# THE DISTRIBUTION OF FINITE AND PARTICIPIAL POSTMODIFIERS IN FICTION AND ACADEMIC PROSE

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### 0. General

This paper aims at pointing out certain tendencies in the distribution of two postmodifying constructions – finite relative clauses and nonfinite participial clauses. These two forms are generally described as functionally equivalent (Quirk et al. 1985: 1243–1244, *CGEL* henceforth; or Dušková et al. 1994: 581, *MSA* henceforth), but the nature of their equivalence has not been explicitly exploited, beyond references to the systematic constraints ensuing from the limited morphological potential of the participial clauses. However, there is an observable variation among registers in terms of the postmodifying forms employed (Biber et al., 1999).

The description of the distribution of the two postmodifiers is not a goal in itself, but it is a necessary intermediate step to understanding the postulated equivalence and the functions of the forms in question.

Prescriptive linguistics, for example, postulates the rule 'avoid whiz-deletions' warning against the use of the reduced *-ing* and *-ed* forms, based on the supposed difficult processing of unexpressed syntactic relations (e.g. Lutz, 2003). On the other hand, as argued by Green (1996: 106-109), it is a mistaken assumption to believe that an increase in the number of explicit markers of interclausal semantic relations will by default make a text more coherent and easier to understand.<sup>1</sup>

This paper hopes to relate the distribution of the two constructions in a particular type of text to some other means it employs to fulfil its needs, demonstrating that certain text-type characteristics can be correlated with the distribution of postmodifying constructions.

**0.1** Adnominal relative clauses and participial clauses function as postmodifiers within a noun phrase. The most obvious and general difference between the two structures is described in terms of explicitness. The use of less explicit forms is termed syntactic

<sup>&</sup>lt;sup>1</sup> The wrong assumption of the function of the full relative clause as a means of making a construction easier to understand is also demonstrated by CHANG (1997), who found that speakers did not change a reduced relative to a full relative as a way of accommodating to their listeners.



compression (CGEL: 995), desententialisation (Huddleston & Pullum 2002: 89), reduction, deletion, abridged or contracted forms (Curme, 1931), or complex condensation.

All these labels of constructions or processes may be seen as instances of G.K. Zipf's 'Principle of Least Effort', which has been taken on and developed in pragmatics, e.g. in Levinson's 'speaker's maxim of minimization' (say as little as necessary), Leech's 'economy principle' (be quick and easy; maxim of reduction) competing with 'clarity principle' (transparency and ambiguity maxim), etc. These principles are summarized in the maxim of minimization, given below:

"[M]axim of minimization: minimization<sub>1</sub>: semantically general expressions preferred to semantically specific ones; minimization<sub>2</sub>: shorter expressions (with less units of speech production) preferred to longer expressions." (Kortmann 1991: 208)

A comment on the opposite tendency is found in Greenbaum  $(1988: 3)^2$ : "redundancy ... is ubiquitous in language use. The kind of redundancy and the degree of redundancy that are tolerable depend on the variety of language and the relationship between the participants in the communication."

Both these tendencies are reflected in the varied frequency of the forms in the individual registers, which corresponds with the overall dependence on the linguistic and situational context.

**0.2** When discussing modification, *CGEL* (pp. 1243-44) points out that premodification is less explicit than postmodification. On the other hand, explicitness in postmodification varies considerably, ranging from the most explicit relative clause to the least explicit prepositional phrase: the girl <u>who was standing in the corner</u>  $\rightarrow$  the girl <u>standing in the corner</u>  $\rightarrow$  the girl <u>in the corner</u>.

Explicitness is understood in terms of overt marking of syntactico-semantic relations, i.e. there are simple morphological and syntactic contrasts – the more explicit variant contains an additional bound or free morpheme.

In our case, the difference in explicitness is mainly the result of the differences in finiteness. Nonfinite clauses are less explicit because they lack tense markers and modal auxiliaries, a subject and a subordinating conjunction (a relative pronoun). They are thus "valuable as a means of syntactic compression" (*CGEL*: 995). The meanings associated with tense, aspect, and mood are inferred from the sentential (or broader) context.

Finiteness is one factor contributing to greater explicitness in relative clauses, the second being the presence of a relative pronoun.

It has been shown that the modifying constructions are perceived as equivalent, with a higher or lower degree of explicitness. Opinions vary on how explicitness interacts with the text-type and its complexity. Rohdenburg's prediction (1996) that explicitness is greater in more cognitively complex texts contrasts with Vachek (1955), who links cognitively more complex styles with less explicit forms (condensed clauses).

