# POSTMODIFICATION BY RELATIVE CLAUSES IN TEXTS OF DIFFERENT DEGREE OF FORMALITY 

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#### Abstract

The article deals with postmodification by finite and non-finite relative clauses in four different text types (newspaper, academic prose, fiction, and interview) of spoken and written English. It presents detailed descriptions of the distribution of particular structures and comparisons with their distribution in other text types. The types of postmodification (restrictive vs. non-restrictive) used in different text types were examined in order to find out to what extent they are employed in the different texts and which forms of postmodification (finite vs. non-finite) are used in which text type. Besides other findings, the results of the analyses show 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.


## 1 Introduction

In general, postmodification serves to identify the reference of the head noun. There are several structural types of postmodification, including clauses and phrases. The present study focuses on clausal postmodifiers, which can be either finite (relative clauses) or non-finite (to-clauses, ing-clauses, and ed-clauses).

Relative clauses consist of the following components: the relativizer (relative pronoun or adverb), the head of the noun phrase, and the gap. The relativizer points back to the head, which is generally referred to as the antecedent. The gap is a missing but understood element, "which corresponds in meaning to the head noun" (Biber et al. 1999: 608), such as in Mr Davis had been sitting on an email that he had received anonymously on March 8 for more than two weeks... [NWp-318], where the head noun phrase is email, to which the relative pronoun that refers, and the gap occurs in the direct object position. The meaning of the relative clause is then Mr Davis had received anonymously an email. Thus, relative pronouns, in addition to their linking function, have a grammatical role (clause element or part of clause element) in the relative clause. They may function as object as in the sentence above, subject, complement of preposition, or complement/adjunct of place (where), time (when) and reason (why), but interestingly not manner (how). In non-subject functions, the relative pronoun is frequently omitted altogether (zero relativizer).

Postmodification has two main functions: either the head can be viewed as a member of a class which can be linguistically "identified only through
the modification that has been supplied" (Quirk et al. 1985: 1239) or it gives "additional information which is not essential for identification" (ibid.). The former definition indicates that the information the relative clause expresses "forms an integral part of the message conveyed by the independent clause as a whole" (Huddleston 1995: 157) and the clause is referred to as restrictive. The relative clause in the example below identifies the 'people' and distinguishes them from the others.
(1) It took orders, it served drinks, it dealt with people who behaved as if they wanted to be murdered. [IWm-123]

While the restrictive clauses give us essential information, the function of the non-restrictive type is to add a further specification of something that is already presented as specific. A clause is non-restrictive if the head can be viewed as unique or as a member of a class that has been independently identified. The modification given to the head noun phrase is additional information which is not essential for its identification (2). With regard to meaning, non-restrictive relative clauses do not define subsets, as does the restrictive type (Downing \& Locke 1992: 284).
(2) The disclosure of Mr Blair's deal to allow unrestricted entry for Romanians, which received no publicity in Britain, provoked uproar last night. [NWp-236]

In the non-restrictive type the specific antecedent is not necessarily a noun, but may be a whole clause (3), thus such constructions are called sentence (or sentential) relative clauses.
(3) This evening it was dark early, which was normal for the time of year. [FC-177]

The relationship here resembles coordination, but these clauses are also very much like disjuncts, as they express a judgement, an attitude, or comment on the truth or likelihood of the proposition they refer to. In the example above, the whole sentence has the form of a clause with This evening it was dark early as the head and the relative clause introduced by which as the dependent clause.

The analysed corpus comprises four text types of different degrees of formality, all representing contemporary English language. The whole corpus includes more than 120,000 words. The texts chosen for our investigation are as follows: conversational speech from radio broadcasting phone-in talk shows or TV talk shows ( 30,610 words), contemporary fiction consisting of several chapters taken from two books ( 30,557 words), newspaper columns sampled
from across various topics found in most newspapers (domestic news, foreign/ world news, cinema, theatre, fine arts, fashion, and social news including reports about society people, environment, crime, etc.) - 30,674 words, and a collection of randomly selected research papers, academic articles, and passages from textbooks taken from different websites and study fields, such as economics, medicine, and psychology ( 30,533 words).

