspect). As a result, their meaning is more general and less explicit and they can be used only as subordinate clauses (relative, adverbial or nominal), where the meaning can be inferred from the superordinate clause. Even so, these clauses can have more interpretations (mainly regarding tense, aspect, modality, their semantic relation to the superordinate clause), and therefore, in cases they can be seen as condensed full clauses, difficulties arise considering the exact form of such full clause paraphrase.

The existing three types of non-finite clauses were introduced in the work: infinitival clauses, gerundive clauses and participial clauses. For the sake of clarity of presentation, and to demonstrate the common characterictics of the individual types, uses of infinitival, gerundive and participial clauses were treated separately.

First, infinitival clauses were discussed. As was argued, these clauses typically convey modal meanings and refer rather to potential situations than to established facts. In cases a full clause alternative is possible, it usually contains a modal auxiliary. Infinitival clauses are used as relative clauses, adverbial clauses and nominal clauses:

Infinitival relative clauses are as a rule treated as condensed full relative clauses (*the place to go to/where one/we... should go to*)

Infinitival adverbial clauses typically function as adverbials of purpose or as conjuncts and disjuncts. Infinitival adverbials of purpose are condensed full clauses of this type, some infinitival disjuncts have full-clause alternatives in if-clauses, however, conjuncts are mostly difficult to paraphrase, since they are frequently more or less set expressions of the type *to conclude, to begin with,* etc.

Infinitival nominal clauses are the most complex and complicated ones for linguistic analysis. For the purposes of this work, their classification was simplified and the traditional distinction of these clauses according to their syntactic functions was avoided. The clauses were divided into three types: clauses used with verb predicates, clauses used with adjective predicates and clauses used with noun predicates. Then, clauses in each group were further subdivided in accordance with the semantic class of the predicate. (division was also made between clauses in post-predicate position and those functioning as subject complement, subject and extraposed subject) Such approach aimed to reflect the fact that the form of a nominal clause (infinitival, gerundive or full clause) is to a considerable extent influenced by the semantics of the predicate with which it is used and it enabled to generalise with which predicates infinitival clauses are found and when they are paraphrasable by full clauses.

Due to their potential meaning, infinitival clauses occur mainly with forward oriented predicates (eg. verbs of intention, verbs of effort, causative verbs, adjectives of ease and difficulty, adjectives having modal meanings, and nouns which are derived from these). With such predicates, infinitive is usually the only possible type of complementation. In addition to this, infinitival clauses are also found with some communication verbs (mainly suasive speech act verbs), cognitive verbs, verbs of probability, adjectives of certainty and evaluative or emotive adjectives, it is in this case that they often have full clause paraphrases.

After presenting the condensing uses of infinitival clauses, gerundive clauses were taken into consideration. Gerundive clauses tend to be factual in meaning and they frequently refer to situations/actions with general validity. Therefore, they usually correspond to non-modal full clauses. The paraphrasability can be made difficult especially due to the general/vague meaning of these clauses as well as the fact that they resemble noun phrases in their functional potential (eg. they occur after prepostions instead of conjunctions) and therefore they are frequently paraphrasable rather by noun phrases than by clauses.

Gerundive clauses are used as adverbial and nominal clauses. Gerundive adverbial clauses can express a wide range of semantic relations (time, contingency, manner, reason, purpose etc.) and they are special in that they must be introduced by a preposition. Basically, they can be considered to be condensed full clauses in cases the preposition can also function as a conjunction (*after, before*) or there exists a corresponding conjuction with similar meaning (*for – because*).

Gerundive nominal clauses were treated as infinitival nominal clauses: they were divided according to the type of predicate (and its semantics) with which they are found. Due to their non-potential meaning, gerundive clauses are used especially with verbs of communication, cognitive verbs, emotive and evaluative adjectives and nouns expressing human judgement. In many of the uses they are paraphrasable by full clauses. (a full clause paraphrase is not possible with two frequent uses of gerund: after aspectual and emotive verbs).

Finally, condensing uses of participial clauses were discussed. Participial clause is a clause headed by a participial VP. These clauses typically present some accompanying information (mostly factual) and they are frequently condensed full clauses (a full clause paraphrase may sometimes be difficult due to the inexplicitness of these clauses, especially in their adverbial uses). Participial clauses are relative and adverbial clauses, marginally nominal clauses (functioning as object complement).

Participial relative clauses are as a rule condensed full relative clauses, ie. they are paraphrasable by full clauses (*the girl standing over there/who is standing over there*). Together with these clauses also participle functioning as premodifier (although this is not a clause) was taken into consideration, since it displays a similar function (*the observed*

facts/the facts that were/have been observed), only the information is even more compressed.

Participial adverbial clauses were divided into those that are explicitly introduced by a conjunction (there is no difficulty seeing these as condensed full clauses introduced by the same conjunction) and those that are not (the so called supplementive clauses). Supplementive clauses can express a wide range of meanings, ranging from clearly adverbial meanings to additive meaning found in coordination or non restrictive relative clauses, such inexplicitnes may cause difficulties for a full clause paraphrase.

This work presented non-finite clauses as divided according to their types of VP (infinitive, gerund, participle), trying to reflect the semantics of the types. However, as regards condensing uses of these clauses and their paraphrasability by full clauses, it is also possible to see similarities in their functions: non-finite relative clauses and adverbial clauses are usually paraphrasable by full clauses (with the exception of conjuncts and some adverbial clauses introduced by a preposition), while nominal clauses often are not. This is due to the fact that relative and adverbial clause are only modifiers in the sentence structure, however, nominal clauses are not and their form is dependent on the predicate used.

In the second, analytical part of the work, the use of non-finite structures/ clauses in scientific style was discussed. (for the text analysis a part of the book Sociolinguistics by Hudson was chosen) Non-finite clauses were a frequent type of clauses in the text, their frequent use in scientific style has two main reasons: 1) in this style there is a need to provide complex and detailed information using long and complex sentences, condensed, non finite clauses reduce the length of the sentences and make them more compact 2) the use of non-finite clauses also contributes to the impersonality and objectivity of the text since they are typically subjectless and the implied subject is often general or the author.

The three types of clauses (infinitival, gerundive and participial) displayed a comparable frequency of occurrence in the text. As regards their uses, the most numerous were nominal clauses (this is due to the diversity of these clauses), relative and adverbial clause showed approximately the same number of occurrences. Concerning the form of the clauses, they were mostly subjectless and their VP was in the simplest form (active, non perfective, non-progressive), only participial clauses were frequently passive.

Infinitival clauses were used as relative clauses, adverbial clauses and nominal clauses. Infinitival relative clauses were rare in the text (the modal meaning of infinitive is not typical of these clauses). Infinitival adverbial clauses were mostly adverbials of purpose, mainly following the descriptive verb use. Infinitival nominal clauses were used with a wide range of verbs (mainly verbs of probability and causative verbs), adjectives (especially with evaluative adjectives and adjectives of ease and difficulty as extraposed clauses in the impersonal constructions of the type It is easy to...) and a handfull of nouns, mostly derived from verbs and adjectives.

The effectivity of infinitive was best seen in cases it theoretically allowed a full clause paraphrase. Infinitival clauses almost always proved to be a more effective means of expression: 1) the meaning of infinitive was often abstract, potential and flexible, a full clause would have to use a modal or the meaning needed could not be explicitly conveyed at all 2) the majority of infinitives were subjectless, they enabled to make the information impersonal (infinitive with evaluative adjectives, in relative clauses, conjuncts) or avoided double mentioning of one referent (frequently in verb complementation) 3) infinitive was found in sentences that, because of their structure, did not permit the use of full clauses, or their use lead to.restructuring the sentence and changing informational structure (when following passive verb, the verbs seem, appear or the adjective likely).

Gerundive clauses were used as adverbial clauses and nominal clauses. Gerundive adverbial clauses were mostly adverbial clauses of manner introduced by the preposition by, describing in what way something is done (there were also some occurences of adverbials of time and of contingency). Gerundive nominal clauses were found especially with descriptive verbs (such use being in accordance with the expository character of scientific writing) and with a great variety of nouns, expressing their content or adding descriptive information about them.

Not many gerundive clauses allowed full clause paraphrases: 1) the majority of gerundive clauses were too general in meaning and were more similar to noun phrases (mainly nominal clauses) 2) gerundive clauses mostly occurred after a preposition: they were found with prepositional" verbs, adjectives and nouns, and as adverbial clauses introduced chiefly by the preposition by (full clause paraphrase was hardly ever possible) 3) there were almost no occurences of communication verbs, cognitive verbs, emotive adjectives, and nouns of extrinsic modality with which gerundive clauses frequently allow

full clause paraphrases (such predicates + gerundive clause are not typical of scientific style)

In spite of this, gerundive clauses were an effective means of condensing sentence structure and they allowed the writer to express a clausal proposition (which could not be expressed by a full clause) in the form of a clause, ie. a compressed gerundive clause.

Participial clauses were used as relative clauses and adverbial clauses (rarely as nominal clauses). Participial relative clauses were one of the most frequent clauses in the text. (their descriptive character is in accordance with the need of scientific style to convey precise information). On the other hand, participle functioning as premodifier was hard to find: the majority of words having participle forms in this function are already established as participial adjectives (*isolated, following*) Participial adverbial clauses were also quite a common means of condensing sentence structure. The majority of them were suplemmentive clauses, providing accompanying (additive) information. (again, to make the message more precise). A handful of adverbial clauses were introduced by a conjunction, these clauses expressed mainly temporal relation (conjunction when).

Nearly all participial clauses (with the exception of the few nominal clauses and supplementive clauses functioning as conjuncts) could be seen as condensed full clauses. Participial relative clause corresponded to full relative clauses and participial adverbial clauses were paraphrasable by full adverbial clauses, or, in case of supplementive clauses, the full clause alternative was indeterminate between coordinated clause and non-restrictive relative clause. Again, a participial clause seemed to be more effective: its use avoided unnecessary realization of relative pronoun, conjunction, subject or tense.

To conclude, non-finite clauses are an effective means of condensing sentence structure in scientific style. Their condensing uses can be divided into two main types: those that can be seen as condensing full clauses (although this is quite a subjective matter), in which case the author often uses them intentionally to condense the sentence structure (comparing the two clauses, then, it can be seen how the compactness of non-finite clauses is achieved: in contrast to full clauses, they are frequently subjectless, lack modality and tense markers and usually occur without a subordinator), and those that are not paraphrasable by a full clause and are the only possible means of expression (however, they still have the condensed, clausal form and contribute to sentence condensation). The meaning of non-finite clauses is quite inexplicit (frequently abstract or

general), however, in no case did this present any difficulties for the smooth reading of the text. Just on the contrary, the use of non-finite clauses leads to compactness and objectivity of the language.

Resumé

Tato práce se zabývala problematikou anglických jmenných tvarů slovesných, a to zejména jejich používáním v anglickém vědeckém stylu. Pozornost byla věnována především výskytu těchto tvarů jako prostředku větné kondenzace (tj. jejich schopnosti zhustit větnou stavbu a efektivně tak nahradit delší a explicitnější vedlejší nebo hlavní věty), což je jedním z hlavních rysů anglických vědeckých textů. V této souvislosti se práce snažila objasnit jak lze této kondenzace dosáhnout, jaká je sémantika těchto tvarů a za jakých podmínek můžeme tyto tvary nahradit hlavními nebo vedlejšími větami. Problematika byla nejprve uvedena z teoretického hlediska a tyto teoretické poznatky byly poté aplikovány při analýze textu vědeckého stylu.

Na začátku práce bylo vysvětleno, co je podstatou větné kondenzace. Byly zmíněny různé prostředky kondenzace (nominální a polovětné vazby), s ohledem na jejich význam a funkci, tj. to, jakým způsobem přispívají ke kohezi a kompaktnosti textu a umožňují tak autorovi vyjádřit celé obsahové komplexy. Práce také představila několik různých pojetí větné kondenzace. V podstatě tato pojetí můžeme rozdělit na ta, která považují za prostředky větné kondenzace všechny konstrukce, které mají zhuštěnou stavbu odpovídající větné stavbě, a ta, která zahrnují pouze ty konstrukce, které jsou navíc převoditelné na vedlejší nebo hlavní věty. V této práci bylo převzato první, všeobecnější, pojetí kondenzace, nicméně, hlavní pozornost byla věnována tomu, které kondenzační prostředky (tj. neurčité tvary slovesné) se dají chápat jako alternativní vyjádření vedlejších nebo hlavních vět.

Názory lingvistů se také různí v tom, které typy anglických konstrukcí zařazují mezi kondenzační prostředky. Nejběžněji se mluví o třech hlavních typech: neurčitých tvarech slovesných, neslovesných větách a nominálních vazbách (někteří autoři v této souvislosti zmiňují i tzv. bezagentní trpný rod a různé případy elipsy). Nicméně, neurčité tvary slovesné jsou nepochybně nepoužívanějším prostředkém větné kondenzace a jejích používání je pro angličtinu velmi typické.

Práce se tedy soustředila zejména na kondenzaci realizovanou neurčitými tvary slovesnými. Nejprve byla představena stavba těchto konstrukcí a jejich sémantika. V této souvislosti bylo poukázáno na to, že tyto konstrukce reflektují větnou stavbu a jsou, stejně jako věty, analyzovatelné na větné členy. Z tohoto důvodu byly zde tyto konstrukce považovány za zvláštní druh vět (tj. věty realizovatelné neurčitými tvary slovesnými, tzv. nefinitní věty). Nefinitní věty jsou zpravidla vedlejší věty. Je ale nutné podotknout, že tyto věty se v mnoha ohledech liší od vedlejších vět finitních (věty s určitým tvarem slovesa). Nefinitní věty mají často nevyjádřený podmět, často postrádají spojku (nebo vztažné zájmeno) a nejsou schopny formálně vyjádřit osobu, číslo, čas a způsob (někdy ani vidové rozdíly). Proto je jejich sémantika méně explicitní a jejich interpretace je závislá na kontextu. Přesto může často dojít k víceznačnosti, zejména co se týče interpretace vidu, modality a časového a významového vztahu nefinitní věty k nadřazené větě. Toto pochopitelně působí obtíže, pokud chceme nefinitní věty nahradit finitními větami, v kterých všechny slovesné kategorie musí být formálně vyjádřeny.

Práce představila tří možné typy nefinitních vět: infinitivní věty, gerundiální věty a participiální věty. Použití každého z těchto typů vět byla probrána odděleně:

Nejdříve se práce zabývala infinitivními větami. Hlavou infinitivní věty je infinitiv (infinitivní slovesná fráze). Infinitiv rozlišuje vidové a rodové rozdíly. Tyto věty mají ve většině případů modální charakter a odkazují tak spíše na potenconální děje než na fakta. Pokud existuje alternativní způsob vyjádření finitní větou, tato věta obvykle obsahuje modální sloveso. Infinitivních vět se používá jako vět vztažných, příslovečných a nominálních.

Infinitivní vztažné věty jsou zpravidla redukované finitní vztažné věty (*the question to be discussed/ the question which must/needs to/should... be discussed*). Jejich převoditelnost na finitní věty může být znesnadněna jejich vágním významem nebo absencí podmětů v aktivních větách (*the place to go to/where one/we... should go to*).

Infinitivní příslovečné věty slouží zejména k vyjádření účelu, fungují jako větné konektory a větné modifikátory hodnotící obsah sdělení. Infinitivní účelové věty odpovídají finitním účelovým větám a některé infinitivní větné modifikátory se dají nahradit větami se spojkou *if*. Infinitivy ve spojovací funkci jsou často více či méně ustálené fráze typu *to conclude, to begin* with, a jejich převoditelnost je řídká.

Infinitivní nominální věty jsou bezesporu nejkomplexnějším druhem nefinitních vět. Pro účely této práce byla jejich klasifikace zjednodušena a infinitivní nominální věty byly rozděleny do skupin pouze podle druhu predikace, se kterou se vyskytují (tj. jestli doplňují sloveso, přídavné jméno nebo podstatné jméno) a podle její sémantiky (nebyl už ale brán zřetel na jejich větněčlenskou platnost). Takováto klasifikace se snažila reflektovat všeobecný fakt, že forma nominální věty (infinitivní, nefinitní věta nebo obě varianty) závisí do určité míry na sémantice toho slovesa, přídavného jména nebo podstatného jména, s kterým je použita, a tím pádem bylo možné vystopovat, v kterých případech infinitivní věty odpovídají finitním větám.

Vzhledem ke jejich častému modálnímu významu se infinitivní nominální věty primárně vyskytují po slovesech a přídavných jménech modálního charakteru (např. po slovesech rozhodování, kauzativních slovesech, po přídavných jménech vyjadřujících nutnost, záhodnost, možnost) a po podstatných jménech odvozených od těchto sloves a přídavných jmen. V tomto případě finitní věta většinou není možná, nebo je okrajovým prostředkem vyjádření. Oproti tomu infinitivní věty po slovesech komunikace, kognitivních slovesech, slovesech vyjadřujících pravděpodobnost či hodnotících nebo emotovních přídavných jménech jsou často alternativou finitních vět (v těchto situacích je potencionálnost infitivu většinou potlačena).

