

# THE DISTRIBUTION AND ROLE OF RELATIVE CLAUSES IN DIFFERENT TEXT TYPES

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**Abstrakt:** The article deals with the formal and functional analysis of post-modifying relative clauses in four different registers, namely newspapers, academic prose, and fiction, as well as in spoken texts. The study presents descriptions of the distribution of particular forms of postmodification (finite vs. non-finite) and comparisons with their distribution in other text types. The types of postmodification (restrictive vs. non-restrictive) as well as the relativizers used in different text types were also examined to find out to what extent they are employed in the differing texts. Besides other findings, the results of the analyses also suggest that the occurrence of finite and non-finite clauses as well as their basic function depends on the degree of formality of the text types.

**Key words:** relative clauses, finite clauses, non-finite clauses, relativizers, postmodification

## Introduction

Relative clauses are sometimes also called adjective clauses since their function to a great extent resembles the function of an adjective within the noun phrase. However, relative clauses do not occupy the same position as adjectives (by many grammarians called pre-modifiers) in the sentence. While adjectives precede the noun they modify, relative clauses are used as postmodifiers of the noun phrase in the sentence, which means that they follow the phrase they modify. Looking back into the history, we will discover that “the term ‘relative’ goes back to the Roman grammarians, who called the Latin equivalent of *that*, *which*, *who* and other referents relative pronouns because they referred back to a noun. Refer derives from the Latin verb *referre*, a very irregular verb whose past participle passive is *relatus*, from which ‘related’ derives” (Miller 2002, p. 64-65).

The present study is based on the formal and functional analysis of finite and non-finite relative clauses in a corpus that comprises four text types (registers) of different degree of formality: fiction, conversation, newspaper language, and academic language, all representing contemporary English language. The texts chosen for our investigation are as follows: The first, contemporary fiction, consists of several chapters taken from two books. The chapters are taken from Ian McEwan’s novel *Enduring Love* (1997), and Douglas Adams’s *So long, and thanks for all the fish* (1984).

The next register, conversational speech from radio broadcasting phone-in talk shows or TV talk shows, which involve question/answer interaction between at least two speakers, was investigated based on the transcripts of interviews with ten different people on different topics. This corpus is comprised of ten different interactions between adult speakers. The texts chosen for the analysis were found on the internet pages [www.iVillage.co.uk](http://www.iVillage.co.uk) interviews, Interviews with Ramona Koval on Radio National website, [www.defenselink.mil/transcripts](http://www.defenselink.mil/transcripts), Tony Snow, Fox News Sunday interviews, and CNN Larry King Live interviews.

The analyzed newspaper columns were sampled from across the various topics found in most newspapers. The texts covered the following major areas: domestic news, foreign/world news, arts (including cinema, theatre, fine arts, fashion, etc.), and social news (including reports about society people, environment, crime, etc.). There were 43 texts of different length used for the analysis of the newspaper language. They were taken from such media as *The Guardian*, *The Observer*, *The Daily Telegraph*, *The Independent*, and *The Sunday Times*.

The last investigated corpus is a collection of research papers, academic articles, and passages from textbooks taken from different websites and study fields, such as economics, medicine, and psychology. Altogether there are eleven texts in the corpus, out of which eight are short medical texts ) that were found on [www.Google-research papers/e-Prints Service](http://www.Google-research-papers/e-Prints-Service), and [www.cancerresearch.org](http://www.cancerresearch.org) , two texts (one article and a chapter from a book by Pinker, S. (2005) *So How Does the Mind Work? Mind and Language*, Blackwell Publishing Ltd. 2005) dealing with psychology, and one passage from a text-book on economics written by Murray N. Rothbard (1990), *What Has Government Done to Our Money?* University Auburn, Alabama ISBN: 0-945466-10-2.

The examples taken from the corpus are marked as [R-IWp-358], where R stands for Relative clauses, IW-interviews, AC-academic prose, FC-fiction, and NW-newspapers. The small case letters after the text type indicate the field the texts belong to, eg. p-politics/psychology, e-economics, m-medicine,media, etc. Each example was given a number in the list.

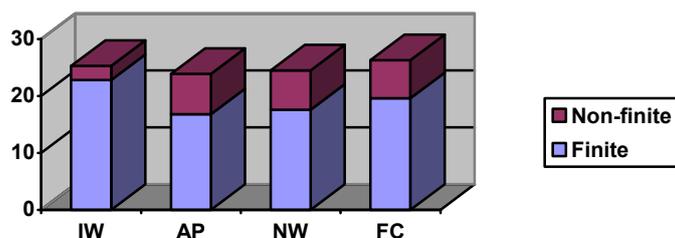
### Postmodification by Relative clauses

Postmodification by finite and non-finite relative clauses is considered to be an index of structural complexity in language, and it is important in the study of differences not only between speech and writing but also within different varieties of texts. For the purpose of the present study it was important to find out the relevance of each type of subordinate clause to the four text types. The differences in the distribution of relative clauses across text types are not very big; the range of their occurrence is from 23.9% in academic prose to 26.3% in fiction (see Table 1 below). Most of the finite ones are to be found in the spoken texts, whereas the highest number of non-finite structures is in academic prose. This finding is rather surprising as according to Biber “postmodifiers are generally rare in conversation”<sup>1</sup>. On the other hand, the incidence of non-finite relative clauses in the spoken texts is the lowest of all.