<sup>&</sup>lt;sup>2</sup> In his article (GREENBAUM, 1988) on the means of syntactic compression in English, nonfinite and verbless clauses are listed as means of compression. Other means include ellipsis, coordination, proforms, conjuncts and disjuncts, and nominalizations.

Rohdenburg's complexity principle interacts with semantic and stylistic tendencies. It assumes that "[i]n the case of more or less explicit grammatical options the more explicit one(s) will tend to be favoured in cognitively more complex environments"<sup>3</sup> (Rohdenburg 1996: 151).<sup>4</sup>

However, grammatical alternatives "tend to evolve subtle, if only latent, semantic distinctions. Eventually, such nuances may even become more firmly established. In addition, there is a tendency for more explicit variants to be treated as more formal than less explicit ones." (ibid.) Another principle suggests that "[t]he syntactic distance between two expressions corresponds to the semantic distance between them." (ibid.: 166), i.e. the relatively autonomous finite clause suggests a less immediate relationship between the superordinate and subordinate actions involved. "The fact that a sentence can dispense with a subordinate clause undoubtedly results in a closer cohesion of its elements, ..." (Vachek 1955: 64).

Thus in cases of syntactic variation the more explicit option is generally predicted to be more formal than its less explicit counterpart.

The above remarks on the competition of more and less explicit forms have indicated that any account of their distribution must reckon with an interplay of factors from various levels of language structure.

## 1. Method

The aim of the present study is to describe the two postmodifying constructions as they occur in different text-types and relate their frequency to other features, the combination with which might be stylistically significant (cf. Leech & Short, 1981; Biber, 1988). In other words, the goal is to identify certain factors that correlate with the distribution of either the finite or the nonfinite modifiers.

Styles (registers) differ in the use of less vs. more explicit forms of modification, therefore the stylistic, and primarily quantitative, approach is adopted to address the issue.

"... on the syntactic level, individual features are likely to have a less significant effect than features in combination. The frequency of a particular kind of syntactic structure (say a relative clause) will probably be less important than the fact that that structure tends to occur in a particular position in the sentence ..." (Leech & Short 1981: 46).

The quote upholds the primary concern of this study, namely the occurrence of the two forms under examination in the subject noun phrases vs. other syntactic functions of the modified noun phrase, and also their cooccurrence with other features.

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<sup>&</sup>lt;sup>3</sup> This principle is also used to account for the distribution of relative pronouns: "In the area of relative clause formation, the more explicit signalling devices appear to have always been favoured in cognitive-ly more complex environments... A complexity factor specific to relative clauses concerns the so-called accessibility hierarchy ... the more explicit *wh*-pronouns become first established in the less accessible positions" (ROHDENBURG 1996: 172). On the other hand, this observation of Rohdenburg's does not seem to be easily applicable as far as the participial clauses are concerned. The opposite tendency is predicted by VACHEK (1955).

<sup>&</sup>lt;sup>4</sup> Cf. also VACHEK (1955), who compares various registers in terms of the use of condensed constructions.

## 1.1 Material

To examine the relation between the text-type and the frequency of modifiers, two registers are compared, namely fiction and academic prose. The latter group contains two subfields (different subject matters) – social science and natural science (cf. the specification of source texts below).

The two registers represent written texts, with no interactiveness and no shared immediate situation between the producer and the recipient of the text. The primary difference between them lies in the main communicative purpose and the audience: fiction representing pleasure reading with a wide public as its audience, academic writing serves the purpose of information/evaluation/argumentation, the audience being specialists (Biber et al. 1999: 16).

For the sake of brevity, the following abbreviations are used to refer to the textgroups:

register	in text	in tables
fiction	FICT	F
academic prose	ACAD	
social sciences	SOC	S
natural sciences	NAT	N

Eight source books were excerpted, four representing fiction and four drawn from academic prose (two sources of social and two of natural sciences). The excerpted length of each text was determined by the number of words needed to obtain 250 relative clauses. All participial postmodifiers were excerpted simultaneously. The whole corpus thus contains 2,000 relative clauses and 1,139 participial postmodifiers, the total excerpted length being 197,816 words of running texts. The frequency of modifiers per one thousand words is presented in Table 1.