Poté se práce zabývala použitím gerundiálních vět. Hlavou gerundiální věty je gerundium (gerundiální slovesná fráze). Na rozdíl od infinitivních vět mají gerundiální věty typicky faktuální význam a často vyjadřují děje všeobecné platnosti. Alternativní finitní věta proto zpravidla nepoužije modální sloveso. Převoditelnost těchto vět může být znemožněna příliš obecným významem gerundiální věty. Mimo to gerundiální věty mají některé společné rysy s nominálními frázemi (např. se vyskytují po předložce) a tím pádem často alternují právě s nominálními frázemi a ne s finitními větami.

Gerundiální věty se používají jako příslovečné a nominální věty. Gerundiální příslovečné věty mohou vyjadřovat různé vztahy (čas, průvodní okolnosti, příčinu, způsob...) a vždy jsou uvedeny předložkou. Vyjádření finitní větou je možné pokud ta která předložka může být použita i jako spojka (after, before) nebo existuje spojka se stejným (podobným) významem (for – because).

Gerundiální nominální věty byly rozděleny stejným způsobem jako infinitivní nominální věty, tj. podle sémantiky sloves, přídavných jmen a podstatných jmen, se kterými se

vyskytují. Význam těchto vět je většinou faktuální (často obecný) a nebývá orientovaný do budoucnosti, nalezneme je zejména se slovesy komunikace, kognitivními slovesy, emotivními a hodnotícími přídavnými jmény a hodnotícími podstatnými jmény. V těchto připadech často alternují s finitní větou (tato alternace není možná u dalších dvou významných použití gerundiálních vět, tj. po emotivních a aspektuálních slovesech).

Nakonec byly představeny participiální věty. Hlavou participiální věty je participium, tj. participiální slovesná fráze. Tyto věty zpravidla uvádějí nějaké průvodní okolnosti nebo upřesňující informace (většinou faktivní) a často mají protějšky v finitních větách. Převoditelnost může byt znesnadněna vágností těchto vět, a to především v příslovečných větách. Partícipialní věty se používají jako vztažné a příslovečné věty, zřídka jako nominální věty (ve funkci doplňku předmětu).

Participiální vztažné věty jsou považovány za redukované finitní vztažné věty (*the girl standing over there/who is standing over there*). V souvislosti s těmito větami bylo zmíněno i použití participia ve funkci nominálního premodifikátoru, jelikož jeho funkce je obdobná (*the observed facts/the facts that were/have been observed*), pouze informace je ještě více zhuštěná.

Participiální příslovečné věty byly rozděleny na ty, které jsou uvedeny spojkou (tyto věty mají alternativy ve finitních větách uvedených stejnou spojkou) a ty, které nejsou (tzv. suplementní věty). Suplementní věty jsou schopny vyjádřit velkou škálu významů a jejich interpretace není někdy úplně jasná. Mohou odpovídat finitním příslovečným větám, ale častěji uvádějí pouze doplňující informace a dají se nahradit hlavními větami nebo nedefinujícími vztažnými větami.

V této práci byly tedy nefinitní věty rozděleny podle typu jejich slovesa (infinitiv, gerundium participium) a byla tak ukázana sémantika jednotlivých typů. Byly ale také patrné podobnosti mezi jednotlivými druhy vět. Nefinitní vztažné a příslovečné věty jsou často nahraditelné finitními větami (s výjimkou některých příslovečných vět), zatímco nominální věty často nejsou. To je způsobeno tím, že vztažné a příslovečné věty fungují pouze jako modifikátory a můžou být většinou finitní i nefinitní, ale nominální věty jsou strukturálně závislé na nadřazené větě a ta ovlivňuje jejich formu.

Druhá, analytická, část práce se soustředila na nefinitní věty ve vědeckém stylu. (jako výchozí text pro analýzu byla použita část knihy Sociolinguistics od Hudsona) Používání nefinitních vět bylo typickým rysem tohoto textu. To má nasledující vysvětlení: 1) cílem

tohoto stylu je poskytnout komplexní a detailní informace za použití dlouhých a komplexních vět, nefinitní věty umožňují zhustit větnou stavbu 2) nefinitní věty rovněž příspívají k odosobnění a objektivitě vědeckého textu, jelikož jejich podmět je obvykle nevyjádřený (implikovaný podmět je často všeobecný nebo je jím autor).

Infinitivní, gerundiální a participiální věty byly v textu zhruba stejně zastoupeny. Co se týče druhů vedlejších vět, nejpoužívaněší byly nominální věty (to bylo způsobeno zejména jejich rozmanitostí), vztažné a příslovečné věty byly více méně stejně časté.Ve většině nefinitních vět byl podmět nevyjádřený a jejich sloveso bylo v prostém tvaru. Pouze participialní věty se často vyskytovali se slovesem v trpném rodě.

Rozbor se soustředil zejména na význam a kondenzační schopnost těchto vět a na podmínky, které ovlivňují jejich převoditelnost na finitní věty. V tomto ohledu šlo o kvalitativní analýzu.

Infinitivní věty byly rozděleny na vztažné, příslovečné a nominální věty. Vztažné věty se vyskytovaly velmi zřídka (modální význam infinitivu není typický pro tyto věty). Příslovečné věty ve většině případů vyjadřovaly účel a často následovaly deskriptivní sloveso use (jednalo se zde o tzv. nepravý účel a převod na finitní větu nebyl možný). Nominální věty doplňovaly velké množství sloves (nejčastěji slovesa vyjadřující pravděpodobnost a kauzativní slovesa), přídavných jmen (zejména hodnotící a modální přídavná jména, s kterými se vyskytovali v neosobních konstrukcích typu It is easy to) a několik podstatných jmen většinou odvozených ze sloves a přídavných jmen.

Efektivnost infinitivu byla nejvíce zřetelná v případech, kdy bylo teoreticky možné vyjádření finitní větou. Infinitiv byl vždy výstižnější: 1) infinitiv měl abstraktní a často potencionální význam, finitní věta musela použít modální sloveso nebo přesná formulace nebyla možná 2) infinitivní věty měly často nevyjádřený podmět, v případě všeobecného podmětu umožňovaly tak text odosobnit (po hodnoticích přídavných jménech, ve vztažných větách) nebo se tak autor mohl vyhnout zbytečnému opakování již zmíněného podmětu (zejména v nominálních větách) 3) v některých situacích bylo vyjádření finitní větou znemožněno strukturálně, finitní věta nebyla vůbec možná nebo vedla ke změně aktuálního členění věty (po slovesech seem, appear, po přídavném jménu likely).

Gerundiální věty v textu byly buď příslovečné věty nebo nominální věty. Gerundiální příslovečné věty nejčastěji vyjadřovaly způsob, jakým se něco dělá, a byly uvedeny předložkou by (několik   vět bylo časových nebo popisovaly průvodní okolnosti).

Gerundiální nominální věty byly časté zejména po deskriptivních slovesech (což je v souladu s popisným charakterem věděckého stylu) a po různých podstatných jménech, kde specifikovaly obsah těchto podstatných jmen nebo uváděly doplňující informace.

Téměř žádné gerundiální věty nebyly nahraditelné finitními větami: 1) většina vět měla příliš všeobecný význam, který se blížil tomu v nominálních frázích (zejména nominální věty) 2) gerundiální věty nejčastěji následovaly po předložce, tj. po slovesech, přídavných jménech a podstatných jménech s předložkou a jako příslovečné věty uvedené předložkou (v případech v textu nebyla náhrada finitní větou téměř nikdy možná) 3) text vykazoval velmi malý výskyt sloves komunikace, kognitivnich sloves, emotivních přídavných jmen a hodnotících podstatných jmen, po kterých má gerundium často alternativu ve finitní větě (takové jeho použití není typické pro vědecký styl).

I přesto byly gerundiální věty efektivním prostředkem větné kondenzace a umožňovaly autorovi vyjádřit myšlenku (která nemohla být vyjádřena pomocí finitní věty) ve formě věty, tj. kondenzované gerundiální věty.

Participiální věty se vyskytovaly jako vztažné věty a přislovečné věty. (okrajově jako nominální věty) Participiální vztažné věty byly jedny z nefrekventovanějšich vět v textu (popisující charakter těchto vět je v souladu s potřebami vědeckého stylu). Oproti tomu participium ve funkci premodifikátoru bylo v textu vzácné, protože většina tvarů v této pozici, které mají formu participia, jsou regulerní přídavná jména (isolated, following). Častým prostředkem kondenzace byly ale participiální příslovečné věty. Většina z nich byly suplementní věty, které udávaly dodatečné informace (opět za účelem upřesnění informací). Několik příslovečných vět bylo uvedeno spojkou, zejména spojkou when, vyjadřující časový vztah.

Téměř všechny participiální věty (s výjimkou nominálních vět a suplementních vět ve spojovací funkci) byly nahraditelné finitními větami. Participiální vztažné věty odpovídali finitním vztažným větám a participialní příslovečné věty uvedené spojkou bylo možné převést na finitní příslovečné věty. V případě suplementních vět byla odpovídající finitní věta často nejasná, buď hlavní věta, nebo nedefinující vztažná věta. Efektivnost a zhuštěnost participiálních vět se projevovala zejména v jejich časté absenci podmětu, vztažného zájmena a spojky.

Tato práce ukázala, jakým způsobem jsou nefinitní věty využívány jako prostředek větné kondenzace ve vědeckém stylu. V tomto ohledu mohou být tyto věty rozděleny do dvou

hlavních typů: 1) ty, které lze chápat jako alternativní vyjádření finitních vět (tato otázka je do značné míry subjektivní) a autor je používá záměrně za účelem kondenzace textu 2) ty, které nelze nahradit finitními větami a jsou v dané situaci jediným prostředkem vyjádření (nicméně, i přesto vykazují zhuštěnou, větnou stavbu a přispívají tak ke kondenzaci). Sémantika nefinitních vět je obvykle vágní (mají často abstraktní nebo obecný význam), to ale zpravidla nepůsobí žadné obtíže pro správné pochopení textu jako celku. Právě naopak, nefinitní věty jsou efektivní a dosahuje se jimi kompaktnosti a objektivity textu.

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APPENDIX 1

PREDICATES USED WITH NON-FINITE AND FULL CLAUSES

(the lists show only illustrative examples, they are in no way complete)

1) List of verbs used with infinitival and *that*-clauses

Communication verbs: Factual speech act verbs

VERB + THAT CLAUSE/INF. : *acknowledge, admit, affirm, allege, announce, certify, confess, confirm, declare, deny, explain, guarantee, proclaim, report, say* (in passive), *state, testify*

Communication verbs: Suasive speech act verbs

VERB + THAT CLAUSE/INF.: *advise, ask, beg, beseech, command, counsel, direct, entreat, exhort, forbid, implore, instruct, order, persuade, remind, recommend, teach, tell, urge*

VERB + INF.: *challenge, detail, enjoin, incite, invite, pray, request*

Cognitive verbs

Evaluative verbs: VERB + THAT CLAUSE/INF.: *assume, believe, consider, deem, discover, estimate, expect, fancy, find, imagine, judge, know, mean, note, notice, observe, perceive, presume, presuppose, prove, recognize, reveal, show, suppose, suspect, think, understand*

Other verbs: VERB + THAT CLAUSE/INF.: *expect, learn, pretend, forget,*

Verbs of desire

VERB + THAT CLAUSE/INF. : *desire, hope, regret, prefer, wish*

VERB + INF. : *like, dread, hate, love, prefer, want, need, wish, dare, loathe, (cannot) bear, care, long, (cannot) stand, ache, burn, burst, clamour, itch, yearn*

Verbs of intention or decision

VERB + THAT CLAUSE/INF. : *decide, agree, resolve, threaten, intend, mean,, plan, consent, look, wait*

VERB + INF. : *aim, refuse, voluntee*r, *prepare, design, schedule*

Verbs of effort

VERB + INF.: *attempt, try, fail, manage, bother, endeavour, seek, strive, struggle, venture*

Verbs of perception

VERB + THAT CLAUSE/INF. (bare inf. only): *hear, notice*

VERB + THAT CLAUSE/INF. (both bare inf. and *to* inf. possible): *feel, observe, see*

VERB + INF. (bare inf. only): *overhear, watch*

Verbs of modality and causation

VERB + THAT CLAUSE/INF.: *allow*, *arrange, counsel, forbid, instruct, order, persuade, vote*

VERB + INF: *enable, get, require, appoint, assist, authorise, cause, compel, defy, drive, elect, encourage, entitle, force, help, inspire, lead, leave, be made, oblige, permit, prompt, raise,. summon, tempt*

VERB + INF. (bare inf.): *have, help, let, make*

Verbs of simple occurrence

VERB + THAT CLAUSE/INF.: *appear, chance, happen, seem, turn out*

VERB + INF.: *come, fail, prove, tend*

Aspectual verbs

VERB + INF. : *begin, cease, commence, continue, proceed, start*

(Quirk et al. 1991: 1180-1182, Biber et al. 1999: 1215)

2) List of adjectives used with infinitival and full clauses

Certainty adjectives

ADJECTIVE + THAT CLAUSE/INF.: *certain, fated, (un)likely, sure*

ADJECTIVE + INF.: *about, apt, bound, due, liable, (im)possible*, prone*

* *(im)possible* used with a *that*-clause expresses degree of certainty *It is possible that he does it*, with infinitive it indicates ability *It is possible for him to do it* (Huddleston, 1253)

Adjectives expressing ability or willingness

ADJECTIVE+THAT CLAUSE/INF.: *anxious, eager, careful, determined, keen, willing*

ADJECTIVE+INF.: *(un)able, bound, competent, disposed, doomed, eligible, fit, greedy, hesitant, inclined, loath, obliged, prepared, quick, ready, reluctant, set, slow, welcome*

Affective adjectives

ADJECTIVE+THAT CLAUSE/INF.: *afraid, angry, annoyed, ashamed, astonished, content, depressed, disappointed, disgusted, dissatisfied, frightened, furious, glad, pleased, relieved, surprised, thankful, worried*

*The same meaning can be sometimes expressed using an adverbial clause of reason: *I am pleased to have seen him/I am pleased that I saw him/ I am pleased because I saw him* (Close, 1975: 75)

Adjectives of ease or difficulty

ADJECTIVE + INF.: *awkward, difficult, easy, hard, (im)possible, tough*

Evaluative adjectives

ADJECTIVE + THAT CLAUSE/INF.: *(un)acceptable, amazing, anomalous, annoying, appropriate, astonoshing, awful, bad, brave, careless (in)conceivable, crazy, curious, disappointing, dreadful, embarrassing, expensive, extraordinary, (un)fortunate, frightening, funny, good, great, horrible, incidental, incredible, indisputable, interesting, ironic, irritating, (un)lucky, mad, natural, neat, nice, notable, noteworthy, noticeable, odd, okay, paradoxical, peculiar, preferable, ridiculous, right, sad, sensible, shocking, silly, smart, strange, stupid, sufficient, surprising, tragic, (un)typical, unfair, understandable, unthinkable, unusual, unwise, upsetting, wonderful, wrong*

Adjectives expressing habitual behaviour

ADJECTIVE + INF: *(un)accustomed, (un)used*

Adjectives of necessity or importance

ADJECTIVE + THAT CLAUSE/INF.: *advisable, appropriate, crucial, compulsory, desirable, essential, imperative, important, necessary, obligatory, proper, vital*

ADJECTIVE + FULL CLAUSE/INF.: *certain, sure*

NOUN + FULL CLAUSE/INF.: *advice, agreement, certainty, decision, information, instruction, inquiry, investigation, knowledge, reminder, warning, wonder*

(Biber 1999: 673, 718, Quirk et al., 1991: 1226-1231)

3) List of verbs used with gerundive and full clauses

Verbs of aspect or manner

VERB + GERUND: *begin, burst out, cease, come, commence, continue, delay, be done, finish, go on, hesitate, keep on, postpone, quit, remain, resume, sit, spend, stand, start, stop*

Communication verbs

VERB + THAT CLAUSE/GERUND: *acknowledge, complain (about/of/that), mention, propose, recommend, report, suggest, urge, warn*

VERB + GERUND.: *talk into, talk about*

Cognitive verbs

VERB + THAT CLAUSE/GERUND: *believe in/that, consider, decide abot/that, forget (about/that), recall, recognize, remember*

VERB + GERUND: *conceive (of), concentrate on, think (of/about)*

Perception verbs

VERB + THAT CLAUSE/GERUND: *dream of/that, imagine*

VERB + GERUND: *envisage, envision, experience, picture*

Verbs of affective stance

VERB + THAT CLAUSE/GERUND: *admire, prefer, regret*

VERB + GERUND: *detest, dislike, dread, enjoy, hate, like, loathe, love, mind, miss, resent*

Verbs of description

VERB + THAT CLAUSE/GERUND: *highlight, identify, ignore*

VERB + GERUND: *amount to, be associated with, be based on, consist of, describe, include, involve*

Verbs of effort, facilitation and hindrance

VERB + GERUND: *achieve, afford, aim at, assist in, cope with, deal with, discourage, eliminate, facilitate, handle, keep from, overcome, prevent, risk save, succeed in, try*

Verbs of (dis)agreement or (dis)approval

VERB + THAT CLAUSE/GERUND: *accept, agree to/that, allow for/that*

VERB + GERUND: *approve of, defer, disagree with, disapprove of*

Verbs of avoidance and obligation

VERB + THAT CLAUSE/GERUND: *require*

VERB + GERUND: *avoid, escape, evade, necessitate, neglect, refrain from, resist, shun, be stuch, withstand*

Verbs of offense, punishment or apology

VERB + THAT CLAUSE/GERUND: *accuse NP of/that, admit, apologize for/that, be blamed for/that, confess, deny, be suspected of/that*

VERB + GERUND: *be arrested for, be blacklisted for, be cited for*

Verbs of required action

VERB + THAT CLAUSE/GERUND: require

VERB + GERUND: need, want

(Biber et al., 1999: 742-744, Quirk et al., 1991: 1181, 1182, 1190)

4) <u>List of adjectives used with gerundive and full clauses</u>

Emotive/evaluative adjectives

VERB + THAT CLAUSE/GERUND: *angry at/that, astonished at/that, delighted at/that, disappointed at/that, surprised at/that, nervous about/that, aware of/that*

VERB + GERUND: *intent on, tired of, fed up with, fond of, clever at, good at, successful in, bad at*

(Knotková, 1986: 237, 238, Biber et al., 1999: 749)

APPENDIX 2

TABLE 1 Types of non-finite clauses and their uses

	Relative clauses	Adverbial clauses	Nominal clauses	Supplementive clauses	Total
Infinitival clauses	17	37	187	_	241
Gerundive clauses	_	48	103	_	151
Participial clauses	88	19	5	52	164
Total	105	104	295	52	556

*Participial supplementive clauses have adverbial meanings, meanings found in coordination or in (non-restrictive) relative clauses. Since there is gradience in their uses, they are best treated as a separate class.