Tab 1 The distribution of all relative clauses (finite /non-finite) across text types

Text type	Finite		Non-finite		Total within the corpus	
	No	%	No	%	No	%
<b>Interviews</b>	418	22.8	45	2.5	463	<b>25.3</b>
<b>Acad. P.</b>	308	16.8	130	7.1	438	<b>23.9</b>
<b>Newspaper</b>	323	17.6	128	6.9	451	<b>24.5</b>
<b>Fiction</b>	360	19.6	122	6.7	482	<b>26.3</b>
Total	1409	<b>76.8</b>	425	<b>23.2</b>	1834	100

Figure 1 The distribution of relative clauses across text types



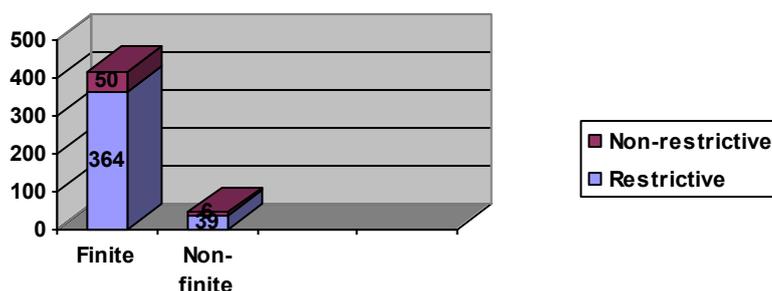
<sup>1</sup> c.f. Biber et al (1999), 8.6.1, page 607

## The distribution of Relative clauses in INTERVIEWS

Out of all 1834 relative clauses (both finite and non-finite) occurring in the analyzed corpus, there were 463 instances to be found in interviews, which is 25.3% of all postmodifying structures. Out of 463 relative clauses in interviews, there are 418 (90,3%) finite clauses, which is the highest number of finite postmodifying structures within the investigated corpus and 45 (9,7%) non-finite clauses, (see Figure 2 below). The proportion of finite vs. non-finite relative clauses in interviews is approximately 9:1 in favour of finite clauses.

These findings support the idea that finite relative clauses can be found significantly more frequently in spoken texts than in written ones.

Figure 2 The distribution of finite vs. non-finite relative clauses in Interviews



The analysis of the numerous structural variants of **finite relative clauses** revealed that by far the most frequently used relativizer in any register is “that”. In interviews, *that* refers more to animate than to non-animate head nouns. It can be found exclusively with restrictive clauses.

[1] Well, there’s plenty of evidence *that suggests people will go a lot further.* [R-IWm-213]

[2] But the thing *that most of us know* is that a brain surgeon’s job ends... [R-IWm-262]

In conversation, we can find more complex relative clause constructions. In other words, there are other subordinate clauses (most commonly nominal clauses) embedded in the relative clause, such as in [1] above, where (*that*) *people will go a lot further* is a zero nominal clause embedded in the relative clause. This finding is also supported by other examples below (the embedded clauses are underlined), where all the embedded clauses are nominal (complement) clauses.

[3] I’m interested in what thoughts you have on the great stage roles *that you now think that perhaps you could play* [R-IWm-326]

[4] There are always things *that occur that one wishes could be handled differently.* [R-IWp-387]

[5] We are not going to take a step *that suggests that it's not important work*... [R-IWp-400]

According to Biber (p.607) such constructions are “surprising in conversations, since structural complexity is associated with written language rather than spoken.”

The relativizer *that* is strongly preferred instead of *which* with indefinite pronouns as head. There were about 9% of all relative clauses found in interviews that postmodify indefinite pronouns. The most common pronouns occurring in this position are something [6] and anything [7]. It is very common to omit the relativizer after indefinite pronouns as in example [8].

[6] There’s another goal, something *that I've supported for a long period of time.* [R-IWp-346]

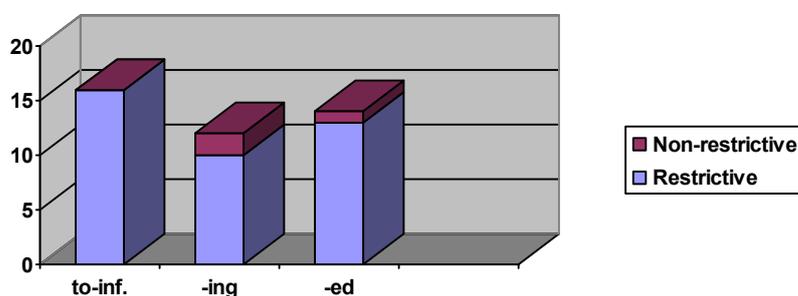
[7] I can't do anything *that causes me stress*. [R-IWm-300]

[8] This should not be something *the United States does alone*. [R-IWp-344]

The choice among relativizers is influenced by several factors, such as the role of the gap in the relative clause (*who*, *whose*, *whom*) or the function of the relative clause (*restrictive* or *non-restrictive*). It is also influenced by the head noun (*animate* or *inanimate*) and last but not least by whether the relative clause postmodifies a place, time, or reason (*where*, *when*, *why*), etc.

The **non-finite structures** found in the spoken text types can be classified into three major types: *ing*-clauses, *ed*-clauses, and *to-infinitive* clauses, which are evenly distributed across the investigated subcorpus (see Figure 3).