Table 1. Frequency of all clauses in the individual source texts (per 1,000 words)

	fiction				academic				
1 clause per	neuon		social science		science	natural science			
1,000 words	HN <sup>5</sup>	ТН	GL	TT	SS	PS	TE	GM	
finite	9.68	7.78	10.58	10.58	13.56	16.35	9.45	7.72	
nonfinite	2.22	2.45	4.00	2.37	5.91	6.41	8.35	11.49	
overall	13.40	10.27	14.56	12.95	19.47	22.76	17.80	19.20	

As was anticipated above, the text-groups differ in the frequency and the type of the modifiers employed. Table 2 shows the overall frequency of participial and finite postmodifiers in the three text-groups. The results confirm the general feature of

<sup>&</sup>lt;sup>5</sup> The combinations of two letters represent the books used as source texts (see the attached list).

ACAD in that this register contains numerous postmodifiers when compared to FICT and other registers (cf. Biber et al. 1999: 607).

Table 2.6

	modifiers overall (15.86)	S (20.96)	N (18.57)	F (12.72)	
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Table 3 presents the frequency of the respective realization forms of postmodification. As evident, the two subgroups of academic prose differ significantly with respect to which realization forms are employed: SOC uses more finite clauses than NAT, which uses most nonfinite modifiers.

Table 3.

relative clauses (10.94)	S (14.82)		F (9.50)	N (8.50)
participles (6.5)	N (10.1)	S (6.14)		F (3.22)

## 2. Analysis

As mentioned above, participial clauses can be viewed as reduced forms of finite clauses. It is clear that not all relative clauses can be replaced with a participial counterpart (e.g. Šaldová, 2000), because nonfinite clauses cannot contain modal verbs, perfective *have*, etc. Relative clauses are thus systemically needed for expressing more complex meanings. Although there are features of this kind to be analysed in terms of the ability of nonfinite modifiers to express certain meanings, the focus of this study is on actual distribution of the respective forms and their possible relation to other tendencies of the texts under examination.

Accordingly, to account for the differences three features are analyzed, based on the following **three hypotheses**: 1) the preference of the individual text type for subject gap relative clauses and the corresponding higher proportion of nonfinite clauses, 2) the higher proportion of nonfinite modifiers in subject noun phrases when compared to the finite clauses, and 3) the frequency of finite clauses in relation to the character of their verb phrase.

In examining these three features it will be shown that it is possible to observe a tendency of the above-listed features and the individual types of modifiers to co-occur. Tentative explanations will be attempted for the co-occurrence of these features as well.

<sup>&</sup>lt;sup>6</sup> Each table (Tables 2, 3, 6, 7, 9 and 12) consists of six columns. The leftmost column contains the title of the phenomenon under description and the mean value for all registers. When no indication is given, the figure expresses frequency (x instances per 1,000 words). When the symbol % follows, the figure indicates the percentage proportion.

The remaining five columns iconically indicate a scale, from the left (the highest value) to the right (the lowest value), with the column in the centre representing the mean value. It has to be emphasized, however, that this is only a rough approximation, motivated by the need to highlight the relations between the registers as 'identical – similar – different'.

## 2.1

The first hypothesis is derived from the observation that certain registers show preference for subject gap relative clauses, i.e. relative clauses where the pronoun occupies the subject position.

(1) The developments *which* led to the formulation of the plate tectonics model are ... (GM-169)

"Subject gaps are ... considered easier to process and are more common. It is thus surprising that conversation and fiction use relative clauses with non-subject gaps more commonly than written nonfiction. ... when the gap is in subject position, it is likely that non-subject noun phrase elements in the relative clause will provide new information, in addition to identifying the reference of the head noun. This pattern fits the informational purposes of written exposition, and thus these constructions are most common in ... academic prose" (Biber et al. 1999: 621–622).

Biber's observation about the frequency of subject gap constructions is important because if it is valid, it might serve as one factor explaining a higher frequency of nonfinite modifiers in academic writing, based on an assumption that the registers which display preference for subject gap relative clauses may also contain more reduced relatives, since these are always 'subject-gaps'. In other words, the relation between the preference of the individual text type for the subject gap constructions can be extended over to participial clauses, which are always 'subject gap', as far as their modifying function is concerned.

Of all 2,000 relative clauses in the corpus, 54.2% (1,084) contain subject gaps. These clauses serve as a basis for comparison with participial postmodifiers, since clauses with relative pronouns in other than subject position have no direct participial counterparts (*CGEL*: 1263–1264).