**The table does not include the use of participial premodifier (i.e. 15 occurrences)

TABLE 2 Types of non-finite nominal clauses and their uses

	Used with verbs	Used with adjs.	Used with nouns	Total
Infinitival clauses	93	57	37	187
Gerundive clauses	35	5	63	103
Participial clauses	5	_	_	5
Total	133	62	100	295

TABLE 3

Infinitival clauses

Type of infinitival clause	Number of occurrences	Voice		Subject	
		active	passive	covert	overt
Relative	17	11	6	17	0
Adverbial	37	37	0	37	0
Nominal (used with V)	93	84	9	67	26

Nominal (used with Adj)	57	55	2	49	8
Nominal (used with N)	37	35	2	31	6
Total	241	222	19	201	40

*The relatively high percentage of overt subjects in verbal complementation is due to the fact that the O of such verb predicates frequently functions also as the S of the inf. clause (*They allow their sons to share...*). Included were also passive sentences (*Men are said to prefer...*).

TABLE 4

Infinitival adverbial clauses

Adv. of purpose	Conjunct	Disjunct	Adv. of result	Total
31	3	1	2	37

TABLE 5

Infinitival nominal clauses used with verbs (as complements)

Semantic class of verb	Verb used	Number of occurrences (of the verb)		Number of occurrences (of the clauses)	
Verb of probability	appear seem tend	3 15 8	26	3 15 8	26
Causative verb	allow encourage help lead (be lead) let make remind require	5 1 5 2 2 2 1 1	19	5 1 5 4 2 2 1 1	21
Cognitive verb	consider expect (be expected) learn take (be taken)	1 4 3 2	10	1 4 4 2	11
Verb of effort	bother try	1 8	9	1 12	13
Verb of desire	need want wish would like	3 3 1 2	9	3 3 1 2	9
Communication verb	claim say (be said) teach (be taught)	1 2 1	4	1 2 1	4
Verb of decision	choose	1	4	1	4

	decide	2		2	
	mean (be meant)	1		1	
Suasive verb	ask (be asked)	1	3	1	3
	tell (be told)	2		2	
Aspectual verb	start	1	1	1	1
Total		85		92	

TABLE 6

Infinitival nominal clauses used with adjectives

Semantic class of adjective	Adjective used	Number of occurrences (of the adjective)		Number of occurrences (of the clauses)	
Evaluative adjective	common	1	16	2	17
	fruitful	1		1	
	inappropriate	1		1	
	interesting	5		5	
	normal	2		2	
	right	1		1	
	rare	1		1	
	safe	1		1	
	tempting	1		1	
	usual	1		1	
	wrong	1		1	
Adjective of ease or difficulty	easy	8	15	8	15
	hard	6		6	
	possible	1		1	
Modality adjective	able	2	10	2	11
	obliged	1		1	
	prepared	1		1	
	ready	1		2	
	sufficient	1		1	
	unable	2		2	
	willing	2		2	
Adjective of necessity or importance	important	5	6	6	7
	necessary	1		1	
Certainty adjective	likely	6	6	6	6
Emotive adjective	careful	1	1	1	1
total		54		57	

TABLE 7

Infinitival nominal clauses used with adjectives – POSITION

	Post-predicate position				Extraposition	Total
	no raising	S raising	O raising	Total		
Evaluative adj.	1	0	0	1	16	17
Adj. of ease or difficulty	0	0	4	4	11	15
Modality adj.	10	0	0	10	1	11
Adj. of necessity or imp.	0	0	0	0	7	7
Certainty adj.	0	5	0	5	1	6
Emotive adj.	1	0	0	1	0	1
Total	12	5	4	21	36	57

TABLE 8

Infinitival nominal clauses used with nouns/pronouns

Type of infinitival clause	Noun used	Number of occurrences (of the noun)		Number of occurrences (of the clauses)	
Restrictive complement clause	*agreement attempt *need opportunity reason *reluctance *requirement signal *struggle *tendency	1 3 4 1 3 1 1 1 2 2	19	1 4 4 1 3 1 1 2 4 4	25
Non-restrictive complement clause	situation skill	1 2	3	1 2	3

Functioning as subject complement	all (we can do here)	1	8	1	9
	*concern	1		1	
	*consideration	1		1	
	effect	1		1	
	*function	1		2	
	thing	1		1	
	purpose	1		1	
	way	1		1	
Total		30		37	

*the noun marked with * is derived from a verb or an adjective

TABLE 9

Gerundive clauses

Type of gerundive clause	Number of occurrences	Voice		Subject	
		active	passive	covert	overt
Adverbial	48	47	1	45	3
Nominal (used with V)	35	33	2	34	1
Nominal (used with Adj)	5	5	0	5	0
Nominal (used with N)	63	62	1	60	3
Total	151	147	4	144	7

TABLE 10

Gerundive adverbial clauses

Type of adv. clause	Preposition used	Number of occurences (of the preposition)		Number of occurrences (of the clauses)	
Manner	by	19	19	22	22
Time	in before after at	8 1 1 1	11	8 1 1 1	11
Contingency	with without in addition to instead of	4 2 1 1	8	6 2 1 1	10
Purpose	for	4	4	4	4
Cause	for	1	1	1	1
Total		43		48	

TABLE 11

Gerundive nominal clauses used with verbs (as complements)

Semantic class of verb	Verb used	Number of occurrences (of the verb)		Number of occurrences (of the clauses)	
Verb of description	consist of consist in gear (be geared to) describe involve include compare concentrate on	1 1 1 1 2 2 1 1	10	1 2 1 2 2 4 1 2	15
Aspectual verb	stop begin finish start	2 1 1 2	6	2 1 1 2	6
Verb of effort, facilitation and hindrance	put effort into protect sb. from manipulate sb. into	1 1 1	3	1 1 1	3
Verb of cognition	know	1	1	2	2
Suasive verb	insist on	1	1	1	1
Verb of desire	enjoy	1	1	1	1
Verb of avoidance	avoid	1	1	1	1
Total		23		29	

TABLE 12

Gerundive nominal clauses used with adjectives

Semantic class of adjective	Adjective used	Number of occurrences (of the adjective)	Number of occurrences (of the clauses)

Evaluative adjective	suitable wrong	1 2	3	1 2	3
Adjective of neccessity and importance	important	2	2	2	2
Total		5		5	

TABLE 13

Gerundive nominal clauses used with nouns/pronouns

Type of gerundive clause	Noun (+ preposition)	Number of occurences (of the noun)		Number of occurences (of the clauses	
Restrictive modifying clause	rule for norm for concept for strategy for gesture for device for way of	3 4 1 1 2 1 8	20	3 4 2 1 3 1 8	22
Restrictive complement clause	motivation for possibility for substitute for difficulty in skill in reason for opportunity for advantage of chance of effect of source of example of gesture of	1 1 1 1 1 2 1 1 3 1 1 1 1	16	2 1 1 1 1 3 1 1 3 1 1 1 1	18
Non restrictive complement clause	reflex like expression like politeness such as signal such as way such as principle (of...) aspect + dash public speaking + dash things + colon contact + brackets signal + brackets	1 1 1 1 1 1 1 1 1 1 1	11	1 1 1 1 1 2 1 3 2 3 4	20

Functioning as subject (N = Cs)	something	1	3	1	3
	intrusion	1		1	
	investment	1		1	
Total		50		63	

TABLE 14
Participial clauses

Type of participial clause	Number of occurrences	Voice		Subject	
		active	passive	covert	overt
Relative	88	18	70	88	0
Nominal (used with V)	5	5	0	0	5
Adverbial (headed by conj./prep.)	19	12	7	17	2
Supplementive	52	35	17	44	8
Total	164	70	94	149	15

TABLE 15
Participial nominal clauses (used with verbs)

Semantic class of verb	Verb used	Number of occurrences (of the verb)	Number of occurrences (of the clauses)
Aspectual verb	keep	2	2
Verb of perception	watch	1	1
Verb of encounter	leave	1	1
Cognitive verb	think	1	1
Total		5	5

TABLE 16
Participial adverbial clauses (introduced by a conjunction/preposition)

Type of adv. clause	Conjunction/preposition	Number of	Number of

	used	occurrences (of the conj/prep)	occurrences (of the clauses
Time	when	11	12
Manner	as	4	4
Contingency	with	2	2
Condition	if	1	1
Total		18	19

APPENDIX 3. Corpus of examples
APPENDIX 3 Corpus of examples

Infinitival clauses
Infinitival relative clauses
1 - 2) We have just seen that speech is so important to us that we give it special treatment in our culture as an object to be classified and talked about; and we may assume that the same is true of every human culture. (p.112)
3) The first point to establish is that speech is not an automatic reflex like sneezing or a spontaneous expression of emotion like laughing; it is skilled work. (p.112)
4) There is no doubt that this is the case: we all know that sometimes we get "tongue-tied" or "drop a brick", and that some people are more likely than others to be stuck for "the right thing to say". (p.112)
5) This is not the place to try to specify the particular kinds of skill needed for successful speech, since they presumably include all the general skills needed for social interaction plus all the specifically linguistic skills concerned with the use of linguistic items. (p.112)
6) It is even more interesting to learn that a member of this species is the only primate to have learned spontaneously to use a communication-system invented by humans (Williams et al. 1994). (p. 115)
7) People there, in fact, just didn't talk much and seldom seemed to find anything much to talk about, and he saw this as a consequence of the particular kind of socialization pattern. (p. 117)
8) As far as speakers are concerned, the commonest characteristic to be reflected by specific linguistic items is sex (Trudgill 1974/1983: 78ff., Graddol and Swann 1989: 42ff., McCormick 1994b, Bainbridge 1994). (p. 121)
9) There is less agreement, and less certainty, over the names to be used in intermediate situations. (p. 123)
10) Linguistic signalling of power and solidarity is sufficiently well studied for at least four possible linguistic universals to be suggested. (124)
11) The system is impressive for its consistency, but the most important point to notice about it is that the choice of pronouns is always reciprocal, and therefore completely uninfluenced by considerations of power. (p.125)
12) Another way to define the relationship between S and X is by the choice of expression for S – in other words, by alternatives for *I* or *me*. (p. 129)
13) For example, the "plain" way to say "Taro came" is *Taroo ga ki-ta*, but the "distant" form is *Taroo ga ki-masi-ta*, with the suffix-*mas*i added to the verb. (p. 130)
14) The particles *ga* and *o* are used after the subject and object respectively, and have nothing to do with the "honorification". (p. 130)
15) The function of style levels is to signal the power-solidarity relations between S and A, and specifically to build a "wall of behavioral formality" to protect the addressee's power-face, which Geertz calls the "inner life". (p. 131)
16) The higher the style level, the more walls there are to protect the addressee against the encroachment that any communication inevitably makes on privacy. (p. 131)
17) As we saw (4.3.2), one of the questions to be asked about turn-taking is how speakers signal that they are ready to stop and let the other person start. (p. 139)

Infinitival adverbial clauses

18) Sometimes we are too tired <u>to engage in it</u>. (p. 113)

19) The theory was developed by Erving Goffman, an American sociologist (1955, 1967, 1969), who called the work needed <u>to maintain face</u> "face-work". (p. 113)

20) They call them "positive" and "negative", but these terms can be misleading because both kinds of face are valuable; instead, I shall call them "solidarity-face" and "power-face", <u>to show the close link to the important concepts of "power" and "solidarity" that we shall introduce in 4.2.2</u>. (p. 114)

21) This is the basis for most formal politeness, such as standing back <u>to let someone else pass</u>. (p. 114)

22 - 23) For solidarity-politeness we have a wide range of ways of showing intimacy and affection – words used for addressing the other person (for example, *mate, love, darling*, <u>not to mention greetings like *Hi*</u>!) and others used <u>to show solidarity-politeness towards the person referred to</u> (for example, *William* or even *Bill* as opposed to *Mr Brown*). (p. 114)

24) One reason why we avoid eye-contact in unfocussed interaction is probably that it is so important as a way of negotiating our way through focussed interactions, and it is interesting to learn that some chimpanzees (bonobos) also use eye-contact socially (<u>to initiate joint action</u>). (p. 115)

25) However, one of the many other ways in which primates keep group-life harmonious is by grooming each other, and it is easy to see parallels to this in our selective use of physical contact with other people <u>to show affection (solidarity-face)</u>. (p. 115)

26) <u>To take another example</u>, in Germany the hostess at a formal dinner party would probably say to her guests Ich darf jetzt bitten Platz zu nehmen ("I may now ask (you) to take (your) places"), using a declarative construction, in contrast with the interrogative that might be used by an English hostess: "May I ask you to come and sit down now?" (p.119)

27) Similarly, it is likely that people use speech like linguistic items <u>in order to locate themeselves in relation to the social groups that they can identify in the world around them</u>. (p. 120)

28) One of the advantages of signalling power and solidarity by our choice of names is that we can avoid such problems simply by not using *any* name <u>to address the person concerned</u>. (p. 123)

29) In contrast with the English system, however, it is much harder to avoid the problems of choice in French, since <u>to do so</u> it would be necessary to avoid making any reference at all to the person addressed. (p. 123)

30) <u>To confirm this</u>, we can ask what happens between grandparents and grandchildren, where the power differences are even more extreme. (p.125)

31) India shows a wide variety of practices: for example, some communities in Bombay call mothers exclusively by a name based on their motherhood (for example, "X's mother", where X is her first child), and in Marashtra husbands give their wives a new name on marriage – an interesting example which presumably shows how naming a person can be used <u>to assert dominance over them</u>. (p. 126)

32) In English the main markers of power an solidarity might fairly be described as peripheral to the system of English as a whole, in the sense that proper names used as vocatives (i.e. <u>to address someone</u>) could be handled in a separate section of the grammar with little or no consequence for any other parts of it. (p. 127)

33) Figure 4.2 shows a speaker, S, talking to someone else (A, for "addressee") about some person R (for "referent", what a word refers to); the curved line is a notation that I have used elewhere (Hudson 1995a) <u>to show the referent relationship</u>. (p. 127)

34) In the following discussion we shall use "X" <u>to stand for either A or R</u> except where these need to be distinguished. (p. 128)

35) In some languages even noun-phrases like this can be marked linguistically for power-solidarity; for example, Japanese has an "honorific" prefix o- which can be attached to a noun <u>to show respect for its referent</u> – for example, the Japanese for rice wine, which is called sake in the west, is *o-sake*! (p. 128)

36) A particularly important case is where a pronoun meaning "you" is used <u>to refer to X</u> – i.e. where X is not only R but also A. (p. 129)

37 - 38) So far we have considered the nouns and pronouns which can be used <u>to address X</u> or <u>refer to X</u>. (p. 129)

39) Speakers in every language can use language <u>to locate themselves in relation to people they are talking about</u>. (p. 131)

40 – 41) Erving Goffman, the originator of "face-work" (see 4.1.4), suggests that a greeting is needed to show that the relation which existed at the end of the last encounter is still unchanged, in spite of the separation, and that a farewell is needed <u>in order to "sum up the effect of the encounter upon the relationship</u> and <u>show what the participants may expect of one another when they next meet</u>" (Goffman 1955) (p. 132)