The types of postmodification used in different text types were examined in order to find out to what extent it is employed in the different texts and which forms of postmodification are used in which text type. The analyses of the texts in the corpus were carried out using manual textual analyses selecting and classifying the different types of subordinate clauses, and categorising them based on different criteria. All the compiled data were then computerized and the findings with the descriptions of the distribution of particular structures and comparisons with their distribution in other text types were interpreted in tables and graphs.

## 2 The distribution of relative clauses across text types

The analysis revealed that different types of postmodifying structures occur in the corpus. There were altogether 1,834 postmodifying relative structures found in the whole corpus, which is 31.5 per cent of all subordinate clauses (both finite and non-finite) found in the corpus. These figures indicate that relative clauses are the second most frequently used type of subordinate clauses in the corpus preceded by nominal clauses ( $39.0 \%$ ), and followed by adverbial clauses (29.5\%).

The first distribution divides the clauses into finite and non-finite. Out of all 1,834 postmodifying relative clauses, 1,409 ( $76.8 \%$ ) are finite and only 425 ( $23.2 \%$ ) are non-finite, which is illustrated in Figure 1.


Figure 1: Distribution of finite vs. non-finite relative clauses in the whole corpus

The proportion of finite to non-finite relative clauses found in the whole investigated corpus is approximately $3: 1$ in favour of finite postmodifying clauses, and a more detailed analysis of this distribution across text types is presented in Table 1 below.

|  | Finite |  | Non-finite |  | All relative clauses |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Text type | number | $\%$ | number | $\%$ | number | $\%$ |
| Interviews (IW) | 418 | 29.7 | 45 | 10.6 | 463 | $\mathbf{2 5 . 2}$ |
| Fiction (FC) | 360 | 25.5 | 122 | 28.7 | 482 | $\mathbf{2 6 . 3}$ |
| Newspaper (NW) | 323 | 22.9 | 128 | 30.1 | 451 | $\mathbf{2 4 . 6}$ |
| Acad. P. (AP) | 308 | 21.9 | 130 | 30.6 | 438 | $\mathbf{2 3 . 9}$ |
| Total | $\mathbf{1 , 4 0 9}$ | 100 | $\mathbf{4 2 5}$ | 100 | $\mathbf{1 , 8 3 4}$ | 100 |
| $\%$ of all relative clauses |  | $\mathbf{7 6 . 8}$ |  | $\mathbf{2 3 . 2}$ |  |  |

Table 1: Distribution of finite vs. non-finite relative clauses across 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 per cent in academic prose to 26.3 per cent in fiction. However, there are more significant differences in their occurrence if looked at finite and non-finite clauses separately. The total figures of finite relative clauses in Table 1 show that they are a typical feature of less formal text types. From all finite relative clauses 29.7 per cent were to be found in interviews followed by 25.5 per cent found in fiction. The lowest incidence of finite relative clauses is in academic prose. As interviews are considered to be the least formal and academic prose the most formal text type in the corpus, it can be concluded that the more formal the text type, the fewer finite clauses it contains. This finding corresponds with Biber et al.'s findings that postmodifying -ing clauses are most frequent in academic writing (Biber et al. 1999: 631). Thus, it can be stated that the distribution of finite relative clauses might be mediumrelated, since there are differences (though not as significant as within non-finite ones) in their occurrence within the four different text types.

On the other hand, non-finite relative clauses are characteristic of academic prose and newspaper texts, where respectively 30.6 and 30.1 per cent of all nonfinite relative clauses occur. Considerably fewer non-finite relative clauses are found in interviews, where the percentage of occurrence is only 10.6 per cent compared with the other media. The non-finite postmodifying structures found in the corpus are participial modifying -ing and -ed clauses and to-infinitive postmodifying clauses. They commonly occur in more formal text types. There are altogether 425 non-finite postmodifying structures in the corpus, the majority
of them are participle clauses (4) with 87.6 per cent of occurrence. To-clauses (5) account only for 12.4 per cent of all non-finite relative clauses.
(4) How many if you have experience with somebody having gone through this? [IWm-30]
(5) There are a lot of things to talk about. [IWm-5]

A further analysis focuses on the distribution of relative clauses, both finite and non-finite according to their basic function, the type of modification. The relative clauses found in the corpus are divided into two groups based on whether they 'identify' the head noun phrase (restrictive) or just give 'additional information' about the head (non-restrictive). Figure 2 shows the frequency of occurrence of restrictive vs. non-restrictive relative clauses in the corpus as well as the proportion of finite and non-finite structures within the two groups.