In addition to differences in the use of those pronouns which can occupy both subject and nonsubject positions in the respective syntactic functions,<sup>7</sup> there are register differences in the frequency of subject gaps occupied by them.

Comparing the two registers under examination, of 1,000 instances in each group, fiction displays 49.9% of subject gaps, academic prose 58.5%. Although the predicted difference is attested, the overall count for the two text groups differs in only 10%.

A picture which is more optimistic in terms of the validity of our prediction emerges when the natural and the social science samples are compared. SOC shows a less distinct preference for the subject gap relative clauses than NAT. Table 4 below reflects the same scalar frequency of the subject gap relative clauses, when compared to the frequency of nonfinite clauses, i.e. NAT-SOC-FICT (cf. Table 3 above, for the frequency of participial clauses). In other words, fiction, containing the fewest subject gap relative clauses, natural sciences being the other extreme.

<sup>&</sup>lt;sup>7</sup> In fiction, the three relative pronouns which can occupy the subject gap (who, which and that) are distributed evenly (31%-37% each), contrary to academic prose, where which is 2.7 times more frequent than who and that together (it is 7.5 times more frequent than who, and 4.1 times more frequent than that).

When the relative clauses with pronouns that can function as relative clause subject (*that* and *which*) are compared (*who* may be disregarded, since it is invariably the subject<sup>8</sup>), the tendency to use the subject gap constructions in the natural sciences is much more pronounced (the difference between NAT and SOC being 20-24%), as Table 5 indicates.

	nat	tural	social		fiction		Σ	
Relative pron. as:	abs	%	abs	%	abs	%	abs	%
subject element	315	63.0	270	54.0	499	49.9	1,084	54.2
nonsubject elem.	185	37.0	230	46.0	501	50.1	916	45.8
Σ	500	100%	500	100%	1,000	100%	2,000	100%

Table 4. The relative pronoun function in the dependent clause in the respective registers

Table 5. The subject gap distribution of which and that pronouns across registers

	natural	fiction	social
which	73.4	65.5%	53.6%
that	92.1%	73.5%	68.8%

This analysis has confirmed the predictability of the frequency of subject gap constructions in dependence on the register. The assumption derived from Biber's account that the relation between the preference of the individual text type for the subject gap relative clauses can be extended over to nonfinite clauses seems to be tenable (with NAT displaying the highest frequency of nonfinite modifers) at least as one of the factors accounting for the distribution of nonfinite forms.

## 2.2

The second feature examined here is the role of the modified noun phrase in the matrix clause. The hypothesis is that although relative clauses are rare in subject position (ex 2), reduced forms may be more frequent than full clauses in modifying subject noun phrases (ex 3).

- (2) a. <u>The islands which make up the East Indies archipelago</u> form a region of fascinating complexity. (GM-242)
  - b. <u>Political scientists</u> who were little influenced by sociology have produced classifications ... (PS-318)
- (3) a. ..., for <u>bees</u> carrying scent apparently attract other males, so that ... (TE-379)
  - b. Indeed, <u>pollen</u> exposed to ants for a short time has reduced germinability ... (TE-353)

<sup>&</sup>lt;sup>8</sup> The use of who is closely related to the subject matter, i.e. the amount of animate head nouns.

It has been observed that the more explicit (i.e. more lengthy) type of postmodification tends to occur in the postverbal position:

"... the majority of relative clauses are placed after the completion of the clause containing the antecedent; this means in effect that relative clauses normally qualify the object or complement rather than the subject of a main clause. Where relative clauses are placed medially – in particular, where they qualify the subject of the main clause – speakers have a strong tendency to anacoluthon ..." (Quirk 1957: 104).

"Head nouns of relative clauses rarely occur in subject position in the matrix clause (only 10–15% of the time across registers)" (Biber et al. 1999: 623).<sup>9</sup>

However, no data regarding this tendency have been available as far as nonfinite postmodifying clauses are concerned.

In our corpus, the percentage of the relative clauses in subject position is higher (21.5%, cf. Table 6) than the results given by Biber (10-15%). This may be due to the fact that our data include only clauses with the relative pronoun as a relative clause subject and that *there* construction subjects are included.

Table 6. Proportion of postmodified subject noun phras
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finite modifier in subject NP (21.5%)	N (27.9)		S (20.7)	F (17.8)	
nonfinite modifier in subject NP (30.1%)		N (36.9)	S (31.6)		F (20.1)

Comparing the percentage of finite and nonfinite postmodifiers in the subject position in Table 6, there is a clear tendency for the nonfinite forms to modify the subject more often than the finite clauses do. Our hypothesis is thus confirmed.