42) Even in these cases there is a little ritual which we go through <u>to leave both parties with their faces intact</u>. (p. 132)

43) Goffman's explanation for the role of greetings might lead us to expect that there will only be the briefest of greeting, or none at all, where no previous relation has existed, and this seems to be the case; witness the lack of greetings when people approach strangers <u>to ask for information</u>. (p. 133)

44) Instead of using speech, in the form of greetings, <u>to assure each other that relations are just as they were before the separation</u>, they wait until they are sure that relations really *are* the same before they speak to each other at all, at least in situations where there is reason to think that relations may have changed, as when children return after a year in boarding-school. (p. 133)

45) <u>To take a different kind of example</u>, if we were describing a flat we could make use of one of two kinds of encyclopedic knowledge. (p. 136)

46) For example, Ekman studied an isolated community in New Guinea which had hitherto had actually no contact with the outside world, and found that they used much the same facial expressions as Europeans <u>to express six basic emotions (happiness, sadness, anger, disgust, fear and surprise)</u>; and Eibl-Eibesfeld found much the same in six infants who had been born both blind and deaf, who could not have learned these reactions from others (Ekman and Friesen 1971 and Eibl-Eibesfeld 1973, both in Giddens 1989/1993: 92). (p. 138)

47) In Britain hand-shaking seems to be used <u>to show that a relation is being given a fresh start</u>, rather than as a sign of intimacy. (p. 139)

48) Thus it is used <u>to patch up quarrels between friends</u>, or when one is introduced to a stranger, or to anyone not seen for a long time. (p. 139)

49) Again there is one very obvious instance of this im most cultures – the use of head movements <u>to indicate "yes" or "no"</u>. (p. 139)

50 - 51) However, the use of a head-movement <u>to mean "yes" or "no"</u> seems sufficiently widespread <u>to risk the hypothesis that it is universal</u>, though it is hard to see why it should be. (p. 139)

52) There are also differences between the same tribes in the gestures used <u>to show the height of a child</u>, according to whether or not a hand is put, palm downwards, at the height of the top of the child's head. (p. 140)

53) <u>To make your job even more taxing</u>, you have to coordinate your performance with that of other conductors who are conducting their own orchestras (that is, with other participants). (p. 140)

54) One interpretation of these findings is that males use interruptions <u>in order to assert their dominance</u>, and in the absence of a better alternative we have to accept this. (p. 142)

Infinitival nominal clauses
Infinitival nominal clauses used with verb predicates
A) IN POST-PREDICATE POSITION

55) This is not the place to try <u>to specify the particular kinds of skill needed for successful speech</u>, since they presumably include all the general skills needed for social interaction plus all the specifically linguistic skills concerned with the use of linguistic items. (p.112)

56) For example, we learn <u>how to order a meal in a restaurant</u> by watching other people doing it, in much the same that we learn vocabulary and grammatical constructions. (p. 113)

57 - 58) It is easy to see why we bother <u>to say things that help us to get things that we want</u>, but why do we bother with phatic communion and why do we worry about how we dress up our requests in speech? (p. 113)

59) The basic idea of the theory is this: we lead unavoidably social lives, since we depend on each other, but as far as possible we try <u>to lead our lives without losing our own face</u>.(p. 113)

60) However, our face is a very fragile thing which other people can very easily damage, so we lead our social lives according to the Golden 114 Rule ("Do to others as you would like them <u>to do to you</u>!") by looking after other people's in the hope that they will look after ours. (p. 113 – 114)

61) Face is something that other people give to us, which is why we have to be so careful to give it to them (unless we consciously choose <u>to insult them</u>, which is exceptional behaviour). (p. 114)

62) This is the basis for most formal politeness, such as standing back to let <u>someone else pass</u>. (p. 114)

63) This theory starts by distinguishing "unfocussed" and "focussed" interaction, according to whether or not the people concerned consider themselves <u>to be "together" in more than a purely physical sense</u>. (p. 115)

64) An obvious example is that we try <u>to keep out of each other's way</u>, but another is that we avoid eye-contact. (p. 115)

65) It is even more interesting to learn that a member of this species is the only primate to have learned spontaneously <u>to use a communication-system invented by humans</u> (Williams et al. 1994). (p. 115)

66 - 67) We need <u>to save our own face by saving the face of everyone we talk to</u>, so we need <u>to manage our behaviour, both verbal and non-verbal, very carefully</u>. (p. 115)

68) The rules chosen vary from one society to another, which makes it easier to see that there *are* rules, but this should not be taken <u>to imply that all rules are similarly variable</u>. (p.116)

69 - 71) There is no agriculture and no industry, and the society is neither particularly cooperative nor particularly competitive; so children are lead <u>neither to be particularly independent</u> <u>nor to be aggressively competitive with each other</u>, <u>but simply to busy themselves with their own concerns in reasonable spatial proximity</u>. (p.116)

72) People there, in fact, just didn't talk much and seldom seemed <u>to find anything much to talk about</u>, and he saw this as a consequence of the particular kind of socialization pattern. (p. 117)

73) No one appears <u>to pay any attention</u>. (p. 117)

74 – 75) In a brief conversation with me, about three minutes, a girl called to someone on the street, made a remark to a small boy, sang a little, told a child <u>to go to school</u>, sang some more, told a child <u>to go buy bread</u>, etc., all the while continuing the thread of her conversation about her sister. (p. 118)

76) Those who have information that others don't know are in a powerful position, and may decide <u>to ration the flow in a way that contradicts our more rational expectations</u>. (p. 118)

77) In familiar societies this is an individual matter (and we probably all know individuals who enjoy making others <u>work hard for their information</u>, (but in some societies the process is institutionalised). (p. 118)

78) Or again, if A asks B "Where is your mother?" and B responds "She is either in the house or at the market", B's utterance is not usually taken <u>to imply that B is unable to provide more specific information needed by the hearer</u>. (p. 118)

79) On the other hand, behind all this diversity there appear <u>to be some features that are universal, such as the obvious indications of "up" and "down"</u> (Key 1992). (p.119)

80) As noted earlier, we may share some of these features with our primate relatives, in which case the explanation of the similarities is presumably genetic; so non-verbal communication offers the same range of learned and innate patterns as we seem <u>to find in language</u>. (p.119)

81 - 82) Firstly, by providing a set of *norms*, which we learn <u>to follow</u> (or <u>occasionally to flout</u>) <u>more or less skilfully</u>, but which vary from society to society, though some may be universal. (p.119)

83) For instance, even in Madagascar the norm of informativeness seems <u>to apply</u> *unless* it conflicts with other principles (of safeguarding individuals and keeping news to oneself), and this norm may in fact be recognised by all societies in spite of these apparent counter examples. (p.119)

84) More precisely, if they do want <u>to interrupt</u> they must do it in a way which gives the teacher control, by raising their hand and awaiting permission. (p. 120)

85) Every language seems <u>to have linguistic items that reflect social characteristics of the speaker, of the addressee or of the relation between them</u>. (p. 120)

86) A particularly interesting difference, from this point of view, is the rule which allows females <u>to omit the word *da*, "is/are" in certain (common) types of sentence</u>. (p. 121)

87) For example, *kirei da yo*, "It's pretty", is the only form available for males, whereas females normally say *Kirei yo*, and are said <u>to sound "blunt and masculine" if they use the other</u>. (p. 121)

88) How does one decide <u>whether to address John Brown as *John* or as *Mr Brown*</u>? (p. 122)

89) In this diagram the length of the line is meant <u>to indicate the social distance between the speaker and the person addressed</u>, while the vertical direction of the line indicates power relationships. (p. 122 – 123)

90) The answer will no doubt vary from person to person, but we are all guided by our experience of other people's behaviour so we can expect <u>to find regularities not only in each person's behaviour but also across individuals</u>. (p. 123)

91) The first is that every language might be expected <u>to have some way of signalling differences in either power or solidarity or both</u>, which could be explained by reference to the extreme importance of both power and solidarity in face-to-face relations between individuals, and the need for each individual to make it clear how they see those relations. (124)

92) But unlike other languages with this pronoun choice, the choice seems <u>to be based on considerations of solidarity alone</u>, without any role for power. (124)

93) However, we may be able to make a somewhat weaker claim: that power and solidarity tend strongly <u>to be expressed by the same forms</u>. (p.125)

94) What seems <u>to be universally true</u> is that this pattern is never reversed completely, but there are interesting variations on it even within English-speaking society. (p. 126)

95 - 96) In some families parents encourage their children <u>to call them by their given names</u> (a very exotic practice, it seems!), while in others parents call their sons "son"; one possible interpretation of these practices is that in the first case the parents accept the same powerlessness as their children, while in the second they allow their sons (but not their daughters!) <u>to share in their own power</u>. (p. 126)

97) What follows is a brief survey of some of the better known types of linguistic signalling of power – solidarity (as we shall call the contrast for convenience, without wishing <u>to imply that both power and solidarity are involved necessarily and equally in all cases</u>. (p. 127)

98) In the following discussion we shall use "X" to stand for either A or R except where these need <u>to be distinguished</u>. (p. 128)

99) The prefix allows one <u>to show respect for a person via their possessions</u>; for example, the normal word for "hat", *boosi*, would normally be expanded to *o-boosi* if the hat belonged to a superior (Shibatani 1990: 374). (p. 128)

100) These are where we might expect speakers <u>to express information about their relationships to X</u>. (p. 129)

101) In either case an extra auxiliary verb is used which allows <u>the ordinary verb to be combined with the so-called "honorific" prefix *o-* mentioned above</u>. (p. 130)

102) In addition to the distant forms which show lack of solidarity with A, Japanese also allows the speaker <u>to show power relations to R through the choice of one of two verb-forms</u>. (p. 130)

103) For example, the French farewells *au revoir* and adieu can both be translated by *good-bye*, but they differ according to whether or not the people concerned expect <u>to meet again</u>. (p. 132)

104 – 105) Goffman's explanation for the role of greetings might lead us <u>to expect that there will only be the briefest of greeting, or none at all, where no previous relation has existed</u>, and this seems <u>to be the case</u>; witness the lack of greetings when people approach strangers to ask for information. (p. 133)

106) Goffman's predictions may be based on a rather American style of social behaviour, since there is at least one society to which they appear <u>not to apply</u>, namely the Apache Indians, studied by K. H. Basso (1970). (p. 133)

107) Thus the Apache do not use greetings in the way that Goffman predicts, but do confirm his more general claim that it is important for people to know how they stand in relation to others before they start <u>to talk</u>. (p. 133)

108) In studying this aspect of discourse one can ask questions such as whether "turns" are taken strictly in sequence or overlap one another, how speakers show that they are about to finish speaking, how listeners show that they would like <u>to start</u>, who decides who should speak next, who does most of the talking, who speaks to whom and so on. (p. 134)

109 - 110) In imposing this structure on the book, I have tried <u>to make it reflect the topics discussed,</u> so that the present sentence is an illustration of one kind of structure, dealt with in the present paragraph, which is part of the subsection on types of discourse structure other than entries and exits, which is one part of the chapter dealing with speech as social interaction. (p. 134)

111) Some researchers have claimed <u>to be able to find a similar hierarchical structure in other kinds of discourse, both spoken and written</u>. (p. 135)

112) Moreover, it seems unlikely that participants in such a conversation have any clear plan at the start about the shape it will take, as would seem <u>to be implied by the notion of a hierarchical structure</u>. (p. 135)

113) On the other hand, speakers tend <u>to stick to the same topic</u> and may feel obliged to give a special signal if they are changing it (for example, *Oh, by the way, on a completely different matter, . . .*). (p. 135)

114) The conclusion to which we seem <u>to be lead on the topic-based structure of discourse</u> is that some kinds of discourse may have a hierarchical structure, especially if entirely under the control of one person who has the opportunity to plan the entire discourse before starting (for example, a book or a lecture), but that most discourse probably has a much looser kind of structure. (p. 135)

115) One very obvious aspect of non-verbal behaviour which helps <u>to reflect power-solidarity</u> is the physical distance between people concerned, the subject-matter of PROXEMICS (Pocheptsov 1994). (p. 137)

116) The students were asked <u>to converse in pairs in a room where they could be observed without their knowledge</u>, and records were kept of their movements – how close to each other they sat, how they oriented themselves towards each other, how much they touched each other, how much they looked at each other, and how loudly they talked. (p. 137)

117) These signals are particularly interesting and important because some of them seem <u>to be universal</u> (as Darwin claimed over a hundred years ago). (p. 138)

118) Non-verbal behaviour also helps <u>to mark the structure in the interaction</u>. (p. 138)

119) In Britain hand-shaking seems <u>to be used to show that a relation is being given a fresh start, rather than as a sign of intimacy</u>. (p. 139)

120) As we saw (4.3.2), one of the questions to be asked about turn-taking is how speakers signal that they are ready to stop and let the other person <u>start</u>. (p. 139)

121) Equally, there are ways of countering such moves if the speaker does not want <u>to yield the floor</u> – such as deliberately looking away so that the would-be-speaker cannot catch one's eye. (p. 139)

122) Many other gestures also help <u>to mark content</u> (McNeill 1992). (p. 140)

123 – 124) Somewhat surprisingly, pointing is something that chimpanzees do *not* do naturally, though they can be tought <u>to do it</u> and they naturally point with their eyes – i.e. by looking at the thing they want <u>to draw attention to</u>. (p. 140)

125) A successful performance requires the conductor <u>to keep all these various organs moving in exact coordination with one another, whatever the speed of the performance and whatever the number of separate organs involved at one moment</u>. (p. 140)

126) In the last chapter (3.3.3) we saw that males and females may be treated very differently in the cultural systems that languages help <u>to perpetuate</u>. (p. 140)

127 - 128) More precisely, there seem <u>to be rather general "interaction styles" which tend to be associated with one sex or the other</u>, though individuals may of course be exceptions. (p. 141)

129) The general concensus seems <u>to be that men are more concerned with power and women with solidarity</u>. (p. 141)

130 - 132) For men, conversations are negotiations in which people try <u>to achieve</u> and <u>maintain the upper hand if they can</u>, and <u>protect themselves from others' attempts to put them down and push them around</u>. (p. 141)

133 - 135) In contrast, for women conversations are negotiations for closeness in which people try <u>to seek</u> and <u>give confirmation and support</u>, and <u>to reach concensus</u>. (p. 141)

136) They try <u>to protect themselves from others' attempts to push them away</u>. (p. 141)

137 – 138) Men are said <u>to prefer a one-to-many pattern, where a single speaker has the rest of the group as audience</u>, while women tend <u>to break a larger group into a number of smaller conversation groups</u> (McCormick 1994b: 1357). (p. 141)

139) This example reminds us <u>to treat generalisations based on middle-class America with caution as the basis for universal conclusions.</u> (p. 141)

140) The same sex difference seems <u>to apply to small boys and girls</u> when talking in single-sex groups (Tannen 1990: 43), which reminds us that children have plenty of opportunities for developing these different patterns when playing in single-sex groups (1.3.2), regardless of whether the differences are dictated by our genes. (p. 141)

141) Another difference in behaviour is that females tend <u>to put more effort than men into keeping a conversation going</u> by giving supportive feedback (for example, *yeah, mhm*) and asking questions (McCormick 1994b: 1357). (p. 142)

142) Males and females seem <u>to be different even in the things they talk about</u>. (p. 142)

143) In the early study mentioned above (Hirschman 1994), the women used *we* and *you* far more than the men, who tended <u>to prefer *I*</u>. (p. 142)

144 - 145) In other words, the women tended <u>to include the person addressed among the people discussed</u>, whereas the men tended <u>to focus on themselves</u>. (p. 142)

146) These conclusions may be vastly too simple, or even wrong, but the issues that they try <u>to summarise</u> are obviously of enormous importance and interest. (p.143)

B) AS SUBJECT
147) Contrarily, <u>to be involved with someone</u> requires active verbal encounter. (p.117)

Infinitival nominal clauses used with adjective predicates
A) IN POST-PREDICATE POSITION
148) There is no doubt that this is the case: we all know that sometimes we get "tongue-tied" or "drop a brick", and that some people are more likely than others <u>to be stuck for "the right thing to say"</u>. (p.112)

149) We started this chapter by asking whether de Saussure was right <u>to see speech as purely individual</u>. (p. 113)

150 – 151) The same is true, of course, of all social interaction, which raises an important question: why are we willing <u>to do it</u>? and why are we willing <u>to accept the restrictions placed on us by our society's social rules?</u> (p. 113)

152) Face is something that other people give to us, which is why we have to be so careful <u>to give it to them</u> (unless we consciously choose to insult them, which is exceptional behaviour). (p. 114)

153) A person who chronically makes himself and others uneasy in conversation and perpetually kills encounters is a faulty interactant; he is likely <u>to have such a baleful effect upon the social life around him that he may just as well be called a faulty person.</u> (p.116)

154) Or again, if A asks B "Where is your mother?" and B responds "She is either in the house or at the market", B's utterance is not usually taken to imply that B is unable <u>to provide more specific information needed by the hearer</u>. (p. 118)