Figure 3 The distribution of non-finite structures in Interviews



Participle clauses (*ing*-clauses and *ed*-clauses) are in fact the result of the reduction of finite relative clauses, where the subject relativizer is omitted as well as the “be” form of the verb [9]. If there is no “be” form of the verb but a lexical verb, it is changed into its *ing*-form [10]. The *-ing* and *-ed* participle clauses found in interviews represent 57% of all non-finite structures. They are both restrictive and non-restrictive; however, there is a strong preference for restrictive non-finite structures.

[9] And for long time I thought, there is way into a story about someone *obsessed by literature...* [R-IWa-17] (someone *who is* obsessed by literature...)

[10] Actually he signed an order *instructing me to commence that campaign*. [R-IWp-39] (an order *which instructed* me...)

Postmodifying *ing* and *ed*-clauses always have subject gap positions, while *to-infinitive* clauses have either subject or non-subject gaps as in [11] and [12].

[11] American and coalition forces are in the early stages of military operations *to defend the world from grave danger*. [R-IWp-42] (*Military operations* will defend the world from grave danger.)

[12] We got lots of things *to talk about*. [R-IWm-5] (We will talk about *things*.)

In conversations, the most commonly occurring head nouns taking *to*-clauses are *something*, *thing*, *way*, and *plan*. These nouns have general meanings and the postmodifying *to*-clauses occur usually in object gaps.

There is another type of postmodification to be found in the subcorpus. *Appositive noun phrases*, which are always non-restrictive structures, explain or describe the head noun,

though it does not need any further identification. Appositive phrases differ from the other postmodifiers in that they can be reversed in order with the head noun they modify [13].

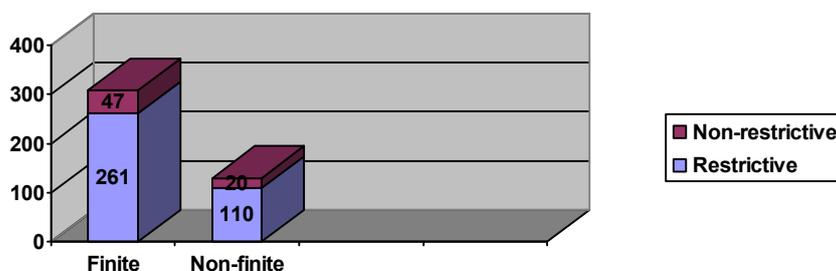
[13]. Senator Bob Graham, *former chairman of Select Intelligence Committee*, together with... [R-IWp-36] (*Former chairman of Select Intelligence Committee*, Senator Bob Graham, ...)

Appositive noun phrases are by far less common than finite and non-finite relative clauses. In interviews they appear exclusively with human proper nouns, they provide background information about people.

### The distribution of Relative clauses in ACADEMIC PROSE

There are altogether 438 relative clauses (both finite and non-finite) to be found in the subcorpus of academic writings. This number is the lowest, though not significantly, if compared with the incidence of postmodifying structures found in the other three sub corpora (see Table 1). This finding is surprising since generally postmodifiers are extremely common in academic prose<sup>2</sup>.

Figure 4 The distribution of finite vs. non-finite relative clauses in Academic Prose



On the other hand, the number of non-finite postmodifiers in the investigated academic writings is the highest; there are almost three times as many non-finite relative clauses as in the interviews. However, there is no significant difference in their distribution compared with the written registers. Thus, it comes clear that the reduction of finite clauses is more common in writing than in spoken discourse. The proportion of finite vs. non-finite clauses in academic prose is 308 to 130. Looking at the graph in Figure 3, we can detect a very interesting fact that the ratio of restrictive to non-restrictive clauses in finite as well as in non-finite clauses is almost exactly the same- 85% to 15% in favour of restrictive postmodifying structures.

As for the **finite relative clauses**, they most commonly characterize non-human entities, which is a factor that influences the choice of the relativizer. Out of eight relativizers commonly used to introduce relative clauses, only the relative adverb *why* is not used in academic texts.

The relativizer *that* is by far the most commonly used one in the investigated texts. Almost half of the relativizers appearing in academic prose are represented by *that*. It is the most flexible relativizer in its use as well as in the terms of a wide range of gap positions. If the relative clause postmodifies the subject head noun [14], it is embedded into the matrix clause separating the subject from its verb.

[14] New drugs *that dissolve blood clots and reduce cholesterol* have reduced drastically the death rate in heart attack victims. [R-APm-128]

<sup>2</sup> c.f. Biber, (1999), p.607

The postmodified heads are such nouns as *drugs, disease, disorder, brain, people, symptoms*, etc. The non-subject position [15] is strongly preferred across all the texts since it does not interrupt the connection between the subject and the verb in the main clause.

[15] The balance is higher in proportion to the prices of goods –to the work *that money has to perform*. [R-APe-31]

“That” occurs exclusively in restrictive clauses usually with both human and non-human head nouns. Therefore, it comes by surprise that there are only two instances of *that* with animate heads in our subcorpus.

If we compare the frequency of occurrence of the relativizers with their occurrence in interviews, we can identify significant differences in their use. Whereas in the spoken register *that* occurs also with animate head nouns (10% of all uses of *that*), in academic writings it is extremely rare. Here we have to take into consideration the character of the register. The analysed academic subcorpus comprises texts from different fields, such as medicine, psychology, economics, etc., which deal mostly with inanimate entities.