Moreover, there seems to be a certain tendency of ACAD to modify the subjects more frequently than FICT. The reasons may be sought in the character of the subject in FICT, where the subjects are more frequently pronominal or proper names, and where the proposition contained in the modifier clause is postponed after the main verb. ACAD, on the contrary, contains fewer pronominal subjects, etc.

The tendency to modify the subject may be thus correlated to a higher frequency of nonfinite (shorter) modifiers in ACAD. The scale again has the form NAT-SOC-FICT, which order is identical with the order of registers ordered by the frequency of participles (Table 3). That is, the registers that tend to modify the subject display the highest frequency of nonfinite postmodifiers.

Another feature observable in connection with the modified subject noun phrases is the disproportion between the *-ing* and the *-ed* clauses in this position according to the respective text-groups (Table 7).

<sup>&</sup>lt;sup>9</sup> "... relative clauses with subject heads disrupt the matrix clause – hearers/readers must process the relative clause before reaching the main verb of the matrix. As a result, subject noun phrases rarely contain a relative clause as postmodifier" (BIBER ET AL. 1999: 623).

Table 7. Proportion of postmodified subject noun phrases by -ing and -ed clauses

-ing in subject NP (28.3%)		N (31.1)	S (27.5)	F (24.6)	
-ed in subject NP (32.3%)	N (42.7)	<b>S</b> (35.7)			F (18.3)

In ACAD, almost 40% (i.e. 42.7 in NAT and 35.7 in SOC) of the *-ed* clauses modify the subject, in fiction it is only 18%, while the difference between the text-groups is much less pronounced as far as the *-ing* clauses are concerned (40% in ACAD x 18% in FICT for *-ed* clauses, 29% (mean) in ACAD x 25% in FICT for *-ing* clauses).

Although SOC approximates NAT as far as the proportion of participial clauses in subject noun phrases is concerned, the same disposition is almost nonexistent in the finite clauses. FICT, on the other hand, is relatively constant as far as the individual realization forms are concerned (finite clause = 17.8%, *-ing* = 24.6%, *-ed* = 18.3%, mean 20.2%). SOC oscillates between the two (finite clause = 20.7, *-ing* = 29.5%, *-ed* = 35.7%, mean 28.6%).

This tendency can be also illustrated by the comparison of the full vs. reduced passive modifiers (Table 8):

	subject with passive finite modifier	subject with -ed
FICT	25%	18%
SOC	23%	36%
NAT	15%	43%
mean	20%	35%

Table 8. Subject noun phrase with finite and nonfinite passive modifier

It has been observed that the past participial clauses in ACAD occur frequently in the subject position. One reason for this frequency is that the *-ed* clauses seem more prone to occur in the reduced form, as attested by Table 9, which shows that 81% of all passive modifiers appear as reduced, while only 35% of active modifiers appear in the shorter form.

Table 9. Reduced vs. finite modifiers in the respective text-groups

reduced forms of all modifiers	N (64.3%)	S (29.3%)	F (25.3%)
-ing (35%) of active modifiers	N (49%)	F (27%)	S (26%)
-ed (81%) of passive modifiers	N + F (85%)		S (67%)

The suitability of the passive modifiers to occur in the less explicit form may be sought in the neutralized meaning of the past participle, which blurs the difference between state (result) and activity. As a result, the difference in the meaning between the more vs. the less explicit passive form is less pronounced, the less explicit form being more universal than the *-ing* form. This argument seems to be strengthened by the identical proportion of the reduced passive clauses in NAT and FICT (85% each, cf. Table 9) despite the disparate frequency of the passive modifiers per one thousand words (both finite and nonfinite), shown in Table 10.

	finite passive abs	<i>-ed</i> abs	passive total abs	% represent reduced passive forms of all passive postmodifying forms	ratio unreduced vs reduced	passive postmodifier per 1,000 words
fiction	28	164	192	85%	0.17	1.82
nat	61	349	410	85%	0.18	6.97
soc	69	138	207	67%	0.49	6.14
Σ	158	651	809	81%	0.24	4.09

Table 10. Ratio of finite passive clauses<sup>10</sup> vs -ed participial clauses

Table 11. Frequency of participial clauses in the respective registers

	-ing		-ed		Σ		
	abs	per 1,000	abs	per 1,000		per 1,000	
nat	244	4.15	349	5.93	593	10.1	
soc	69	2.05	138	4.09	207	6.14	
fiction	175	1.66	164	1.56	339	3.22	
Σ	488	2.47	651	3.29	1,139	5.76	