155) A rather different kind of sex-marker is found in the Island Carib language of Central America, whose history is specially likely <u>to show sex differences</u> since the Island Caribs may be descended from Carib-speaking males and Arawak females whose males were slaughtered by the Caribs. (p. 121)

156) "Power" is self-explanatory, but "solidarity" is harder <u>to define</u>. (p. 122)

157) It concerns the social distance between people – how much experience they have shared, how many social characteristics they share (religion, sex, age, region of origin, race, occupation, interests, etc.), how far they are prepared <u>to share intimacies,</u> and other factors. (p. 122)

158) However, we may be able <u>to make a somewhat weaker claim: that power and solidarity tend strongly to be expressed by the same forms</u>. (p.125)

159) In most societies pronoun choice is based on a rather diffuse notion of solidarity which is hard <u>to separate from power;</u> but if generation is the only criterion there is no reason why power should enter the picture at all. (p.125)

160) We also do it to people we are never likely <u>to meet again</u> – strangers who ask us the way, shop assistants who serve us and so on. (p. 132)

161) Although greetings and farewells (presumably) exist in all languages, they also vary enormously from language to language (and between dialects), so close translation-equivalents are hard <u>to find.</u> (p. 132)

162) Some researchers have claimed to be able <u>to find a similar hierarchical structure in other kinds of discourse, both spoken and written</u>. (p. 135)

163) On the other hand, speakers tend to stick to the same topic and may feel obliged <u>to give a special signal if they are changing it</u> (for example, *Oh, by the way, on a completely different matter, . . .*). (p. 135)

164) At one end of the scale are courting couples, and at the other end impersonal and formal occasions where speakers may be long distances from their addressees, as in theatres, or unable <u>to see them at all</u>, as on radio or television. (p. 137)

165) When the results were compared it was found that "Arabs confronted each other more directly than Americans when conversing . . . ,they sat closer to each other . . . , they were more likely <u>to touch each other . . .</u>, they looked each other more squarely in the eye . . . , and they conversed more loudly than Americans." (p. 137)

166 - 167) As we saw (4.3.2), one of the questions to be asked about turn-taking is how speakers signal that they are ready <u>to stop</u> and <u>let the other person start.</u> (p. 139)

168) These general conclusions are very easy <u>to integrate into the framework of ideas that we are gradually building</u>. (p. 142)

B) IN EXTRAPOSITION

169) If speech is skilled work, the same is true of other aspects of social interaction in face-to-face communication (or "focussed interaction"): "it is fruitful <u>to look upon the behaviour of people engaged in focussed interaction as an organised, skilled performance, analogous to skills such as car driving"</u> (Argyle and Kendon 1967). (p.112)

170 - 171) For instance, in asking for a ticket on a bus, it is easier and safer <u>to use what you know about buying bus-tickets, or buying transport tickets in general</u>, than <u>to use a more general rule for requesting anything from anybody</u> (for example by saying *Excuse me, would you mind selling me a ticket to. . .*). (p. 113)

172) It is easy <u>to see why we bother to say things that help us to get things that we want</u>, but why do we bother with phatic communion and why do we worry about how we dress up our requests in speech? (p. 113)

173) It is interesting <u>to see how much of language is geared to looking after the two kinds of politenesss</u>, and we shall consider some of these ways in more detail below. (p. 114)

174) One reason why we avoid eye-contact in unfocussed interaction is probably that it is so important as a way of negotiating our way through focussed interactions, and it is interesting <u>to learn that some chimpanzees (bonobos) also use eye-contact socially (to initiate joint action)</u>. (p. 115)

175) It is even more interesting <u>to learn that a member of this species is the only primate to have learned spontaneously to use a communication-system invented by humans</u> (Williams et al. 1994). (p. 115)

176) However, one of the many other ways in which primates keep group-life harmonious is by grooming each other, and it is easy <u>to see parallels to this in our selective use of physical contact with other people to show affection (solidarity-face)</u>. (p. 115)

177) Returning to our original question about motivation, it may now be possible <u>to explain why we put so much effort into the skilled work involved in speaking</u>. (p. 115)

178) The rules chosen vary from one society to another, which makes it easier <u>to see that there *are* rules</u>, but this should not be taken to imply that all rules are similarly variable. (p.116)

179) For instance, it would be quite normal <u>to refer to one' s own sister as "a girl"</u> (Keenan quotes a specific occasion when a boy said to her – in Malagasy - "There is a girl who is coming", referring to his own sister). (p. 118)

180) We have referred in very general terms to "society", but it would be wrong <u>to give the impression that societies are any more homogeneous with respect to the ways in which they control speech than they are with respect to the linguistic items which their members use</u>. (p. 120)

181) As we shall see shortly, the omission of the word for "is/are" is characteristic of "baby-talk", so it is interesting <u>to speculate about whether this originated as an example of women being treated like children</u>. (p. 121)

182 - 183) In contrast with the English system, however, it is much harder <u>to avoid the problems of choice in French</u>, since to do so it would be necessary <u>to avoid making any reference at all to the person addressed</u>. (p. 123)

184 – 185) For instance, it was normal until quite recently <u>for French children to call their father *vous*</u>, in recognition of his greater power, but in the very different circumstances of modern urban society it is usual <u>for them to call him *tu*</u> because of the high solidarity. (p. 124)

186) A second explanation is that solidarity inevitably increases through time as two people get to know each other better, so the question is when it is sufficient <u>to justify more intimate language</u>. (p. 126)

187) If power is enequal, it is likely <u>to be the superior who decides this</u>, so there may be a period where the superior uses intimate forms to the subordinate while the latter is still using the distant forms, but the reverse will never be true (Brown and Ford 1961) (p. 126)

188 – 189) It is common <u>for the power-solidarity contrast to be quite crucial</u>, and <u>for the grammar of such a language to refer to it at many points</u>. (p. 127)

190) In some cases it is important <u>to contrast these two cases</u> so we can call the first "vocative" and the second "referring"; and for the present purposes the important point is that referring names are part of the ordinary sentence structure, covered by the ordinary grammar. (p. 127)

191) In some languages central parts of the grammatical system are dedicated to this important social function, so it is important <u>to bear these languages in mind as a corrective to the idea that the sole purpose of language is to convey messages efficiently</u>. (p. 131)

192 – 194) Everything we have seen so far shows that relations between the participants in some piece of interaction are of the greatest interest to the participants themselves, and it is easy <u>to see why it is important for each piece of interaction to begin and end with an indication of these relations</u>. (p. 132)

195) Thus the Apache do not use greetings in the way that Goffman predicts, but do confirm his more general claim that it is important <u>for people to know how they stand in relation to others before they start to talk</u>. (p. 133)

196) It is tempting <u>to think that topic-based structure is hierarchical, in the sense that a given text should be analysable into successively smaller units on the basis of topic</u>. (p. 134)

197) It is hard <u>to see how the study of discourse structure can be anything but interdisciplinary</u>. (p. 136)

198) As we noticed in 4.1.4, such cultural differences can lead to serious misunderstandings, and it is easy <u>to see how physical distance relates to solidarity and power-face</u>. (p. 137)

199) However, the use of a head-movement to mean "yes" or "no" seems sufficiently widespread to risk the hypothesis that it is universal, though it is hard <u>to see why it should be.</u> (p. 139)

200) It must be rather rare <u>for *this* to be contrasted with *that*</u> (for example, *this is bigger than that*) <u>without some kind of gesture as an accompaniment, even if it is only a nod of the head in the direction of the thing in question</u>. (p. 140)

201) It would not be inappropriate <u>to compare you when speaking with the conductor of a large orchestra consisting of the various speech-organs and other visible organs of your body over which you have control</u>. (p. 140)

202) It is no wonder that people sometimes find it easier <u>to slip into fixed routines, nearer to music played from a score than to extemporised music like jazz</u>. (p. 140)

203) These books, like a good deal of the research they discuss, focus on middle-class America so it is important <u>to bear in mind that they may not be directly relevant to other societies</u>. (p. 141)
204) It is interesting <u>to remember the pattern reported from Antigua in 4.1.4, which is yet another possibility – the group stays united but everyone talks at the same time</u>. (p. 141)

Infinitival nominal clauses used with noun predicates (pronouns)
A IN POST-PREDICATE POSITION
205 – 206) For instance, if a chatterbox is with a person who habitually stays silent while others do the talking, each may consider themselves more successful than the other, according to how they balance the need <u>to fill "awkward" gaps</u> against the need <u>to avoid triviality</u>. (p.112)
207 – 209) They vary from very specific skills, dealing with particular linguistic items (e.g. <u>when to say *sir*</u>) or with particular situations (for example, <u>how to conduct a business transaction on an expensive transatlantic telephone call</u>), to much more general skills, such as <u>how to avoid ambiguity</u>. (p. 112 – 113)
210) Power-face is respect as in *I respect your right to . . .* , which is a "negative" agreement <u>not to interfere</u>. (p. 114)
211) It seems likely, therefore, that some of the skills needed for face-work are innate, as is our general need <u>to maintain face</u>. (p. 115)
212) He had no reason <u>to speak</u>. (p. 117)
213) Fundamentally, there is no regular requirement <u>for two or more voices not to be going at the same time</u>. (p. 117)
214 - 215)) The start of a new voice is not in itself a signal <u>for the voice speaking either to stop</u> or <u>to institute a process which will decide who is to have the floor</u>. (p. 117)
216) Consequently, there is no reluctance <u>to give information</u> when it is easily available to anyone. (p.119)
217) There is no reason <u>to believe that this is so</u>, and we may expect just as much variation in norms of speech as in linguistic items. (p. 120)
218) The first is that every language might be expected to have some way of signalling differences in either power or solidarity or both, which could be explained by reference to the extreme importance of both power and solidarity in face-to-face relations between individuals, and the need <u>for each individual to make it clear how they see those relations.</u> (124)
219 – 220) These are distributed unequally , with a strong tendency <u>for given names to be applied to junior relatives</u> and <u>role-based names (to be applied) to senior relatives</u>. (p. 126)
221) Instead of using speech, in the form of greetings, to assure each other that relations are just as they were before the separation, they wait until they are sure that relations really *are* the same before they speak to each other at all, at least in situations where there is reason <u>to think that relations may have changed</u>, as when children return after a year in boarding-school. (p. 133)
222) The most obvious fact about discourse structure is that many differents kinds of structure run through discourse, and any attempt <u>to reduce them to a single type</u> is bound to fail. (p. 134)
223) The conclusion to which we seem to be lead on the topic-based structure of discourse is that some kinds of discourse may have a hierarchical structure, especially if entirely under the control of one person who has the opportunity <u>to plan the entire discourse before starting (for example, a book or a lecture)</u>, but that most discourse probably has a much looser kind of structure. (p. 135)
224 – 225) For example, after fights, chimpanzees may attempt reconciliations which start with the gesture of an outstretched hand and are commonly completed with a kiss and grooming, reminiscent of the human tendency <u>to "kiss</u> and <u>make up</u>": in a different context, support is expressed to a nervous individual during conflicts through an embrace rather than a kiss, again suggesting basic patterns shared with humans. (p. 138)
226 – 227) For men, conversations are negotiations in which people try to achieve and maintain the upper hand if they can, and protect themselves from others' attempts <u>to put them down</u> and <u>push them around</u>. (p. 141)
228 – 229) Life, then, is a contest, a struggle <u>to preserve independence</u> and <u>avoid failure</u>. (p. 141)
230) They try to protect themselves from others' attempts <u>to push them away</u>. (p. 141)
231 – 232) Life, then, is a community, a struggle <u>to preserve intimacy</u> and <u>avoid isolation</u>. (p. 141)

B AS SUBJECT COMPLEMENT
233) The main consideration in these cases is <u>to preserve each other's power-face</u>. (p. 115)
234) Such rules are of various types, dealing with different aspects of speech, but all we can do here is <u>to mention a few examples</u>. (p.116)

235) If our only concern is <u>to communicate as efficiently as possible</u>, then information should flow freely. (p. 118)

236) For example, one speech-category is "lesson", and one of the things that primary-school children have to learn by explicit instruction, is <u>not to interrupt in the middle of a lesson</u> (in contrast with all other kinds of speech in which they are involved). (p. 120)

237) The second effect of using a plural pronoun is <u>to pretend that the person addressed is the representative of a larger group ("you and your group")</u>, which obviously puts them in a position of a greater power. (124)

238 – 239) The function of style levels is <u>to signal the power-solidarity relations between S and A</u>, and specifically <u>to build a "wall of behavioral formality" to protect the addressee's power-face, which Geertz calls the "inner life"</u>. (p. 131)

240) In some languages central parts of the grammatical system are dedicated to this important social function, so it is important to bear these languages in mind as a corrective to the idea that the sole purpose of language is <u>to convey messages efficiently</u>. (p. 131)

241) An easy way of measuring these differences is <u>to count the pronouns used</u>. (p. 142)

Gerundive clauses
Gerundive adverbial clauses
242) We can now go further <u>by showing that our speech is controlled by rules that we learn as part of our culture, just like the grammar and vocabulary that make up our language.</u>(p. 112)

243) We may perhaps think of these skills arranged hierarchically, with the most specific ones at the bottom and the most general at the top, and assume that <u>in dealing with a particular situation</u> the speaker will look for a specific skill in preference to a more general one, since the latter will always involve more cognitive effort and may be less successful. (p. 113)

244 – 245) For instance, <u>in asking for a ticket on a bus</u>, it is easier and safer to use what you know about buying bus-tickets, or buying transport tickets in general, than to use a more general rule for requesting anything from anybody (for example <u>by saying *Excuse me, would you mind selling me a ticket to. . .*</u>). (p. 113)

246) We started this chapter<u> by asking whether de Saussure was right to see speech as purely individual.</u> (p. 113)

247) We can now answer this question <u>by pointing, first, to the evidence given above that speech is socially classified in terms of types of speech-act, and second, to the fact that these speech-act types are learned as part of our socialisation</u>. (p. 113)

248) For example, we learn how to order a meal in a restaurant <u>by watching other people doing it</u>, in much the same that we learn vocabulary and grammatical constructions. (p. 113)

249) The basic idea of the theory is this: we lead unavoidably social lives, since we depend on each other, but as far as possible we try to lead our lives <u>without losing our own face</u>.(p. 113)

250) However, our face is a very fragile thing which other people can very easily damage, so we lead our social lives according to the Golden Rule ("Do to others as you would like them to do to you!") <u>by looking after other people's in the hope that they will look after ours.</u> (p. 113 – 114)

251) For solidarity-politeness we have a wide range of ways of showing intimacy and affection – words used <u>for addressing the other person</u> (for example, *mate, love, darling*, not to mention greetings like *Hi*!) and others used to show solidarity-politeness towards the person referred to (for example, *William* or even *Bill* as opposed to *Mr Brown*). (p. 114)

252) <u>For showing power-politeness</u> there are different "address" words (for example, *sir, please*), and all the euphemisms that protect the other person from being offended (for example, *spend a penny, pass away*). (p. 114)

253) This theory starts <u>by distinguishing "unfocussed" and "focussed" interaction</u>, according to whether or not the people concerned consider themselves <u>to be</u> "together" in more than a purely physical sense. (p. 115)

254 – 255) Most interactions in modern cities are unfocussed, <u>with strangers passing in the street</u> or <u>sitting next to each other on buses</u>. (p. 115)

256) However, one of the many other ways in which primates keep group-life harmonious is <u>by grooming each other,</u> and it is easy to see parallels to this in our selective use of physical contact with other people to show affection (solidarity-face). (p. 115)

257) We need to save our own face <u>by saving the face of everyone we talk to</u>, so we need to manage our behaviour, both verbal and non-verbal, very carefully. (p. 115)

258) Firstly, <u>by providing a set of *norms*, which we learn to follow (or occasionally to flout) more or less skilfully, but which vary from society to society, though some may be universal.</u> (p.119)

259) <u>In addition to controlling it in these two ways,</u> society takes a great interest in speech, an in particular provides a set of concepts for thinking and talking about it. (p. 120)

260 – 261) More precisely, if they do want to interrupt they must do it in a way which gives the teacher control, <u>by raising their hand</u> and <u>awaiting permission.</u> (p. 120)

262) Similarly, they learn that a discussion has a purpose and an outcome but a chat doesn't; so discussions should not be interrupted or diverted, but chats can be all the better <u>for being both interrupted and diverted.</u> (p. 120)

263) For instance, in the Koasati language spoken in Louisiana there are quite regular morphological differences between the verb forms used by males and females, <u>with males typically adding -*s* to the end of the female forms</u> (for example, males say *lakáws* where females say *lakáw*, both meaning "he is lifting it"). (p. 121)

264) For example, <u>in talking either to or about a person with a squint</u> a suffix is added to verbs, and all sibilant sounds ([s] and [c]) are changed into voiceless laterals (like the Welsh sound written "ll"). (p. 122)

265) One of the advantages of signalling power and solidarity by our choice of names is that we can avoid such problems simply <u>by not using *any* name to address the person concerned.</u> (p. 123)

266) <u>By using a plural pronoun for "you",</u> the speaker protects the other person's power-face in two ways. (124)