Another important difference worth mentioning is the occurrence of *who* and *which*. From the previously mentioned fact it comes logical that *which* is more common in academic texts (25% of all relativizers in the subcorpus) than in interviews (13,5%). On the contrary, there is a preference of *who* in the spoken texts (25,6%) compared with its use in academic prose (16,5%). The relativizer *who* can be found in both functional types of relative clauses, but only with subject gaps [16] referring to animate head nouns, such as *person, people, children, patients, athletes, borrowers, creditors*, etc., proper nouns, as well as indefinite and demonstrative pronouns.

[16] Sure it is illegal and it is unfair for all the other athletes *who do it the hard way*, but most do not care. [R-APm-79]

As for *which*, it provides more commonly non-essential information [17] and makes up 81% of all non-restrictive relative clauses and only 15% of all restrictive relative clauses [18]. Contrary to *who*, the relativizer *which* occurs with subject as well as with non-subject gaps.

[17] These may include the anterior cingulate cortex (AAC), *which has been implicated in the signalling of conflict situations*. [R-APp-212]

[18] He contrasts it with alternatives *which are sensitive only to collections of features and lack syntactic organization*. [R-APp-286]

In academic prose the structural variant preposition + *which* is much more common than in the other text types. *Which* usually occurs with the preposition “in”, but there are instances when *which* takes the preposition “to” or “for” [19-20]. This variant can be found with a wide range of different head nouns.

[19] Some used blocked designs *in which subjects inflected regular and irregular forms in different blocks of trials*. [R-APp-201]

[20] You should be vaccinated if you are in a group *for which the vaccine is recommended*. [R-APm-75]

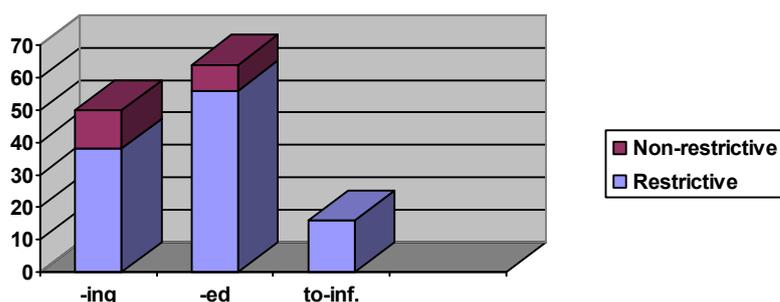
The *zero* relativizer is used with non-subject gaps with both animate and inanimate heads; however, there is a slight preference for inanimate nouns [21], such as *demands, problems, materials, pressure*, etc. The *zero* relativizer is an alternative also to relative adverbs *where, when, and why* [4.7.2.12], but this structural option is less common in academic prose.

[21] With parts of the house or with building materials *they could not use?* [R-APe-3]

Similarly to the findings in the corpus of interviews, there is a strong preference for restrictive relative clauses. This is given by the character of the texts, which are packed with a lot of special terminology and specific head nouns that need to be further classified and identified.

**Non-finite** relative clauses are represented by *-ing* forms, *-ed* participles, and *to*-infinitive forms. The total figures of the distribution of non-finite forms in academic prose are illustrated in Figure 5. There are altogether 130 non-finite structures to be found in academic texts, which is the highest number of all non-finite structures in the whole corpus. Thus, it comes clear that that non-finite structures are a feature typical of the academic writings.

Figure 5 The distribution of non-finite structures in ACADEMIC PROSE



Almost half of all non-finite relative clauses found in academic prose texts are *-ed* participle clauses [22] that are considerably more common than in any other register.

[22] The main symptoms *most recognized in chronic bronchitis is, again, a cough, with sputum, often occurring in paroxysm.* [R-APm-31]

The vast majority (98%) of head nouns postmodified by non-finite clauses are non-human, but this is especially the case with *-ed* participles and *to*-infinitives. The most commonly used verbs in *ed*-clauses are: *called, caused, characterized, divided, involved, and performed.* The heads postmodified by *-ing* participle clauses comprise both human and non-human nouns with a strong preference for the latter. In *ing*-clauses, the most commonly occurring verbs are: *being, depending, making, involving, including, occurring, following, and using,* most of which usually do not occur as finite clause progressive verbs.

*To*-infinitive clauses as postmodifiers are more flexible than *-ed* and *-ing* clauses in that they can occur with both subject and non-subject gaps<sup>3</sup>. The most common head noun taking a *to*-clause is *way* [23].

[23] The only way *to relieve the anxiety* is working through the obsession. [R-APm-56]

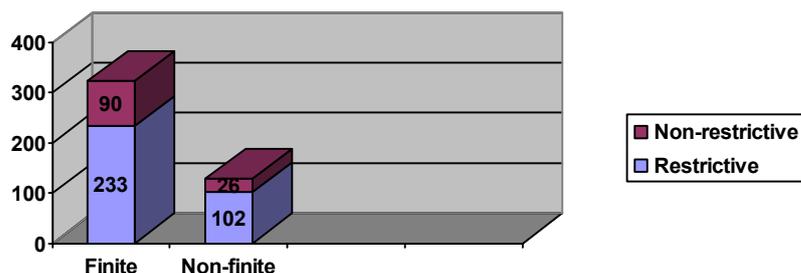
Except for the above mentioned head noun *way*, a variety of different head nouns, such as *agreement, ability, desire, work,* etc. can be found within the 16 examples of *to*-clauses in the corpus of academic prose.