Table 11 demonstrates a preference for the -ed clauses in ACAD and Table 7 shows that these modifiers are frequent in the subject position. Another possible explanation, in addition to the less problematic use of the bare passive, for the frequency of the -ed forms can be sought in their discourse function. It has been shown (Fox & Thompson, 1990) that the use of the type of relative clause in conversation depends on the information status of the NP, and, consequently, the subjects with non-human referents occur most frequently with object-relatives (*the problem I have ...*). This observation can be extended tentatively to account for the significant proportion of the -ed clauses in the subject position in ACAD (40%), since the passive can be regarded as a variant of the object-relative, with a pronoun in the underlying active form.

The above-mentioned function of the *-ed* clauses is illustrated here (ex 4) by the most frequent lexical item in this position, i.e. *associated* (*with*), which can be regarded as a typical representative because of its frequency: 10% of all *-ed* clauses in NAT. It may also be significant that this verb form occurs predominantly in the subject noun phrase (54%).

(4) The fruits associated with such dispersers are conspicuous, ... (TE-173) The reason why this verb is frequent may probably be sought in its meaning of 'connect in the mind', which serves well the defining function of the postmodifiers. It

<sup>&</sup>lt;sup>10</sup> Finite clauses with the relative pronoun as subject.

allows to connect noun phrases in a semantically rather unspecified way, i.e. signalling some kind of relationship, or, as Fox and Thompson would have it, connecting it with something known ("anchoring it"). The preposition *with* adds to this flexible combinability.

To sum up, the hypothesis that the participial forms will be more frequent in the subject noun phrases seems to have been confirmed. Nevertheless, this tendency is more pronounced in ACAD, and even more so in the case of the *-ed* forms.

Three tendencies are observable in this respect: 1) the more frequent use of modified subject noun phrases in ACAD (fewer pronouns or animate heads), 2) the past participles are more prone to appear as "bare" passives, and 3) the use of past participles serves a specific defining discourse function of linking the entity to previous discourse (object gap, cf. Fox & Thompson, 1990).

The hypotheses discussed in 2.1 and 2.2 attempted to correlate the frequency of certain features in the respective text-types with the frequency of the nonfinite modifiers. The third hypothesis aims at accounting for the high frequency of finite postmodifying clauses in SOC.

### 2.3

The third hypothesis, relating the morphological properties of the respective postmodifying forms to the overall cognitive complexity of the texts, focuses on the character of the verb phrase in the relative clause and provides empirical data for the assumption that full clauses are used where the reduced ones would be unable to express certain temporal and aspectual relations.

Although there are lexical devices, mainly adverbs, which can substitute for the analytical grammatical markers (modal or temporal – *possibly*, *recently*, *previously* etc.), the finite forms are used precisely to express more complex modal, temporal and aspectual relations.

The salient difference between SOC and NAT in terms of which realization forms are employed is evident from Table 3 above. SOC employs relative clauses significantly more often (14.82 per one thousand words), than FICT and NAT (9.50 and 8.50, respectively, cf. Table 3). The comparison with NAT is of interest at this point, since, as for the frequency of postmodifiers overall, these two groups are comparable.

The difference in the usage of the more explicit forms can be partially attributed to the need to employ complex verb phrases, the frequent use of the *be* predicate and other state predicates and the different tenses used in the main and dependent clauses (all these features can be correlated with the subject matter). The results of examining these features across the registers are summarized in Table 12, suggesting that the forms without a direct counterpart in a participial clause are more numerous in the text-type which employs the finite clauses most frequently. Table 12 shows, again, a fairly consistent patterning, corresponding to the frequency of finite modifiers employed (NAT 8.50 - FICT 9.50 - SOC 14.82 finite clauses per one thousand words).

Table 12.

simple VP (64.8%)	N (68.3)	F (66.1)		S (60.0)	
full verb (79.5%)	N (83.7)	F (80.9)			S (71.0)
same tense (24.7%)	N (31.8)		F (22.0)	S (20.6)	

It is thus shown that the type of verb phrase which appears in the finite postmodifying clauses has a reflex in the high frequency of their occurrence.