267) For example the language Mijikenda (which is spoken in north-east Kenya) allows speakers the same two options for "you" addressed to one person as French does, one of which is the plural "you", the word which can also be used <u>for addressing more than one person</u> (McGivney 1993). (124)

268) This is certainly true of very many languages, and it may be that we can explain why Mijikenda is different <u>by referring to the "purity" of its criteria for pronoun choice.</u> (p.125)

269 – 270) In every society at least two kinds of names are available for use <u>in identifying people as unique individuals</u> or <u>in addressing them:</u> given names (for example, *John*) and role-based names (for example, *Mum*). (p. 126)

271) What follows is a brief survey of some of the better known types of linguistic signalling of power – solidarity (as we shall call the contrast for convenience, <u>without wishig to imply that both power and solidarity are involved necessarily and equally in all cases.</u> (p. 127)

272) One of the easiest ways of showing that power-solidarity relationships are central to the grammar is <u>by pointing out that even in English they are not restricted to vocatives.</u> (p. 127)

273) What is controversial is the extent to which a hierarchical structure can be identified above the sentence, and we shall return to this question in the next section, <u>after first looking at greetings and farewells, which offer the clearest examples of structure in speech</u>. (p. 132)

274) Another is that they frequently reflect the time of day or a public festival (*Good morning, Good afternoon, Happy Easter, Happy New Year*); this presumably adds to solidarity-face <u>by emphasising the similar experiences currently being shared.</u> (p. 133)

275) <u>Instead of using speech, in the form of greetings</u>, to assure each other that relations are just as they were before the separation, they wait until they are sure that relations really *are* the same before they speak to each other at all, at least in situations where there is reason to think that relations may have changed, as when children return after a year in boarding-school. (p. 133)

276) One kind of structure is based on the fact that people take *turns* <u>at speaking in most kinds of interaction</u>, so that speech is divided up into separate stretches spoken by different speakers. (p. 134)

277) <u>In studying this aspect of discourse</u> one can ask questions such as whether "turns" are taken strictly in sequence or overlap one another, how speakers show that they are about to finish speaking, how listeners show that they would like to start, who decides who should speak next, who does most of the talking, who speaks to whom and so on. (p. 134)

278) <u>In imposing this structure on the book</u>, I have tried to make it reflect the topics discussed, so that the present sentence is an illustration of one kind of structure, dealt with in the present paragraph, which is part of the subsection on types of discourse structure other than entries and exits, which is one part of the chapter dealing with speech as social interaction. (p. 134)

279) The conclusion to which we seem to be lead on the topic-based structure of discourse is that some kinds of discourse may have a hierarchical structure, especially if entirely under the control of one person who has the opportunity to plan the entire discourse <u>before starting (for example, a book or a lecture)</u>, but that most discourse probably has a much looser kind of structure. (p. 135)

280 – 281) Sixteen Arabs and sixteen Americans were studied in this way, <u>with Arabs talking to Arabs</u> and <u>Americans (talking) to Americans.</u> (p. 137)

282) We get (and give) solidarity-face by physical contact (touching, stroking, grooming), and intimacies of the close family and between lovers are the ultimate <u>in showing acceptance</u>, so the closer we are the more we can bolster each other's solidarity-face. (p. 137)

283) For example, after fights, chimpanzees may attempt reconciliations which start with the gesture of an outstretched hand and are commonly completed <u>with</u> a kiss and <u>grooming</u>, reminiscent of the human tendency to "kiss and make up": in a different context, support is expressed to a nervous individual during conflicts through an embrace rather than a kiss, again suggesting basic patterns shared with humans. (p. 138)

284 - 285) Some aspects of the former are relatively conventionalised, such as hand-shaking, which in some cultures is replaced by nose-rubbing or supplemented <u>by kissing</u> or <u>embracing</u>, according to the relation between the participants. (p. 138)

286) Finally, we come to the use of non-verbal behaviour <u>for marking content</u>. (p. 139)

287) Somewhat surprisingly, pointing is something that chimpanzees do *not* do naturally, though they can be tought to do it and they naturally point with their eyes – i.e. <u>by looking at the thing they want to draw attention to</u>. (p. 140)

288 - 289) Another difference in behaviour is that females tend to put more effort than men into keeping a conversation going <u>by giving supportive feedback (for example, *yeah, mhm*)</u> and <u>asking questions</u> (McCormick 1994b: 1357). (p. 142)

Gerundive nominal clauses
Gerundive nominal clauses used with verb predicates
A) IN POST-PREDICATE POSITION
290 – 291) For instance, in asking for a ticket on a bus, it is easier and safer to use what you know about <u>buying bus-tickets</u>, or <u>buying transport tickets in general</u>, than to use a more general rule for requesting anything from anybody (for example by saying *Excuse me, would you mind selling me a ticket to. . .*). (p. 113)

292) Much of what we usually call "politeness" or "etiquette" in social gatherings consists of <u>disregarding aspects of behaviour that might otherwise lead to a "loss of face"</u>. (p. 114)

293) It is interesting to see how much of language is geared to <u>looking after the two kinds of politenesss</u>, and we shall consider some of these ways in more detail below. (p. 114)

294) For showing power-politeness there are different "address" words (for example, *sir, please*), and all the euphemisms that protect the other person from <u>being offended</u> (for example, *spend a penny, pass away*). (p. 114)

295) Returning to our original question about motivation, it may now be possible to explain why we put so much effort into the skilled work involved in <u>speaking</u>. (p. 115)

296 – 297) Each society recognises its own norms for saving face, so our face-work consists in <u>recognising these norms</u> and <u>applying them effectively</u>. (p.116)

298) He observed that, by the time a man was forty, he practically stopped <u>speaking</u> altogether. (p.116)

299 – 301) An . . . ethnographer describes <u>staying with in-laws in Denmark</u> and <u>being joined by an American friend who, despite warnings, insisted on talking with American intensity until "at 9 o' clock my in-laws retired to bed; they just couldn't stand it any more"</u>. (p. 117)

302) When he feels ready, he will simply begin <u>speaking</u>. (p. 117)

303) In familiar societies this is an individual matter (and we probably all know individuals who enjoy <u>making others work hard for their information</u>, (but in some societies the process is institutionalised). (p. 118)

304) For example, gossips on Nukulaelae Atoll frequently withhold important pieces of information, such as the identity of a person, from their gossip narratives, thus manipulating their audiences into <u>asking for the missing information</u>, sometimes over the spaces of several turns, as information is revealed in small doses, requiring further questioning (Besnier 1994; see also Besnier 1989). (p. 118)

305) In contrast with the English system, however, it is much harder to avoid the problems of choice in French, since to do so it would be necessary to avoid <u>making any reference at all to the person addressed</u>. (p. 123)

306) In studying this aspect of discourse one can ask questions such as whether "turns" are taken strictly in sequence or overlap one another, how speakers show that they are about to finish <u>speaking</u>, how listeners show that they would like to start, who decides who should speak next, who does most of the talking, who speaks to whom and so on. (p. 134)

307) A general feature for topical organization is movement from topic to topic, not by a topic-close followed by a topic-beginning, but by a stepwise move, which involves <u>linking up whatever is being introduced to what has just been talked about</u>, such that, as far as anybody knows, a new topic has not been started, though we're far from wherever we began. (Quoted from Sacks' lecture notes in Schiffrin 1994: 261) (p. 136)

308 - 309) If the current topic is a holiday, we know there are various "subtopics" which are generally considered relevant, such as accommodation, weather, activities and travel, each of which can be further subdivided – for example, "activities" might include sight-seeing, <u>swimming</u>, other sports, night-life and <u>shopping</u>. (p. 136)

310 – 311) Research has shown that we normally look at the other person's eyes for much longer periods when we are listening than when speaking, so when we are about to stop <u>speaking</u> (and start <u>listening</u>) we look up at the other person's eyes, in anticipation of our next role as listener. (p. 139)

312) Conversely, the other person looks down when about to start <u>speaking</u>, in anticipation of the change of role (Argyle and Dean 1965, Kendon 1967). (p. 139)

313 – 314) Less formalised signals include <u>moving forward in one's chair</u> or <u>clearing one's throat</u>. (p. 139)

315) Another difference in behaviour is that females tend to put more effort than men into <u>keeping a conversation going</u> by giving supportive feedback (for example, *yeah, mhm*) and asking questions (McCormick 1994b: 1357). (p. 142)

316) For example, one of the earliest studies (which has only just been published as Hirschman 1994) compared <u>two men and two women talking to each other in all possible pairings</u>, and found that women used *mhm* (two syllables, first low in pitch then high) thirty-three times as often as the men. (p. 142)

317 - 318) Females give priority to solidarity and concentrate on <u>building</u> and <u>maintaining the social bonds that hold communities together</u>; for males, priority goes to power, the struggle for independence. (p. 142)

B) AS SUBJECT

319) <u>Talking</u> takes energy, both physical and mental, and can leave us <u>feeling</u> tired. (p. 113)

320) When someone enters a casual group, for example, <u>no opening</u> is necessarily made for him; nor is there any pause or other formal signal that he is being included. (p. 117)

321) One is that they are afraid that <u>identifying an individual</u> may bring the person to the attention of evil forces, or get them into trouble in other ways. (p. 118)

322) India shows a wide variety of practices: for example, some communities in Bombay call mothers exclusively by a name based on their motherhood (for example, "X's mother", where X is her first child), and in Marashtra husbands give their wives a new name on marriage – an interesting example which presumably shows how <u>naming a person</u> can be used to assert dominance over them. (p. 126)

323) <u>Calling X by a given name</u> can show solidarity, affection and so on; but it can also show dominance; and conversely the use of a role-based name can show respect but it can also deny X's individuality, which is a denial of both solidarity and power. (p. 129)

324) In short, <u>sticking to one topic</u> makes speech much easier both for speaker and foe addressee. (p. 135)

Gerundive nominal clauses used with adjective predicates

325) As we now see, both skill and motivation to work are due to the society in which a person lives, and (to the extent that they influence speech) we may conclude that de Saussure was wrong <u>in thinking of speech simply as an individual activity, owing nothing to society.</u> (p.116)

326) This discussion has shown that de Saussure was wrong <u>in seeing speech as the product of the individual's will, unconstrained by society.</u> (p.119)

327) Japanese is an important language <u>for studying the linguistic classification of the speaker.</u> (p. 121)

328) Apart from entries and exits, non-verbal cues are important <u>for structuring discourse</u> as far as turn-taking is concerned. (p. 139)

329) One consequence of this difference which presumably has major implications for men's and women's carreer prospects is that male style prepares them better for public speaking – asking questions after lectures, talking in commitees, presenting verbal reports and so on – while the female style is more "private", suitable <u>for establishing rapport</u> (hence Tannen's terms "report-speaking" and "rapport speaking" (1990: 70)). (p. 142)

Gerundive nominal clauses used with noun predicates (pronouns)
A) IN POST-PREDICATE POSITION
330 - 331) The first point to establish is that speech is not an automatic reflex like <u>sneezing</u> or a spontaneous expression of emotion like <u>laughing</u>; it is skilled work. (p.112)

332) For instance, in asking for a ticket on a bus, it is easier and safer to use what you know about buying bus-tickets, or buying transport tickets in general, than to use a more general rule for requesting anything from anybody (for example by saying *Excuse me, would you mind selling me a ticket to. . .*). (p. 113)

333) This is the basis for most formal politeness, such as standing back to let somebody else pass. (p. 114)

334) For solidarity-politeness we have a wide range of ways of showing intimacy and affection – words used for addressing the other person (for example, *mate, love, darling*, not to mention greetings like *Hi*!) and others used to show solidarity-politeness towards the person referred to (for example, *William* or even *Bill* as opposed to *Mr Brown*). (p. 114)

335) One reason why we avoid eye-contact in unfocussed interaction is probably that it is so important as a way of negotiating our way through focussed interactions, and it is interesting to learn that some chimpanzees (bonobos) also use eye-contact socially (to initiate joint action). (p. 115)

336) Each society recognises its own norms for saving face, so our face-work consists in recognising these norms and applying them effectively. (p.116)

337) Skill in speaking depends on a variety of factors, including knowledge of the relevant rules governing speech. (p.116)

338 – 339) For example, a raised eyebrow may mean various things according to the culture and social circumstances: greeting, invitation, warning, scepticism, disdain, doubt, interest, intrigue or disgust. (p.119)

340 - 341) For instance, even in Madagascar the norm of informativeness seems to apply *unless* it conflicts with other principles (of safeguarding individuals and keeping news to oneself), and this norm may in fact be recognised by all societies in spite of these apparent counter examples. (p.119)

342 – 343) Secondly, society provides the *motivation* for adhering to these norms, and for putting effort into speech (as in social interaction in general). (p. 120)

344) The theory of face-work explains this motivation, and could explain why it is that speech can run as smoothly as it usually does, given the possibilities for misunderstanding and other difficulties that exist. (p. 120)

345 – 346) In addition to controlling it in these two ways, society takes a great interest in speech, an in particular provides a set of concepts for thinking and talking about it. (p. 120)

347) As we shall see shortly, the omission of the word for "is/are" is characteristic of "baby-talk", so it is interesting to speculate about whether this originated as an example of women being treated like children. (p. 121)

348) One of the advantages of signalling power and solidarity by our choice of names is that we can avoid such problems simply by not using *any* name to address the person concerned. (p. 123)

349) However, other languages have other devices for signalling power and solidarity which in this respect are less accommodating (as we shall see in 4.2.3), such as the use in French of the pronouns *tu* and *vous*, both meaning "you" and both singular, (although *vous* is also plural). (p. 123)

350 – 351) The norms for choosing between tu and vous in the singular are precisely the same as those for choosing between first name only and title plus family name in English, tu being used prototypically to a close subordinate, and vous to a distant superior, with other situations resolved in realtion to these. (p. 123)

352) The studies by Brown and Gilman show that there have been considerable changes through time in the norms for using the French pronouns, which derived from Latin pronouns where the distinction was one of number only (*tu* "you, singular", *vos* "you, plural"). (124)

353) This kind of indirectness is a common strategy for giving the other person an out", an alternative interpretation which protects them against any threats to their face which may be in the message. (124)

354) The second effect of using a plural pronoun is to pretend that the person addressed is the representative of a larger group ("you and your group"¨), which obviously puts them in a position of a greater power. (124)

355) The first is that every language might be expected to have some way of signalling differences in either power or solidarity or both, which could be explained by reference to the extreme importance of both power and solidarity in face-to-face relations between individuals, and the need for each individual to make it clear how they see those relations. (124)

356) At present we can only marvel at the rich variety of data, but this is no substitute for understanding why these apparently strange practices exist. (p. 127)

357) One of the easiest ways of showing that power-solidarity relationships are central to the grammar is by pointing out that even in English they are not restricted to vocatives. (p. 127)

358) For example the neutral way of saying "She is English" is *ingelesa da*, but the verb *da* would become *duk* when speaking to a male intimate, and *dun* to a female. (p. 131)

359) There is no difficulty in establishing that speech is structured, since grammars and dictionaries are full of recurrent patterns of words, constructions and so on. (p. 132)

360 - 363) The reason for <u>sticking to a given topic</u>, or <u>only drifting gradually away from it</u>, is partly that this increases the chances of <u>other participants being interested in what is said</u>, and partly because it increases their chances of <u>understanding the discourse</u>, because for any given topic we all have a large amount of information about how the world works which we can exploit both as speakers and hearers. (p. 135)

364) It should be clear from the discussion that there is no chance of <u>reducing all these structures to a single type</u>, and that the structures of discourse are complex mixtures of norms specific to speech and general knowledge of the world. (p. 136)

365) Non-verbal behaviour is involved in the two aspects of speech considered in this chapter – <u>marking relations between speaker and addressee</u> (4.2) and the structure of discourse (4.3); and it is also involved in the communication of "content" , that is, propositions and referents. (p. 137)

366 – 368) We get (and give) solidarity-face by physical contact (<u>touching</u>, <u>stroking</u>, <u>grooming</u>), and intimacies of the close family and between lovers are the ultimate in showing acceptance, so the closer we are the more we can bolster each other's solidarity-face. (p. 137)

369 – 372) We give out social signals with our mouths (<u>smiling</u>, <u>showing disgust</u>), our eyes (eye-contact) and our eye-brows (<u>frowning</u>, <u>showing surprise</u>). (p. 138)

373) In other cultures the rules for <u>shaking hands</u> are clearly different, so once again we find scope for relativity in the norms governing behaviour. (p. 139)

374) In some institutions (notably schools, conferences and parliaments), there are other, formalised, signals, such as <u>a would-be-speaker raising their hand</u>. (p. 139)

375 – 376) Equally, there are ways of <u>countering such moves</u> if the speaker does not want to yield the floor – such as <u>deliberately looking away so that the would-be-speaker cannot catch one's eye</u>. (p. 139)

377) People may count on their fingers, and in some societies this is a recognised way of <u>displaying numbers</u>. (p. 140)

378) Indeed, in East Africa there are differences between tribes in the rules for <u>doing this</u>, depending, for instance, on whether "one" is indicated by the thumb or the little finger (Omondi 1976). (p. 140)