### The distribution of Relative clauses in NEWSPAPERS

The number of all relative clauses occurring in the analysed newspaper articles is 451, which is very close to the incidence of this type of clauses in interviews or academic prose. There are 323 (71,6%) finite and 128 (28,4%) non-finite structures to be found in this subcorpus (Figure 6).

<sup>3</sup> c.f. Biber, (1999) 8.8.2

Figure 6 The distribution of finite vs. non-finite relative clauses in Newspapers



The lowest number of restrictive clauses occurs in the newspaper texts. On the other hand, there are almost twice as many non-restrictive clauses to be found here as those in the spoken texts or academic writings. It can be accounted to the fact that in newspapers there is a very high incidence of nouns that do not need identification since they are assumed to be already known. These nouns have been previously mentioned or identified in the text, or they are proper nouns postmodified by additional descriptive information as in [24].

[24] Miss Hughes, *who was born in Venezuela, the eldest of eight children*, was admired for her feisty character. [R-NWp-45]

The facts that Miss Hughes was born in Venezuela, or that she is the eldest of eight children are not relevant for the story; however this non-essential information might be of interest at least to some readers.

The **finite** relative clauses in newspapers are introduced by the same range of relativizer as in the previously analysed sub corpora; however, their distribution significantly differs. If we compare the distribution of different relativizers across the newspaper texts, it comes by surprise that the most frequently used ones: *that*, *which* and *who* occur almost in the same rate, 25,4%, 26% and 26,6% respectively. Such a consistency in the incidence of these relativizers cannot be found in any of the investigated texts.

The relativizer *that* is used exclusively with inanimate head nouns and in different gap positions. It can be most commonly found with subject gaps as in [25]; however, some instances of non-subject gaps [26] can be found, too.

[25] Here is a group of people *that don't play by the rules and come in and take* what is rightfully mine. [R-NWp-85]

[26] Many members have non-Jewish influences *that they like to express*. [R-NWp-154]

There are some other examples of clauses introduced by *that* resembling relative clauses to be found in the investigated texts. In this structure (it +be + noun + *that* clause) the *that*- clause is placed immediately after the noun phrase; however, it is not a relative clause, but a *cleft*-sentence [27]. Cleft constructions are used to draw special attention to the complement of the verb “be”, thus in the example below the phrase *south Asian immigration* is the highlighted element.

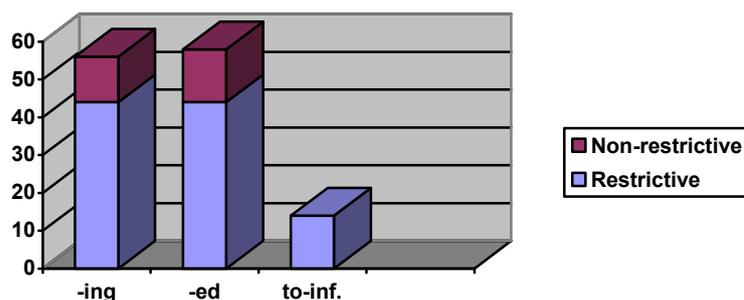
[27] For this reason it was south Asian immigration *that first led British governments into letting down the portcullis*. [R-NWp-124]

While *that* is used only in finite restrictive relative clauses, the other most common relativizer, *which*, is almost equally distributed between restrictive and non-restrictive clauses. In newspapers, *which* occurs with a wide range of non-human and abstract head nouns (*advice, pressure, process, vision*), depending on the character of the article. The high frequency of occurrence of *which* in this subcorpus can be explained by the fact that the

analysed articles were taken from British newspapers, where in British English there is a strong preference for *which* over *that*.

**Non-finite** relative clauses in newspapers are represented by *-ed*, *-ing*, and *to-infinitive* structures. The vast majority of non-finite postmodifiers are participle clauses, which are almost equally distributed across the newspaper text types (see Figure 7 below). There is only 11% of *to-infinitive* clauses, though they are more flexible as they can be found not only with subject but also with object or adverbial gaps.

Figure 7 The distribution of non-finite structures in Newspapers



Most *-ed* participle clauses are to be found in articles dealing with political and social issues. They postmodify a wide range of especially non-human head nouns, such as *allegation*, *candidates*, *information*, *problems*, *statement*, *summit*, etc. as in [28]. The verbs in *-ed* participle clauses also vary according to the character of the text. All the *-ed* participle clauses are the result of reduction of full relative clauses with passive verbs. In newspaper style, as well as in academic prose this construction is preferred to finite clauses in order to provide more compact information.

[28] One of the more thorny problems *discussed at the conference* was the new estates that had been built in the past 20 years. [R-NWm-73]

Common verbs in *-ing* clauses are activity or communication verbs, such as *mark*, *say*, *try*, *use*, and *work* [29] and mental verbs<sup>4</sup>. Postmodifying *-ing* clauses are frequently used also with existence verbs that cannot be used in finite progressive form. The most commonly occurring verbs with stative meaning in the analysed newspaper articles are *appearing*, *being*, *containing*, *including*, and *involving*. The nouns that are postmodified by *-ing* clauses are both human and non-human heads and that refer to the doer of the action.

[29] It was done in the sense of either of them *trying to change each other's minds*. [R-NWp-50]

*To-infinitive* clauses [30] are rather rare as postmodifiers in newspaper texts. The most common head nouns postmodified by *to-* infinitive clauses are *attempt/s*, *place*, and *way*.