## 3. Conclusions

The original thesis that the reduced forms will be more numerous in the subject position than the full clauses is confirmed (2.2). Another assumption concerns the correspondence between the frequency of the subject gaps, observed in academic writing, and the frequency of the nonfinite clauses. The registers displaying preference for the subject gaps in relative clauses are expected to display a higher proportion of nonfinite postmodifiers. This assumption also seems to be confirmed (2.1).

A discourse explanation of the types of relative clauses occurring in conversation by Fox & Thompson (1990) seems to be partially applicable to the nonfinite forms as well. It is shown that the use of the type of the relative clause in conversation depends on the information status of the noun phrase, and, consequently, the subjects with nonhuman reference occur most frequently with object relatives.<sup>11</sup> Although valid for conversation, this observation can be extended to account for the significant proportion of the *-ed* clauses in the subject position in ACAD (40%), since the passive can be regarded as a variant of the object-relative, with a pronoun in the active (underlying) version. The unexpressed agent is either generic, or, more often, the author (replaceable by *we*), and as such it can be paralleled with the use of pronouns in these positions in conversation.

The results of the frequency counts need to be explained by features contributing to the varied rate of occurrence of the individual forms, which brings the comments back to the observation that discourse strategies have to be seen as interacting with the options available in the system of the language (i.e. the morphological potential). The morphological and syntactic constructions actually used correspond with the (external or internal) text world, which is different in the individual registers or styles. This difference in the text worlds, correlated with the system options, can be seen as providing an explanation of the varying frequencies of the two forms of modifiers which were studied.

The highest frequency of reduced forms (both per words and in comparison with the unreduced forms) in NAT can be correlated with the above discussed tendency of

<sup>&</sup>lt;sup>11</sup> "Nonhuman subject heads tend to occur with object-relatives" (ex. probably the only thing you'll see is like the table) (Fox & THOMPSON, 1990: 102).

academic prose to use subject gap constructions. A tendency to modify the subject noun phrases is also observable in ACAD on the whole. This may be tentatively attributed to the 'identifying' function of the participial clause, rather than the presentational function. Moreover, the morphological (temporal and aspectual) constraints on the use of the reduced forms seem to be neutralized in NAT, due to the atemporal use of the verbs:

"Academic prose, ..., uses the present tense not so much to focus on the immediate context, as to imply a lack of time restriction, with the present subsuming past and future time. ... in academic writing, the present tense is used to convey the idea that the propositions are true, regardless of time ... Further, the distinction between description of a state and habitual behaviour is blurred in this register. ... both stative verbs (such as the copula *be* and the lexical verb *require*) and dynamic verbs (such as *lead* and *reveal*) are used to present propositional information that is generally valid whenever the states or events actually occur. ... In contrast, ..., fiction writers use past tense verbs much more frequently than present tense verbs" (Biber et al. 1999: 457-458).

These characteristics seem to imply that the reduced form is more plausible in instances where the temporal reference is irrelevant in terms of duration or completion. This seems to be confirmed by the frequent use of *-ing* clauses in NAT (where the subjects are mainly non-human).

The consistent patterning of the above mentioned features clarifies the different proportion of the reduced forms in the respective registers: NAT displays the highest proportion of reduced modifiers (64%), being the prototype of ACAD in blurring state and habit, modifying the subject noun phrases, using subject gap constructions and modifying the non-human subject, and displaying non-human subjects with object relatives. FICT displays the lowest proportion of the reduced forms (25.3%): this register is more coherent as a narration of past events, but with more human subjects and the need to express temporal relations and aspectual modifications. In SOC the proportion of reduced forms is 29.3%: this figure can be explained by the fact that this register combines the generalizations of ACAD, but frequently has to make reference to past events. The limited morphologico-semantic potential of the reduced forms is not flexible enough to express this diversity, which results in the high frequency of the finite clauses in this text type.

### References

BIBER, D. (1988), Variation across speech and writing. Cambridge: Cambridge University Press.

BIBER, D. – JOHANSSON, S. – LEECH, G. – CONRAD, S. – FINEGAN, E. (1999), Longman Grammar of Spoken and Written English. Harlow: Longman.

CHANG, F. (1997), "Syntactic Adjustment in Response to Listener Difficulty", paper presented at the Sixty-Eighth Annual Meeting of the Midwestern Psychological Association, Chicago, IL.

DUŠKOVÁ, L., et al. (1994), *Mluvnice současné angličtiny na pozadí češtiny* [A Grammar of Contemporary English against the Background of Czech]. Praha: Academia.