379 – 381) Every culture presumably has its own repertoire of gestures for <u>commenting on people and objects</u>, such as the various gestures in British culture for <u>suggesting that someone else is crazy</u>, or for <u>saying that food is just right</u>. (p. 140)

382) Finally, one should not forget the gesture of <u>pointing</u> (done with different fingers in different societies), which is often associated with the use of demonstratives like *this* or *that* and *here* or *there*. (p. 140)

383) The same sex difference seems to apply to small boys and girls when talking in single-sex groups (Tannen 1990: 43), which reminds us that children have plenty of opportunities for <u>developing these different patterns</u> when playing in single-sex groups (1.3.2), regardless of whether the differences are dictated by our genes. (p. 141)

384 – 386) One consequence of this difference which presumably has major implications for men's and women's carreer prospects is that male style prepares them better for public speaking – <u>asking questions after lectures</u>, <u>talking in commitees</u>, <u>presenting verbal reports</u> and so on – while the female style is more "private", suitable for establishing rapport (hence Tannen's terms "report-speaking" and "rapport speaking" (1990: 70)). (p. 142)

387) This feedback can involve interruptions, which are just as frequent in single-sex groups among women as among men, but the reasons for <u>interrupting</u> seem to be fundamentally different for the two sexes, because when males and females are together males interrupt women far more often than the other way round (Zimmerman and West 1975, quoted in McCormick 1994: 1357). (p. 142)

388) An easy way of <u>measuring these differences</u> is to count the pronouns used. (p. 142)

389) These differences put females at a disadvantage in the world of work (at least as it has been developed by males), and males at a disadvantage in the family and other important places where relationships are at a premium; and they are a potential source of <u>misunderstanding</u> wherever males and females have to communicate. (p. 143)

B) AS SUBJECT

390) <u>Wrapping up an encounter neatly by an appropriate farewell</u> is not just an investment for future meetings with the same person. (p. 132)

391) On the other hand, <u>being physically close to another person</u> is also an intrusion on their personal territory and a threat to their power-face. (p. 137)

392) Somewhat surprisingly, <u>pointing</u> is something that chimpanzees do *not* do naturally, though they can be tought to do it and they naturally point with their eyes – i.e. by looking at the thing they want to draw attention to. (p. 140)

Participial clauses (+ participle as premodifier)
Participial relative clauses (restrictive)
393) Firstly, success in speech varies considerably according to the type of speech act <u>required</u>. (p.112)
394 – 395) This is not the place to try to specify the particular kinds of skill <u>needed for successful speech</u>, since they presumably include all the general skills <u>needed for social interaction</u> plus all the specifically linguistic skills concerned with the use of linguistic items. (p.112)
396) We can now answer this question by pointing, first, to the evidence <u>given above </u>that speech is socially classified in terms of types of speech-act, and second, to the fact that these speech-act types are learned as part of our socialisation. (p. 113)
397) The same is true, of course, of all social interaction, which raises an important question: why are we willing to do it? and why are we willing to accept the restrictions <u>placed on us by our society' s social rules?</u> (p. 113)
398) The theory was developed by Erving Goffman, an American sociologist (1955, 1967, 1969), who called the work <u>needed to maintain face</u> "face-work". (p. 113)
399 – 401) For solidarity-politeness we have a wide range of ways of showing intimacy and affection – words <u>used for addressing the other person</u> (for example, *mate, love, darling*, not to mention greetings like *Hi*!) and others <u>used to show solidarity-politeness towards the person referred to </u>(for example, *William* or even *Bill* as opposed to *Mr Brown*). (p. 114)
402) This is where solidarity-face becomes so important because we care about what our friends and family think of us; and power-face may be threatened in many ways (not least by parents <u>imposing restrictions in children</u>). (p. 115)
403) It is even more interesting to learn that a member of this species is the only primate to have learned spontaneously to use a communication-system <u>invented by humans</u> (Williams et al. 1994). (p. 115)
404) It seems likely, therefore, that some of the skills <u>needed for face-work</u> are innate, as is our general need to maintain face. (p. 115)
405) The norms <u>governing speech</u> (p.116)
406) Skill in speaking depends on a variety of factors, including knowledge of the relevant rules <u>governing speech</u>. (p.116)
407) The rules <u>chosen</u> vary from one society to another, which makes it easier to see that there *are* rules, but this should not be taken to imply that all rules are similarly variable. (p.116)
408) First there are norms <u>governing the sheer quantity of speech that people produce</u>, <u>varying from very little to very much.</u> (p.116)
409) Peter Gardener (1966) did some fieldwork . . . in southern India, among a tribal people <u>called the Puliya</u>, describing their socialization patterns. (p.116)
410 – 411) There may be problems when people from societies with different norms meet, as shown by the following anecdote <u>quoted by Coulthard</u> (1977:49), where other instances of different norms <u>relating to quantity of speech</u> may also be found. (p. 117)
412) The start of a new voice is not in itself a signal for the voice <u>speaking</u> either to stop or to institute a process which will decide who is to have the floor. (p. 117)
413) Or again, if A asks B "Where is your mother?" and B responds "She is either in the house or at the market", B's utterance is not usually taken to imply that B is unable to provide more specific information <u>needed by the hearer</u>. (p. 118)
414) For instance, if there is a pot of rice <u>cooking over a fire</u>, people will refer to it as "the rice", since anyone can see that there is rice there. (p.119)
415) It has even been claimed that people <u>brought up in the southern states</u> smile differently from other Americans! (p.119)
416) The norms <u>reviewed below</u> are the best known and the most widely studied of those that govern speech. (p. 120)
417) One of the oddest cases <u>described in the ethnographic literature</u> is that of the Abipon of Argentina, who according to Hymes (1972) add -*in* to the end of *every* word if either the speaker or addresse is a member of the warrior class. (p. 120)
418 – 419) For instance, in the Koasati language <u>spoken in Louisiana</u> there are quite regular morphological differences between the verb forms <u>used by males and females</u>, with males typically adding -*s* to the end of the female forms (for example, males say *lakáws* where females say *lakáw*, both meaning "he is lifting it"). (p. 121)

420) In modern Island Carib, males and females differ in various aspects of their common language, including the genders <u>given to abstract nouns</u>, which are treated as grammatically masculine by female speakers and feminine by male ones (Taylor 1951: 103). (p. 121)

421) Nootka apparently provides special word-forms for use when speaking either to or about people with various kinds of deformity or abnormality, namely "children, unusually fat or heavy people, unusually short adults, those <u>suffering from some defect of the eye</u>, hunchbacks, those that are lame, left-handed persons and circumcised males". (p. 122)

422) For example, in talking either to or about a person with a squint a suffix is added to verbs, and all sibilant sounds ([s] and [c]) are changed into voiceless laterals (like the Welsh sound <u>written "ll"</u>). (p. 122)

423) Speech may also reflect the social relations between the speaker and the addressee, most particularly the POWER and SOLIDARITY <u>manifested in that relationship</u>. (p. 122)

424) Let us consider just two combinations: the first name on its own (for example, *John*), and the title <u>followed by the family name</u> (for example, *Mr Brown*). (p. 122)

425) In this diagram the length of the line is meant to indicate the social distance between the speaker and the person <u>addressed</u>, while the vertical direction of the line indicates power relationships. (p. 122 – 123)

426) In contrast with the English system, however, it is much harder to avoid the problems of choice in French, since to do so it would be necessary to avoid making any reference at all to the person <u>addressed</u>. (p. 123)

427) The intended referent could, in principle, be some group of people rather than the individual <u>actually targeted.</u> (124)

428) The second effect of using a plural pronoun is to pretend that the person <u>addressed</u> is the representative of a larger group ("you and your group""), which obviously puts them in a position of a greater power. (124)

429) For example the language Mijikenda (which is spoken in north-east Kenya) allows speakers the same two options for "you" <u>addressed to one person</u> as French does, one of which is the plural "you", the word which can also be used for addressing more than one person (McGivney 1993). (124)

430) In Chinese all junior relatives are normally named with a role-based name ("son", "niece", etc.), a practice which is also common in Polish; in Japanese adults are rarely called by their given name, and names <u>based on family roles </u>are used extensively even outside the family.(p. 126)

431) India shows a wide variety of practices: for example, some communities in Bombay call mothers exclusively by a name <u>based on their motherhood</u> (for example, "X's mother", where X is her first child), and in Marashtra husbands give their wives a new name on marriage – an interesting example which presumably shows how naming a person can be used to assert dominance over them. (p. 126)

432) In English the main markers of power an solidarity might fairly be described as peripheral to the system of English as a whole, in the sense that proper names <u>used as vocatives (i.e. to address someone)</u> could be handled in a separate section of the grammar with little or no consequence for any other parts of it. (p. 127)

433) In non vocative uses, on the other hand, English allows less choice and power-solidarity relationships are generally irrelevant except for the choice of names <u>mentioned above</u>. (p. 128)

434) A particularly important case is where a pronoun <u>meaning "you"</u> is used to refer to X – i.e. where X is not only R but also A. (p. 129)

435) In modern English *you* is neitral for power-solidarity, but this is a recent development <u>resulting from the loss of *thou* (which survives in some English dialects)</u>. (p. 129)

436) A simple, and familiar, example is the form of the imperative verb in Italian, which shows not only that the sentence is imperative (a command, invitation or whatever) but also whether the person <u>addressed</u> is an intimate or not; *Parlami!*, "Speak to me!" is used to an intimate, whereas when talking to a superior one would say *Mi Parli!* (p. 130)

437) This interpretation is not possible in Japanese, however, where the endings <u>attached to verbs</u> show the solidarity relationship of S to A regardless of what is being talked about.(p. 130)

438) Once again, then, we find an important similarity between "social information" and other kinds of information <u>shown by verbs</u>. (p. 130)

439) According to Shibatani these "power" forms show respect to someone <u>referred to in the sentence</u>, but differ according to whether this person is referred to by the subject or by the object. (p. 130)

440) In either case an extra auxiliary verb is used which allows the ordinary verb to be combined with the so-called "honorific" prefix *o-* <u>mentioned above</u>. (p. 130)

441) This system can combine with the polite form <u>discussed in the previous paragraph</u>, for example, *Sensei ga o-warai ninari-masi-ta*, "The teacher laughed" (polite and subject honorific). (p. 131)

442) Another is Basque, where main verbs (but not subordinate verbs) show the speaker's social relationships to the person <u>addressed</u> (Trask 1995). (p. 131)

443) For instance, Geertz gives the alternative forms for the Javanese sentence <u>meaning "Are you going to eat rice and cassava now?"</u> (which apparently may be translated word-for-word from English), and shows that there are two or three different words in Javanese for each word in the English except *to* and *cassava*. (p. 131)

444 – 445) These relatively short patterns, contained within the sentence, are obviously only a part of the total structure of speech since all sorts of longer patterns can be identified, such as the one <u>consisting of a question followed by its answer</u>, and even longer ones such as some piece of interaction between two people, with a clearly recognisable greeting at the beginning and a farewell at the end. (p. 132)

446) Another is that they frequently reflect the time of day or a public festival (*Good morning, Good afternoon, Happy Easter, Happy New Year*); this presumably adds to solidarity-face by emphasising the similar experiences <u>currently being shared</u>. (p. 133)

447) Some of these formulae are made up out of ordinary words <u>used in fairly ordinary ways</u> (for example, *Happy Easter*) but others are opaque without etymological help (for example, *Good-bye*, from *God be with you*; *"Bye!* is even more opaque, of course). (p. 133)

448 – 449) Furthermore, the sheer length of a greeting is generally proportional to the lenghth of time since the last meeting (ie. a greeting to a friend <u>last seen ten years ago</u> will be longer than one to a friend <u>seen yesterday</u>) and to the importance of the relationship (i.e. a friend will receive a longer greeting than a mere acquantaince). (p. 133)

450) It is clear that there is no lack of different kinds of structure <u>linking sentences together in coherent wholes</u>, but there is no agreed single theoretical framework for the analysis of these coherent patterns. (p. 134)

451) One kind of structure is based on the fact that people take *turns* at speaking in most kinds of interaction, so that speech is divided up into separate stretches <u>spoken by different speakers</u>. (p. 134)

452) The most obvious adjacency pair is a sequence of question <u>followed by answer</u>, but there are many others, such as greeting + greeting, complaint + apology, summons + answer, invitation + acceptance and so on. (p. 134)

453) A second type of structure in discourse is based on *topic*, which clearly bears little relation to the type <u>based on turn-taking</u>, since speakers frequently change topics in the middle of their turn. (p. 134)

454) For instance, this book has a very clear hierarchical structure <u>based on topic</u>, with chapters as the largest units, sections as the next largest, then subsections (for example, the present one, which is 4.3.2), then paragraphs and finally sentences, all neatly delimited by one type of typographic convention or another. (p. 134)

455 – 457) In imposing this structure on the book, I have tried to make it reflect the topics <u>discussed,</u> so that the present sentence is an illustration of one kind of structure, dealt with in the present paragraph, which is part of the subsection on types of discourse structure other than entries and exits, which is one part of the section <u>dealing with discourse structure</u>, and that in turn is part of the chapter <u>dealing with speech as social interaction.</u> (p. 134)

458) However convincing we may find these proposals, it seems clear that there is no such hierarchical structure in certain kinds of interaction, but rather the topic "drifts" gradually from one subject to another – perhaps starting off with a film about sheep-farming in Wales, leading to a sheep-dog trial somebody saw on holiday, and from there into further details of the holiday and a comparison with a holiday <u>spent in Spain</u> and so on. (p. 134 - 135)

459) A general feature for topical organization is movement from topic to topic, not by a topic-close <u>followed by a topic-beginning</u>, but by a stepwise move, which involves linking up whatever is being introduced to what has just been talked about, such that, as far as anybody knows, a new topic has not been started, though we're far from wherever we began. (Quoted from Sacks' lecture notes in Schiffrin 1994: 261) (p. 136)

460) Alternatively, other subtopics might cut across these, spoiling the neat hierarchical organisation <u>implied so far</u> – for instance "food" might cut across "accommodation" and "activities", since you can eat either in your hotel or in a restaurant. (p. 136)

461 – 462) We could either take the architect's viewpoint, and describe it statically: *There are four rooms, forming a square, . . .* , or we could take the point of view of somebody <u>visiting the flat</u> and <u>being shown around it</u>: *First you come into a hall, then you go down a corridor on your left, . . .* (p. 136)

463) Other kinds of structure can be identified in discourse in addition to those <u>based on turn-taking, topic and encyclopedic knowledge</u>. (p. 136)

464) Non-verbal behaviour is involved in the two aspects of speech <u>considered in this chapter</u> – marking relations between speaker and addressee (4.2) and the structure of discourse (4.3); and it is also involved in the communication of "content" , that is, propositions and referents. (p. 137)

465) For example, after fights, chimpanzees may attempt reconciliations which start with the gesture of an outstretched hand and are commonly completed with a kiss and grooming, reminiscent of the human tendency to "kiss and make up": in a different context, support is expressed to a nervous individual during conflicts through an embrace rather than a kiss, again suggesting basic patterns <u>shared with humans</u>. (p. 138)

466 – 467) One of the main kinds of structure <u>considered above</u> (4.3.1) was the pattern of behaviour <u>associated with "entries" and "exits"</u>, where non-verbal behaviour is just as clearly patterned as verbal behaviour. (p. 138)

468) Thus it is used to patch up quarrels between friends, or when one is introduced to a stranger, or to anyone <u>not seen for a long time</u>. (p. 139)

469) In other cultures the rules for shaking hands are clearly different, so once again we find scope for relativity in the norms <u>governing behaviour</u>. (p. 139)

470) There are cultural differences in the particular head-movements <u>used for each meaning</u> – for "yes", some culteres (for example, Western Europe and the United States) use a top-to-bottom movement, others (for example, Easter Mediterranean) use a bottom-to-top movement and still others (for example, the Indian subcontinent) use a diagonal movement. (p. 139)

471) There are also differences between the same tribes in the gestures <u>used to show the height of a child</u>, according to whether or not a hand is put, palm downwards, at the height of the top of the child's head. (p. 140)

472) It would not be inappropriate to compare you when speaking with the conductor of a large orchestra <u>consisting of the various speech-organs and other visible organs of your body over which you have control</u>. (p. 140)

473) It is no wonder that people sometimes find it easier to slip into fixed routines, nearer to music <u>played from a score</u> than to extemporised music like jazz. (p. 140)

474) It is interesting to remember the pattern <u>reported from Antigua</u> in 4.1.4, which is yet another possibility – the group stays united but everyone talks at the same time. (p. 141)

475) This example reminds us to treat generalisations <u>based on middle-class America</u> with caution as the basis for universal conclusions. (p. 141)

476) This is not just a matter of general topics such as football versus families, but of the people <u>discussed</u>. (p. 142)

477) An easy way of measuring these differences is to count the pronouns <u>used</u>. (p. 142)

478) In the early study <u>mentioned above</u> (Hirschman 1994), the women used *we* and *you* far more than the men, who tended to prefer *I*. (p. 142)