[30] The best way *to undermine the case for a liberal immigration* is to administer it incompetently. [R-NWp-39]

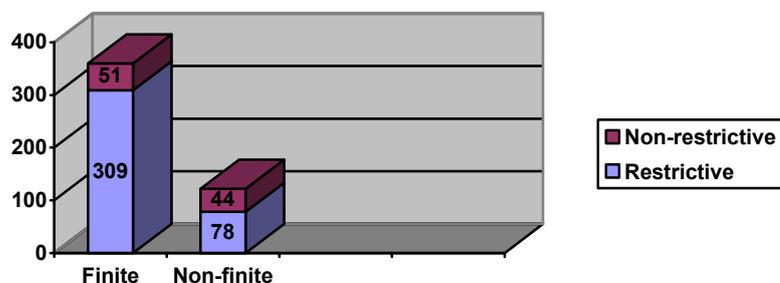
### The distribution of Relative clauses in FICTION

There were altogether 482 postmodifying structures found in the analyzed texts taken from contemporary British fiction. They represent more than 26% of all relative clauses to be

<sup>4</sup> classification of verbs according to Biber et al (1999). 5.2.1

found in fiction, which is the highest incidence of postmodifiers compared with that in the other text types. (Table 1). In our analysis we investigated also the ratio of finite and non-finite clauses. Figure 8 below shows that there are almost three times as many finite relative clauses (360) as non-finite ones (122). Furthermore, the analysis according to semantic restriction revealed that the proportion of restrictive clauses to non-restrictive clauses is roughly 4 to 1 (387: 95).

Figure 8 The distribution of finite vs. non-finite relative clauses in FICTION



**Finite** restrictive relative clauses make use of all kinds of relativizers, but their distribution differs from that in the other analyzed subcorpora. The most commonly used relativizer here is not *that* as it is in the interviews and academic prose; moreover the percentage of occurrence of *that* in fiction (22,2%) is the lowest compared with the other three analyzed text types (interviews- 33,7% , acad. prose- 49%, newspapers- 25,4%). The relativizer *that* occurs most commonly in clauses postmodifying abstract and common head nouns that refer to non-human heads [31]. These are such nouns as *event, feeling, horror, love, society, space, theory, way*, etc., but here are also some cases when *that* postmodifies indefinite pronouns [32], where the use of *that* is strongly preferred to *which*.

[31] In Victorian physics and chemistry alone there was no end of brilliant theory *that displayed not a shred of narrative inclination*. [R-FC-160]

[32] What was once a half-eaten sandwich had now turned into something *that Arthur entirely didn't want to know about* [R-FC-331]

*That* in fiction frequently occurs with subject gaps which are easier to process, yet non-subject gaps, namely direct object gaps, adverbial gaps, or complement of preposition are common, too.

The most common relativizer in fiction is *which*. Its frequency of occurrence is the highest across all the four investigated subcorpora. *Which* can be used with both subject and non-subject gaps and with animate and inanimate heads. Since it is more common for inanimate head nouns to take relative clauses, the incidence of postmodifying structures introduced by *which* is relatively high [33]. The proportion of restrictive to non-restrictive relative clauses with *which* is exactly 3:1. Non-restrictive clauses can be found either with proper nouns or with other non-human heads that do not need further specification or identification [34].

[33] He whistled to himself as he pushed open the door *which had so daunted him last night*. [R-FC-360]

[34] He was trying to pay for a drinks bill with an American Express card, *which was not acceptable anywhere in the unknown Universe*. [R-FC-228]

There is a moderately high occurrence of sentential relative clauses in fiction. These clauses are not treated here separately since they are also introduced by *which*; however, they do not postmodify nouns, but comment on the contents of the main clause [35].

[35] That evening it was dark early, *which was normal for the time of year*. [R-FC-177]

With non-subject gaps it is very common to omit the relativizer altogether, which is preferred in spoken as well as in written register. The *zero* relativizer belongs to the three most frequently used relativizers in fiction [36]. Relativizer omission is by far the most common in fiction and conversation; it occurs about three times as frequently as in academic prose and twice as frequently as in newspapers. The choice to omit the relativizer is a feature of less formal style, to which fiction and conversation undoubtedly belong.

[36] Will was with some friends, and they had a game *they played with the dog*. [R-FC-324]

The most common head nouns followed by zero relativizers are indefinite pronouns *something*, *everything*, *anything* and *nothing*. However, there are also nouns that require relative clauses with adverbial gaps, such as *moment*, *time*, *place*, and *way* [37].

[37] Because Dold City wasn't a sort of place *you could afford to do things casually*... [R-FC-223]

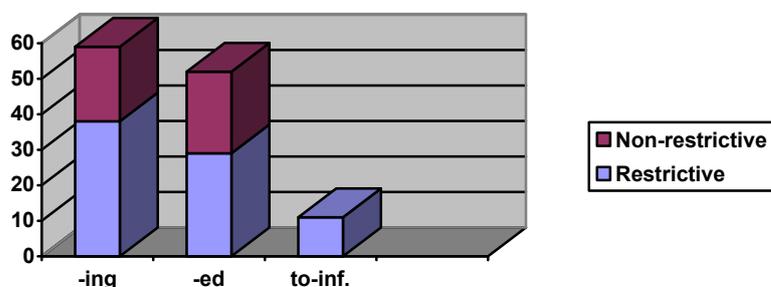
More than 14% of relative clauses have adverbial gaps [38,39] that make use of the relativizer *where* and *when*. While the relativizer *where*, which is by far the most common one used in relative clauses with adverbial gaps, is used with a range of different head nouns, such as *city*, *junction*, *house*, *place*, *spot* and proper names of places, *when* is used only with two nouns, namely *moment* and *time/s*.