Restrictive clauses with 1,496 instances ( $81.6 \%$ ) are by far more common than non-restrictive relative clauses, which account only for 338 instances ( $18.4 \%$ ).

$\square$

Figure 2: Distribution of restrictive vs. non-restrictive relative clauses in the whole corpus
The analysis according to semantic restriction and text type division reveals that the distribution of restrictive and non-restrictive relative clauses across the four text types varies, which indicates that their use is determined by medium (see Figure 2a).


Figure 2a: Distribution of restrictive vs. non-restrictive relative clauses across text types

As for restrictive relative clauses (both finite and non-finite), the highest frequency of their occurrence is in interviews (21.9\%) and fiction (21.1\%). In these text types most of the post-modifying clauses identify and distinguish their heads, as in Example (6).
(6) I'm somebody that likes to talk and collaborate. [IWm-111]

The restrictive relative clause specifies what kind of a person the speaker is.
In contrast to the findings for restrictive relative clauses, newspaper texts have almost twice as many non-restrictive clauses as interviews and academic prose. The occurrence of this type of postmodification is common in the mentioned text type, "where non-restrictive clauses are used to add information of potential interest but not directly related to the news story" (cf. Biber et al. 1999: 603), as in (7).
(7) Among those in the photographic exhibition, which opens in London later this month, are Tatiana and Barney Worth, billed as he World's Fattest Couple. [NWm176]

The higher incidence of non-restrictive relative clauses in newspapers may also be explained by the fact that in these texts the modified head is frequently a proper noun, as in (8), the identity of which is known to the readers, so it does not need to be further modified.
(8) Blair, who had been Leader of the Opposition for little more than a year, made a silly mistake. [NWp-84]

There are altogether 33 sentential relative clauses to be found in the investigated corpus. They are a typical feature of spoken text types, thus can be found especially in the interviews ( $39.3 \%$ ) and in fiction ( $33.3 \%$ ). They are introduced by which and are used to express the attitude or judgement of the speaker/writer, as in (9), or give some comment on the proposition in the main clause (10) and (11).
(9) I tend to eat what I want, which probably isn't good. [IWm-127]
(10) Such passports incorporate either an iris or fingerprint identity check, which is virtually impossible to counterfeit. [NWp-17]
(11) Many solutions were suggested for this problem, which was odd because ... [FC-175]

## 3 The choice and the function of relativizers

Finite relative clauses are linked to part or all of the main clause by a backpointing (anaphoric) element, a relative pronoun (which, who, whom, whose, and that) or a relative adverb (where, when, and why). This means that all $w h$-words are interrogative as well as relative pronouns, except what. In informal British English the wh-word what is frequently used, but which, who, and that are still more common.

The choice of relativizer is determined by several factors, mainly by the nature of the noun that the relative clause modifies. The basic distinction is between the relativizers which relate to nouns referring to animate (human) and the one relating to inanimate (non-human) head nouns. While the relative pronoun who is used almost exclusively with an animate head, which is used with a wide range of inanimate heads. That as a relative pronoun may relate to both human and non-human nouns (Biber et al. 1999: 612-616).

The analysis also deals with the choice of relativizers in the whole corpus of relative clauses as well as in particular texts. Table 2 shows the differences in their distribution.

|  | that | which | who | whom | whose | where | when | why | zero | total |
| :---: | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| IW | 141 | 55 | 107 | 1 | 2 | 13 | 9 | 3 | 87 | 418 |
| FC | 80 | 116 | 31 | 5 | 10 | 19 | 9 | 1 | 89 | 360 |
| NW | 82 | 84 | 86 | 6 | 8 | 20 | 3 | - | 34 | 323 |
| AP | 151 | 77 | 51 | 2 | 1 | 3 | 2 | - | 21 | 308 |
| Total | 454 | 332 | 275 | 14 | 21 | 55 | 23 | 4 | 231 | $\mathbf{1 4 0 9}$ |
| \% | $\mathbf{3 2 . 2}$ | $\mathbf{2 3 . 6}$ | $\mathbf{1 9 . 5}$ | $\mathbf{1 . 0}$ | $\mathbf{1 . 5}$ | $\mathbf{3 . 9}$ | $\mathbf{1 . 6}$ | $\mathbf{0 . 3}$ | $\mathbf{1 6 . 4}$ | 100 |