FOX, B.A. – THOMPSON, S.A. (1990), "A discourse explanation of the grammar of relative clauses in English conversation", *Language* 66 (2), pp. 297–316.

e 7/8

- GREEN, G.M. (1996), *Pragmatics and Natural Language Understanding*. Mahwah, NJ: Lawrence Erlbaum Associates.
- GREENBAUM, S. (1988), "Syntactic Devices for Compression in English", in Klegraf, J. Nehls, D. (eds.), Essays on the English Language and Applied Linguistics, Heidelberg: Julius Groos, pp. 3–10.
- HUCKIN, T. CURTIN, E. GRAHAM, D. (1986), "Prescriptive Linguistics and Plain English: The Case of 'Whiz-deletions'", Visible Language XX (2), pp. 174-187.
- HUDDLESTON, R. PULLUM, G.K. (2002), The Cambridge Grammar of the English Language. Cambridge: University Press.

KORTMANN, B. (1991), Free Adjuncts and Absolutes in English. London: Routledge.

- LEECH, G.N. SHORT, M.H. (1981), Style in Fiction: A linguistic introduction to English fictional prose. London: Longman.
- LUTZ, William D. (2003), "Rules for Writing Plain English", Charles University, 18 March 2004 <a href="http://www.plainlanguagenetwork.org/Resources/lutz.htm">http://www.plainlanguagenetwork.org/Resources/lutz.htm</a>
- QUIRK, R. (1957), "Relative Clauses in Educated Spoken English", English Studies 38, pp. 97-109.
- QUIRK, R. GREENBAUM, S. LEECH, G. SVARTVIK, J. (1985), A Comprehensive Grammar of the English Language. London: Longman.
- ROHDENBURG, G. (1996), "Cognitive complexity and increased grammatical explicitness in English", Cognitive Linguistics 7-2, pp. 149-182.
- ŠALDOVÁ, P. (2000), "Adnominal relative clauses vs participial postmodification", Acta Universitatis Carolinae – Philologica 5 (1997), Prague Studies in English XXII, Praha: Charles University in Prague, The Karolinum Press, pp. 117–140.
- VACHEK, J. (1955), "Some Thoughts on the So-Called Complex Condensation in Modern English", Sborník prací filosofické fakulty brněnské university A3, pp. 63–71.

### Sources

### fiction

LODGE, David (1996), Therapy. Penguin Books. – [TH] MAITLAND, Sara (1990), Three times table. London: Chatto & Windus, Ltd. – [TT] POTTER, Dennis (1990), Hide and seek. London: Faber & Faber Ltd. – [GL] UNSWORTH, Barry (1995), After Hannibal. Penguin Books. – [HN]

### academic prose

BOTTOMORE, Tom (1993), Political sociology. London: Pluto Press. - [PS]
HUDSON, R.A. (1996), Sociolinguistics. Cambridge University Press. - [SS]
MABBERLEY, D.J. (1992), Tropical rainforest ecology. London: Blackie & Son Ltd. - [TE]
SUMMERFIELD, Michael A. (1991), Global geomorphology. Harlow: Longman Scientific & Technical. - [GM]

### Distribuce finitních a participiálních postmodifikátorů v beletrii a odborném textu

#### Résumé

Článek srovnává výskyt dvou forem postmodifikace v beletrii a odborných textech (společenskovědních a přírodovědných) s cílem zjistit, jaké faktory souvisejí s užitím více či méně explicitní formy a různým poměrem jejich využití v daných typech textů.

Odborný styl vykazuje vyšší míru postmodifikace než beletrie, nicméně společenskovědní texty využívají zřetelně více finitních vět, v textech přírodovědných naopak dominují nefinitní konstrukce. Studie ověřuje tři hypotézy týkající se syntaktických rysů, které mohou korelovat s distribucí více či méně explicitních forem postmodifikace:

- Vztažné věty s relativem v podmětu jsou častější v odborném stylu. Předpoklad, že nefinitní konstrukce, které mohou být protějškem těchto struktur, budou frekventovanější v textech, kde je nejvíce takových vztažných vět, se potvrdil.
- 2. Vztažné věty se vyskytují nejčastěji u členu v postverbální pozici. Hypotéza, že participiální konstrukce jako kratší alternativa budou modifikovat podmětové substantivum častěji než finitní věty, se také potvrdila. Tato tendence je nejpatrnější u minulého příčestí a v odborném stylu.
- Texty, které jsou náročnější na vyjadřování temporálních a vidových významů, obsahují největší zastoupení vět finitních.

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