479 – 480) In other words, the women tended to include the person <u>addressed </u>among the people <u>discussed</u>, whereas the men tended to focus on themselves. (p. 142)

Participle as premodifier

481) Nootka apparently provides special word-forms for use when speaking either to or about people with various kinds of deformity or abnormality, namely "children, unusually fat or heavy people, unusually short adults, those suffering from some defect of the eye, hunchbacks, those that are lame, left-handed persons and <u>circumcised</u> males". (p. 122)

482) This widely <u>observed</u> fact can be explained in two ways (both of which may be true). (p.125)

483) In some cases it is important to contrast these two cases so we can call the first "vocative" and the second "referring"; and for the present purposes the important point is that <u>referring</u> names are part of the ordinary sentence structure, covered by the ordinary grammar. (p. 127)

484) Even if vocatives are too peripheral for inclusion, ordinary <u>referring</u> names are not, so a grammar of English must allow both *John* and *Mr Brown* and should explain the difference between them. (p. 127)

485) Having distinguished vocative and <u>referring</u> names, however, we must also recognise their similarities. (p. 127)

486) The choice is always controlled by general principles rather than left to the speaker's whim, and one of the <u>controlling</u> questions is the nature of the power-solidarity relationships between S and X. (p. 128)

487) This is relevant to any theory of language structure because the verb is also the <u>collecting</u> point for so much other information in the sentence (for example, tense, negation, questions and commands are typically shown in the verb, and some are restricted to the main verb), and in all modern theories of grammar the

main verb is the structural "root" (or "head") of the whole sentence, with the subject, object, adjuncts and so on (including subordinate clauses) all dependent on it. (p. 129)

488) Subordinate verbs (in relative clauses, temporal clauses, <u>reported clauses</u> and so on) are always left in their neutral form.(p. 130)

489) At one end of the scale are <u>courting</u> couples, and at the other end impersonal and formal occasions where speakers may be long distances from their addressees, as in theatres, or unable to see them at all, as on radio or television. (p. 137)

490) Eye-movement is not the only signal of an <u>approaching</u> change of speaker. (p. 139)

491) In some institutions (notably schools, conferences and parliaments), there are other, <u>formalised,</u> signals, such as a would-be-speaker raising their hand. (p. 139)

492) People may count on their fingers, and in some societies this is a <u>recognised</u> way of displaying numbers. (p. 140)

493) It is no wonder that people sometimes find it easier to slip into fixed routines, nearer to music played from a score than to <u>extemporised</u> music like jazz. (p. 140)

494) This generalised difference explains a number of differences in behaviour, though at present we have little more than our own experience (and a host of <u>reported</u> examples) as evidence for these differences. (p. 141)

495) One such difference involves the <u>preferred</u> relations between speaker and addressee. (p.141)

Participial nominal clauses

496) We may perhaps think of these skills <u>arranged hierarchically</u>, with the most specific ones at the bottom and the most general at the top, and assume that in dealing with a particular situation the speaker will look for a specific skill in preference to a more general one, since the latter will always involve more cognitive effort and may be less successful. (p. 113)

497) For example, we learn how to order a meal in a restaurant by watching other people <u>doing it</u>, in much the same that we learn vocabulary and grammatical constructions. (p. 113)

498) Talking takes energy, both physical and mental, and can leave us <u>feeling tired</u>. (p. 113)

499) A successful performance requires the conductor to keep all these various organs <u>moving in exact coordination with one another</u>, whatever the speed of the performance and whatever the number of separate organs involved at one moment. (p. 140)

500) Another difference in behaviour is that females tend to put more effort than men into keeping a conversation <u>going</u> by giving supportive feedback (for example, *yeah, mhm*) and asking questions (McCormick 1994b: 1357). (p. 142)

Participial adverbial clauses
(INTRODUCED BY A CONJUNCTION/PREPOSITION)

501) Episodes in an individual's past, or personal characteristics that might produce embarrassment <u>if mentioned</u>, are not commented or referred to . . . (p. 114)

502) There may be problems when people from societies with different norms meet, <u>as shown by the following anecdote quoted by Coulthard (1977:49), where other instances of different norms relating to quantity of speech may also be found</u>. (p. 117)

503) This may be the pattern in some societies, <u>as suggested by some theories of pragmatics (for example, Grice 1975, Sperber and Wilson 1986)</u>, but we cannot take it for granted. (p. 118)

504) <u>As noted earlier</u>, we may share some of these features with our primate relatives, in which case the explanation of the similarities is presumably genetic; so non-verbal communication offers the same range of learned and innate patterns as we seem to find in language. (p.119)

505) Nootka apparently provides special word-forms for use <u>when speaking either to or about people with various kinds of deformity or abnormality, namely "children, unusually fat or heavy people, unusually short adults, those suffering from some defect of the eye, hunchbacks, those that are lame, left-handed persons and circumcised males"</u>. (p. 122)

506) The fact remains, however, that we are all rather uncertain about the choice of names <u>when dealing with cases other than the clear ones</u>. (p. 123)

507) The norms for choosing between tu and vous in the singular are precisely the same as those for choosing between first name only and title plus family name in English, tu being used prototypically to a close subordinate, and vous to a distant superior, <u>with other situations resolved in relation to these</u>. (p. 123)

508) Brown and Gilman link it to the complexities of the history of the Roman Empire, but since their work was published this kind of change has been found in languages all over the world, <u>as reported by Penelope Brown (a different Brown!) and Stephen Levinson</u> (1978/1987:198ff.). (124)

509) A simple, and familiar, example is the form of the imperative verb in Italian, which shows not only that the sentence is imperative (a command, invitation or whatever) but also whether the person addressed is an intimate or not; *Parlami!*, "Speak to me!" is used to an intimate, whereas <u>when talking to a superior</u> one would say *Mi Parli!* (p. 130)

510) For example, the "plain" way to say "Taro came" is *Taroo ga ki-ta*, but the "distant" form is *Taroo ga ki-masi-ta*, <u>with the suffix *-mas*i added to the verb.</u> (p. 130)

511 – 512) For example the neutral way of saying "She is English" is *ingelesa da*, but the verb *da* would become *duk* <u>when speaking to a male intimate</u>, and *dun* <u>(when speaking) to a female</u>. (p. 131)

513) It would be a safe hypothesis that physical distance is proportional to social distance in all cultures, so that people who feel close in spirit will put themselves relatively near to each other <u>when interacting</u>. (p. 137)

514) When the results were compared it was found that "Arabs confronted each other more directly than Americans <u>when conversing</u> . . . ,they sat closer to each other . . . , they were more likely to touch each other . . . , they looked each other more squarely in the eye . . . , and they conversed more loudly than Americans." (p. 137)

515) We don't make these decisions unaided, but learn them from those around us; this is very helpful when we are dealing with our own group, but a source of problems <u>when dealing with strangers</u>. (p. 137 - 138)

516) An interesting example is the difference between British a Wolof (Senegal) practice <u>when greeting a group</u> of people. (p. 139)

517) It would not be inappropriate to compare you <u>when speaking with the conductor of a large orchestra consisting of the various speech-organs and other visible organs of your body over which you have control</u>. (p. 140)

518 - 519) The same sex difference seems to apply to small boys and girls <u>when talking in single-sex groups</u> (Tannen 1990: 43), which reminds us that children have plenty of opportunities for developing these different patterns <u>when playing in single-sex groups</u>, regardless of whether the differences are dictated by our genes. (p. 141)

B) SUPPLEMENTIVE CLAUSES
520) <u>Putting these two characteristics together</u>, we can predict that speech may be more successful at some times than at others, and some people may be better at it than others. (p.112)

521) They vary from very specific skills, <u>dealing with particular linguistic items (e.g. when to say *sir*) or with particular situations (for example, how to conduct a business transaction on an expensive transatlantic telephone call)</u>, to much more general skills, such as how to avoid ambiguity. (p. 112 – 113)

522) The question of motivation is one of the basic questions of social psychology and sociology, so we cannot expect a simple answer, but a particularly influential (and attractive) theory is based on the term "FACE", which is used in much the same way as in the expressions *to lose face* and *to save face*, <u>meaning something like "self-respect" or "dignity"</u>. (p. 113)

523) In contrast, focussed interaction has been the basis for social groups since the earliest times; in fact, it is the basis for all primate species (<u>including humans</u>) that live in groups, such as chimpanzees. (p. 115)

524) <u>Returning to our original question about motivation</u>, it may now be possible to explain why we put so much effort into the skilled work involved in speaking. (p. 115)

525) As we now see, both skill and motivation to work are due to the society in which a person lives, and (to the extent that they influence speech) we may conclude that de Saussure was wrong in thinking of speech simply as an individual activity, <u>owing nothing to society</u>. (p.116)

526) Skill in speaking depends on a variety of factors, <u>including knowledge of the relevant rules governing speech</u>. (p.116)

527) Such rules are of various types, <u>dealing with different aspects of speech</u>, but all we can do here is to mention a few examples. (p.116)

528) First there are norms governing the sheer quantity of speech that people produce, <u>varying from very little to very much</u>. (p.116)

529) Peter Gardener (1966) did some fieldwork . . . in southern India, among a tribal people called the Puliya, <u>describing their socialization patterns</u>. (p.116)

530) We may contrast this society with one in Roti, a small island in eastern Indonesia, <u>described by James Fox</u> (1974) (p. 117)

531) In a brief conversation with me, about three minutes, a girl called to someone on the street, made a remark to a small boy, sang a little, told a child to go to school, sang some more, told a child to go buy bread, etc., <u>all the while continuing the thread of her conversation about her sister</u>. (p. 118)

532 – 533) For example, gossips on Nukulaelae Atoll frequently withhold important pieces of information, such as the identity of a person, from their gossip narratives, <u>thus manipulating their audiences into asking for the missing information</u>, sometimes over the spaces of several turns, as information is revealed in small doses, <u>requiring further questioning</u> (Besnier 1994; see also Besnier 1989). (p. 118)

534) For instance, it would be quite normal to refer to one' s own sister as "a girl" (Keenan quotes a specific occasion when a boy said to her – in Malagasy - "There is a girl who is coming", <u>referring to his own sister</u>). (p. 118)

535) To take another example, in Germany the hostess at a formal dinner party would probably say to her guests Ich darf jetzt bitten Platz zu nehmen ("I may now ask (you) to take (your) places"), <u>using a declarative construction</u>, in contrast with the interrogative that might be used by an English hostess: "May I ask you to come and sit down now?" (p.119)

536) This discussion has shown that de Saussure was wrong in seeing speech as the product of the individual's will, <u>unconstrained by society</u>. (p.119)

537) For instance, in the Koasati language spoken in Louisiana there are quite regular morphological differences between the verb forms used by males and females, with males typically adding *-s* to the end of the female forms (for example, males say *lakáws* where females say *lakáw*, <u>both meaning "he is lifting it"</u>). (p. 121)

538) In modern Island Carib, males and females differ in various aspects of their common language, <u>including the genders given to abstract nouns</u>, which are treated as grammatically masculine by female speakers and feminine by male ones (Taylor 1951: 103). (p. 121)

539) It is perhaps not too surprising that the word which refers to the speaker ("I/me") varies according to the speaker' s sex / there are in fact several words, <u>varying in terms of formality</u>, but *boku* is used only by males and *atasi* only by females. (p. 121)

540) Each person has a number of different names by which they may be addressed, <u>including first and family names an possibly a title (such as *Mr* or *Professor*)</u>. (p. 122)

541 – 542) However, other languages have other devices for signalling power and solidarity which in this respect are less accommodating (as we shall see in 4.2.3), such as the use in French of the pronouns *tu* and *vous*, <u>both meaning "you"</u> and <u>both (meaning) singular</u>, (although *vous* is also plural). (p. 123)

543 – 544) The norms for choosing between tu and vous in the singular are precisely the same as those for choosing between first name only and title plus family name in English, <u>tu being used prototypically to a close subordinate</u>, and <u>vous (being used) to a distant superior</u>, with other situations resolved in relation to these. (p. 123)

545) <u>Returning to our second universal</u>, then, we cannot claim that any form which expresses power must also express solidarity, and vice versa. (p.125)

546) This pairing is NEVER reversed, <u>linking a close superior to a distant subordinate</u>. (p.125)

547) In some cases it is important to contrast these two cases so we can call the first "vocative" and the second "referring"; and for the present purposes the important point is that referring names are part of the ordinary sentence structure, <u>covered by the ordinary grammar</u>. (p. 127)

548) <u>Having distinguished vocative and referring names</u>, however, we must also recognise their similarities. (p. 127)

549) Figure 4.2 shows a speaker, S, <u>talking to someone else (A, for "addressee") about some person R (for "referent", what a word refers to)</u>; the curved line is a notation that I have used elewhere (Hudson 1995a) to show the referent relationship. (p. 127)

550 – 552) A and R are each related to S in terms of both solidarity, <u>shown by the straight lines</u>, and power, <u>shown by the angled lines (meaning "up, down or level")</u>. (p. 127)

553) In Eglish S can use various vocatives to John Brown, <u>including *you* (*Hey, you!*) or a common noun such as *waiter* as well as the names *John* or *Mr Brown*, or the role-based name *dad* which we mentioned above</u>. (p. 128)

554) Admittedly Italian also has a pronoun contrast (like the French *to/vous* contrast) between *tu* and *lei*, <u>both meaning " you"</u>, so one might interpret the verb difference as a consequence of two distinct "understood" subject pronouns which arises only when A and R are the same. (p. 130)

555) If A is either a close kin or childhood friend of the speaker – a very restrictive condition on intimacy <u>compared with most languages</u>! - a special morpheme is added to the main verb. (p. 131)

556) A good example of this is found in Javanese (Geertz 1960), which offers a range of alternative forms, <u>listed in the lexicon</u>, for each of a large number of meanings. (p. 131)

557) Geertz identifies just six "style levels", <u>each marked by a definable range of vocabulary items so that any given sentence can belong to just one of the levels</u>. (p. 131)

558) These relatively short patterns, <u>contained within the sentence</u>, are obviously only a part of the total structure of speech since all sorts of longer patterns can be identified, such as the one consisting of a question followed by its answer, and even longer ones such as some piece of interaction between two people, with a clearly recognisable greeting at the beginning and a farewell at the end. (p. 132)

559) The terms "entry" and "exit", <u>borrowed from the stage</u>, reflect the fact that discussions of speech norms often compare them with the "lines" that an actor recites on stage. (p. 132)

560) Goffman's predictions may be based on a rather American style of social behaviour, since there is at least one society to which they appear not to apply, namely the Apache Indians, <u>studied by K. H. Basso</u> (1970). (p. 133)

561) For instance, this book has a very clear hierarchical structure based on topic, with chapters as the largest units, sections as the next largest, then subsections (for example, the present one, which is 4.3.2), then paragraphs and finally sentences, <u>all neatly delimited by one type of typographic convention or another</u>. (p. 134)

562) In imposing this structure on the book, I have tried to make it reflect the topics discussed, so that the present sentence is an illustration of one kind of structure, <u>dealt with in the present paragraph</u>, which is part of the subsection on types of discourse structure other than entries and exits, which is one part of the section dealing with discourse structure, and that in turn is part of the chapter dealing with speech as social interaction. (p. 134)

563) For instance, John Sinclair and Malcolm Coulthard (1975) analysed tape-recordings of a number of lessons from secondary schools, and identified a hierarchical discourse structure with " lesson" as the largest unit, then "transaction", then "exchange", then "move" and finally "act", <u>corresponding very roughly with the syntactic unit "clause"</u> (see Couthard 1977 for a survey of other proposals for hierarchical analyses of discourse). (p. 135)

564 – 566) However convincing we may find these proposals, it seems clear that there is no such hierarchical structure in certain kinds of interaction, but rather the topic "drifts" gradually from one subject to another – <u>perhaps starting off with a film about sheep-farming in Wales</u>, <u>leading to a sheep-dog trial somebody saw on holiday</u>, <u>and from there (leading) into further details of the holiday and a comparison with a holiday spent in Spain</u> and so on. (p. 135)

567) Alternatively, other subtopics might cut across these, <u>spoiling the neat hierarchical organisation implied so far</u> – for instance "food" might cut across "accommodation" and "activities", since you can eat either in your hotel or in a restaurant. (p. 136)

568) For example, after fights, chimpanzees may attempt reconciliations which start with the gesture of an outstretched hand and are commonly completed with a kiss and grooming, reminiscent of the human tendency to "kiss and make up": in a different context, support is expressed to a nervous individual during conflicts through an embrace rather than a kiss, <u>again suggesting basic patterns shared with humans</u>. (p. 138)

569) Indeed, in East Africa there are differences between tribes in the rules for doing this, <u>depending, for instance, on whether "one" is indicated by the thumb or the little finger</u> (Omondi 1976). (p. 140)

570) Finally, one should not forget the gesture of pointing (<u>done with different fingers in different societies</u>), which is often associated with the use of demonstratives like *this* or *that* and *here* or *there*. (p. 140)

571) (Zimmerman and West 1975, <u>quoted in McCormick 1994: 1357</u>) (p. 142)