Table 2: Distribution of relativizers in finite relative clauses across text types
The most frequent relativizer is that, which accounts for 32.2 per cent of all relativizers. This might be explained by the fact that that can be used with both human and non-human heads and can occur with a wide range of gap positions. Figure 3 shows the proportion of the two most frequently used relativizers, that and which in the analyzed text types. That is most commonly used in academic prose ( $49.0 \%$ ) and in interviews ( $33.7 \%$ ). While in interviews that occurs also with animate heads, in academic prose, except for two instances, it is always used with non-human heads.


| $\square$ Non-restrictive |
| :--- |
| $\square$ Restrictive |

Figure 3: Distribution of that and which across text types
The second most frequently occurring relativizer is which (23.6\%). This relativizer is restricted to instances where non-human heads can be also found with different gap positions.

If compared with that, which occurs only with restrictive clauses, which commonly occurs with both restrictive and non-restrictive relative clauses. The highest frequency of which ( $32.3 \%$ ) of all finite relative clauses within particular text types is in fiction. As Figure 4 below shows, the majority is to be found in restrictive clauses, while the difference in the use of this relativizer in the other text types is not as significant.


Figure 4: Distribution of which in restrictive and non-restrictive clauses across text types
Who altogether with other forms of relative pronouns (whom, whose) account for 22 per cent. These relativizers are usually used with human head nouns and their choice depends on whether they occur in subject (who) or object position (whom), or they show a possessive relationship (whose). Who is most frequent in the spoken text type ( $25.6 \%$ of all relativizers in the text) and occurs with subject gaps. Whom similarly to whose are rarely used in the investigated text types. Both who and whom are often omitted and instead the zero relativizer, which
accounts for 16.4 per cent is used. This is usually in less formal text types of the corpus, such as interviews and fiction, where the percentage of occurrence of the zero relativizer is 20.1 per cent and 24.7 per cent respectively. This relativizer occurs almost exclusively in restrictive relative clauses.

The adverbial relativizers where, when and why altogether account for only 5.8 per cent. The most frequent is where, which can be usually found in newspapers and fiction.

Non-finite relative clauses in the corpus usually do not take relativizers, but if a to-clause appears with adverbial and prepositional object gap, it can be introduced by a preposition and a relativizer (12).
> ...I could have proposed the moment after I had collected her from the airport, or when we decided on our route, or the field in which to have our lunch ... [FC-305]

The analysis of the relative clauses based on the function of the relative pronoun within the relative clause has shown that the clauses in the corpus occur in the following range of functions: subject (13), object (14), complement of preposition (15), adverbial (16), and genitive (17).
(13) From devastating personal tragedies to those kids who say the darnedest things,...[NWp-189]
(14) There would doubtless be several people whom he knew. [IWm-76]
(15) You should be vaccinated if you are in a group for which the vaccine is recommended. [APm-51
(16) That most times when I spoke to my friends, they screamed or shouted back. [IWm-13]
(17) Ms Bennett, 47, a former head of science whose BBC production credits include 'Walking with Dinosaurs', has recently spent two years at the US Discovery Channel. [NWm-257]

## 4 Conclusion

The analysis of the corpus consisting of four different text types shows that postmodification by relative clauses is most common in fiction and least common in academic prose, which indicates that more formal text types contain a lower number of relative clauses. The results of our analysis suggest that the degree
of formality also influences the choice of finite vs. non-finite relative clauses. The highest number of finite relative clauses can be found in the least formal text type (interview), while the lowest number of finite relative clauses is in academic prose. In contrast, the highest number of non-finite structures is in formal academic text types ( $30.6 \%$ ), the lowest (only $10.6 \%$ ) in conversation. These results show that the greater the frequency of finite clauses, the less formal the text (interview), and the greater the frequency of non-finite clauses, the more formal the text (academic prose).

Restrictive relative clauses in the corpus are to be found mostly in the least formal text type, while non-restrictive clauses conveying some additional information are used in fiction. Thus, it can be said that here the degree of formality of the text does not directly influence the choice of the type of postmodification.

## References

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