[38] Beyond them was a large pasture *where sheep and a few lambs were grazing*. [R-FC-227]

[39] I stood still, delaying the moment *when I would have to set out across the field*. [R-FC-83]

The incidence of **non-finite** relative clauses in fiction is approximately the same as that in academic prose and newspapers. Thus, it can be said that the finite vs. non-finite distribution is determined by medium, for they occur more commonly in written texts than in spoken ones. Out of all 482 relative clauses found in fiction, 122 are non-finite, which is 25,3%. The non-finite clauses in fiction are both restrictive and non-restrictive, with a preference for restrictive ones. Figure 8 shows the frequency of occurrence of non-finite clauses in the subcorpus.

Figure 9 The distribution of non-finite structures in Fiction



Besides *-ed* and *-ing* participle clauses and *to*-infinitive clauses, there is a considerable number of appositive noun phrases to be found in fiction. Appositive phrases differ from the non-finite postmodifying clauses in that they do not contain a verb; therefore they are not

included into the statistics of relative clauses. They are abbreviated forms of relative clauses and they provide descriptive information about the head noun phrase. They are always non-restrictive and most commonly appear after proper nouns as in [40].

[40] Immediately to my left was John Logan, *a family doctor from Oxford*, who was not the youngest of the group, but he was the fittest. [R-FC-32]

The incidence of *to*- infinitive clauses in fiction is the lowest compared with the other three analysed media. It is used with a limited number of head nouns from which the most common are *thing*, *nothing*, *nobody*, and *something*. The distribution of participle clauses, on the other hand, does not differ a lot from the occurrence of *-ed* and *-ing* clauses in newspapers and academic prose. Similarly to these two text types, participle clauses in fiction postmodify a wide range of head nouns, most of which are inanimate. As for the verbs used in postmodifying clauses, their selection differs in *-ing* and *-ed* clauses. While in the former the majority of occurring verbs are activity or communication verbs [41], such as *asking*, *running*, *sitting*, *waiting*, *wearing* or stative and existence verbs (*existing*, *living*, *relating*, *having*), *ed*-clauses make use most commonly of mental verbs, such as *known*, *thought*, *needed*, *heard*, *considered*, and *expected* [42].

[41] I thought this might be those two knees *dancing up and down inside his trousers*. [R-FC-77]

[42] She had spent part of a sabbatical term travelling around Spain and Portugal, visiting houses *known to Fanny Brawne and to Keats's sister Fanny*... [R-FC-24]

## Conclusion

Relative clauses represent 31,5 % of all subordinate structures found in the investigated corpus. They are the second most commonly occurring type of subordinate clauses within all four text types. The highest incidence of all relative postmodifying structures is in fiction, while the lowest incidence is in academic prose (see Table 1 Figure 1 above). These figures support Biber's corpus findings, which state that "*Relative clauses are relatively frequent in all three written registers. Proportionally, they are most common in fiction.*"<sup>5</sup> As for the distribution of finite vs. non-finite relative clauses, the obtained figures show that the proportion of these two different structures is approximately 3 to 1 in favour of finite clauses. The majority of finite relative clauses were found in the spoken texts-interviews. On the other hand, the highest incidence of non-finite structures is in academic prose. However, the occurrence of non-finite clauses in the other two written text types is very close, with 30,1% in newspapers and 28,7% in fiction. The incidence of non-finite relative clauses in interviews is very low, only 10,6%. Based on these findings, it can be said that the finite vs. non-finite distribution is determined by medium and stylistic association. Postmodification by finite relative clauses has more informal associations and is, therefore, preferred in colloquial discourse- interviews, while postmodification by non-finite clauses has more formal, academic associations and thus is relatively frequent in written non-fiction registers, such as academic prose and newspapers.

The preferred use of participle and infinitive clauses in the mentioned text types is because of economy, since they communicate the same idea or meaning as the finite relative clause, but they do it in a concise way.

If we look at the distribution of the functional types of relative clauses, the results show that the vast majority of relative clauses are restrictive (they provide essential information that is needed to specify or identify the head noun). There are approximately 4,5

<sup>5</sup> c.f. Biber et al (1999), 8.6.1, page 606

times as many restrictive as non-restrictive clauses to be found in the corpus. The occurrence of both restrictive (essential) and non-restrictive (non-essential) relative clauses is determined by medium as well as the degree of formality; the less formal text type, the higher occurrence of restrictive relative clauses. The highest number of restrictive relative clauses is to be found in interviews and fiction. In these text types there common nouns (*thing, people, man, child, friend, etc.*) as well as indefinite pronouns (*somebody, someone, something, anything, and everything*) that need further identification or specification are very frequently used. On the other hand, non-restrictive relative clauses do not appear to be influenced by the degree of formality of the text, since the results show that they appear most commonly in newspapers and fiction, which are two media of different degree of formality. The relatively high incidence of non-restrictive relative clauses in these text types might be explained by the fact that newspaper articles as well as narratives are full of proper nouns, the identity of which is known to the readers, so they do not need further identification.

The distribution of relativizers across the four different text types is influenced by many factors, which results in differences of their occurrence. By far the most frequently occurring relativizer is *that*. It appeared 454 times, which is 32,2% of all relativizers. The high occurrence of *that* is due to its high grammatical potential. It is considered to be the most flexible in its use as *that* is used with both animate and inanimate heads as well as with indefinite pronouns; moreover, it can be found in a wide range of gap positions. *That* is very common in conversation and academic prose, and it is evenly distributed in news and fiction. In spoken texts, the high frequency of *that* can be explained by the fact that this relativizer is freely used instead of *who* with animate head nouns referring to humans. According to Biber<sup>6</sup> the relativizer *that* has a more colloquial flavour than *wh-* relativizers, and it is preferred in conversation to avoid making a choice between *who* and *whom*. *That* appears almost exclusively with restrictive relative clauses.

The second most frequently used relativizer across all registers is *which* (23,6%), but it has a significantly different distribution when compared with *that*. While *that* was the most common in interviews and the less common in fiction, with *which*, it is the other way round. *Which* is the most common relativizer in fiction and less common in conversations. *Which*, similarly to *that*, is flexible in its use; however, it does not appear with animate head nouns at all. It can be found in different gap positions, the most frequent of which is that of subject. While *that* can be found with restrictive clauses, *which* commonly occurs with non-restrictive and sentential relative clauses.

*Who* with its 19,5% incidence across the investigated corpus belongs to the group of commonly used relativizers. Nevertheless, it is not as flexible as *that* and *which* in that its occurrence is limited to subject gap positions only, and it can be found almost exclusively with animate head nouns. Comparing the incidence of the mentioned relativizer across all four analyzed registers, *who* is by far the most common in interviews, and the least common in fiction. In interviews, such human head nouns as *people, children, friend(s), student(s), man/men, parents*, but also *everybody, someone* and a lot of proper nouns take the relativizer *who*. These animate heads together with a lot of other human head nouns appear also in non-fiction written registers, which often inform about entities with human associations; therefore, the incidence of *who* is moderately common in the analysed newspaper articles, too. On the other hand, the low frequency of *who* in academic prose is due to the fact that academic writings usually deal with inanimate entities that take either *which* or *that*.

In colloquial discourse, both written and spoken, the use of *zero relativizer* is very common. In order to avoid the choice among the relative pronoun *that*, *who*, and the formal relativizer *whom*, all referring to animate head nouns with non-subject gaps, it is preferred to

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<sup>6</sup> Biber et al (1999), 8.7.1.2, page 612

omit the relativizer altogether. The zero relativizer is to be found exclusively with restrictive relative clauses wherever the gap is not in subject position. Relativizer omission is influenced by several factors. One of them is the degree of formality; therefore, the zero relativizer is by far the most common in fiction and conversation, not in the other text types. About 24% of all relative clauses in fiction and 21% of the restrictive relative clauses in interviews omit the relativizer, while the relativizer is omitted only 6-10% of the time in academic prose and newspapers, respectively. The other factor that strongly influences the omission of the relativizer is grammatical, namely the subject of the relative clause. The relativizer is usually omitted when the relative clause has a personal pronoun as its subject, which logically marks the beginning of a new clause (*one of the best shows I've ever seen, story you told us*). In contrast, when the subject of the relative clause is a noun phrase, omission of the relativizer is disfavoured (*his words that people will remember*).

Relative adverbs *where*, *when* and *why* do not occur so commonly as the above mentioned ones, since they are frequently substituted by other structural variants. The difference in their distribution is determined by the use of different head nouns in particular texts. The distribution of different relativizers across the four text types in the analyzed corpus indicates that the choice among the relativizers is determined not only grammatically (the role of the gap), but it is also influenced by other factors, such as register, head noun (animate/inanimate), and function (restrictive/non-restrictive).

## References

- Biber, D., Johansson, S., Leech, G., Conrad, S., Finegan, E. (1999). Longman Grammar of Spoken and Written English, Pearson Education Limited. ISBN 0-582-237254
- Biber, D., Conrad, S. & Reppen, R. (2002). Corpus Linguistics, Cambridge University Press, ISBN 0-521-49957-7
- Downing, A. & Locke, F.A. (1992). A University Course in English Grammar, Prentice Hall International (UK). ISBN 0-13-952490-8
- Gethin, H. (1992). Grammar in Context, Proficiency level English. Thomas Nelson and sons Ltd. ISBN 0-00-370333-9
- Greenbaum, S., Quirk, R., Leech, G., Svartvik, J. (1993). A Student's Grammar of the English Language, Longman Group UK Ltd. ISBN 0-582-07569-6
- Hopper, P. J. and Closs Traugott E. (1993). Grammaticalization, Cambridge University Press. ISBN 0-521-36684-4
- Huddleston, R. (1995). English Grammar an outline, Cambridge University Press. ISBN 0-521-31152-7
- Lock, G. (1997). Functional English Grammar, Cambridge University Press. ISBN 0-521-45922-2
- Leech, G. and Svartvik, J. (1975). A Communicative Grammar of English, Longman Group UK Ltd. ISBN 0-582-55238-9
- Quirk, R., Greenbaum, S., Leech, G., Svartvik, J. (1985). A Comprehensive Grammar of the English Language, Longman Group UK Limited. ISBN 0-582-51734-6
- Rafajlovičová R. (2002). A Survey of the English Syntax, FHPV Prešov, ISBN 80-8068-172-4
- Thompson and Longacre, (1985). Adverbial clauses. In Timothy Shopen (ed), 170-23

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