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A CORPUS-BASED ANALYSIS OF THE POSTPOSITION OF CENTRAL ADJECTIVES

UDC 811.111'367
Original scientific paper

This paper deals with adjectives as post-head modifiers in noun phrases. The aim of the quantitative and qualitative analysis conducted on the British National Corpus was to find out which type of adjectival postmodification is most common. We analysed the position of a hundred central adjectives in five thousand sentences looking for the cases of adjectival postmodification. The postposed adjectives were then classified according to the type and counted. We found out that the most frequent type of adjectival postmodification is the one where the postposition is due to the heaviness of the adjectival phrase (adjectives with a complement or a modifier). The second most frequent type was the type of postmodification in which the postposition is governed by the head of the noun phrase, i.e. a compound indefinite pronoun. Furthermore, our analysis showed that postposition of coordinated descriptive adjectives is more frequent than expected, considering that this type of postmodification is not obligatory.

Key words: *adjectival postmodification, complex noun phrases, postnominal adjectives.*

1. Introduction

This paper explores adjectival postmodification in noun phrases, a phenomenon which is sometimes referred to as a "minor" type of postmodification (Quirk, Greenbaum, Leech, & Svartvik, 1985, p. 1292). In the current literature the principal focus is on more frequent types of postmodification realised by prepositional phrases, finite clauses and non-finite clauses, with only a few pages devoted to this topic. The first part of the paper provides a theoretical framework for a corpus-based analysis of the postposition of central adjectives. The quantitative and qualitative analysis conducted on the British National Corpus explores the tendency of these adjectives to be postposed when modifying a noun and aims at finding out which type of adjectival postmodification in noun phrases is most common.

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2. Theoretical framework

After nouns and verbs, adjectives are the third most important open word class in English. They are defined as "... a syntactically distinct class of words whose most characteristic function is to modify nouns. They typically denote properties – most centrally in the domain of size, shape, colour, worth, and age" (Huddleston & Pullum, 2002, p. 527). The most important syntactic functions of adjectives are attributive, predicative and postpositive. Postpositive adjectives are internal modifiers which immediately follow the head noun.

In some languages (French, for example) adjectival postmodification in noun phrases is quite common. However, the situation is different in the English language where adjectives typically function as premodifiers when they are a part of a noun phrase. This is probably the main reason why most grammarians devote only a page or two to this untypical syntactic function of adjectives.

In *The Cambridge Grammar of the English Language* (Huddleston & Pullum, 2002, pp. 445) we are given four situations in which postposed adjectives may or must occur:

- 1 when a predicative-only adjective is a part of a noun phrase (the house *currently ablaze*),
- 2 when an adjective has a prepositional phrase as complement (a leader *younger than you*),
- 3 some idiomatic phrases (the body *politic*), and
- 4 postpositive-only adjectives (trees *galore*).

In *Longman Grammar of Spoken and Written English* (Biber, Johansson, Leech, Conrad, & Finegan, 1999, p. 519), the situations are slightly different:

- 1 adjectives with indefinite pronoun heads such as *anyone, something* (everything *possible*),

- 2 'certain' adjectives that tend to be postposed, such as *available*, *involved* and *concerned* (the only details *available*),
- 3 a number of fixed expressions (*Asia Minor*), and
- 4 "heavy" adjectival phrases (sounds *totally different from what we think of as saxophone tone*).

In *A Comprehensive Grammar of the English Language* (Quirk et al., 1985, pp. 1293-1296) they are placed in the group of minor types of postmodification and four situations of adjectival postmodification are given:

- 1 adjectives modifying indefinite pronouns such as *somebody*, *everything*, etc. (something *different*),
- 2 adjectives with complementation or modification (a play *popular in the 1890s*),
- 3 fixed noun-plus-adjective phrases modelled on French (the heir *apparent*), and
- 4 adjectives with some clause element added (a man *usually honest*).

Christophersen and Sandved (Christophersen & Sandved, 1972, pp. 127-129) provide the most detailed classification of adjectival postmodification in *An Advanced English Grammar*:

- 1 coordinated adjectives (a man *good and noble*)
- 2 stock phrases with words of French origin (*Princess Royal*)
- 3 adjectives used with compound nominals ending in *-thing*, *-one* and *-body* (anything *wrong*)
- 4 'expanded' adjectival phrase (a style *impossible to imitate*)
- 5 adjectival phrases preceded by *too*, *so* or *as* (a style *too difficult to imitate*)
- 6 verbs used as adjectivals (no man *living*)
- 7 adjectives which can be found in both positions with a difference in meaning (the *present* members vs. the members *present*).

Some authors mention other situations when adjectives can or have to be postposed. Thus Đorđević (1997, p. 221) explains that adjectives are always postposed when they are preceded by a definite article, typically in the names of rulers (Ivan the *Terrible*), but some other examples can also be found (Jude the *Obscure*). Curme (1931, p. 64) mentions that some authors use this word order to achieve striking effect through the unusual position of adjectives - "After snobs *military* snobs *clerical* suggest themselves." (Thackeray). Eckersley and Eckersley (1981, p. 82) notice that participial adjectives that are predominantly verbal in meaning follow the noun.

Considering the lack of information on the topic and the fact that this type of postmodification is rather infrequent, we felt challenged to try to get a clearer picture of this phenomenon by conducting a corpus-based analysis of the postposition of central adjectives.

3. Method

3.1. Sample description

The position of a hundred adjectives was analysed. Since we had seen that post-head placement of adjectives is sometimes dependent on their syntactic function, there were no attributive-only and predicative-only adjectives in the sample. Postpositive-only adjectives were also not included in this analysis for obvious reasons. There were no adjectives with obligatory postposition for certain meanings (the members *present*), adjectives which 'tend' to be postposed (the books *available*) and participial adjectives (the examples *mentioned* above) in our sample. We thus had a random selection of 100 central adjectives which were the focus of our analysis and which are listed in alphabetical order. It should be mentioned here that we were careful to include both simple and derived adjectives in our sample.

active	dusty	horrible	peaceful	silky
ancient	eager	huge	persuasive	silly
arrogant	empty	hungry	plastic	simple
awful	envious	icy	pleasant	skinny
bitter	evil	juicy	plump	slippery
brave	fantastic	large	polite	small
bright	fresh	lazy	precious	solid
broad	friendly	lively	proud	sour
cold	furious	lonely	quiet	steep
comfortable	generous	lovely	rainy	strange
confident	gentle	lucky	repulsive	strong
creepy	good	melodic	ripe	successful
curly	great	modern	risky	swift
dangerous	green	mysterious	rough	tall
deep	grim	narrow	scary	terrible
delicious	guilty	nice	serious	thoughtful
delightful	handsome	noisy	sharp	ugly
different	healthy	obedient	shiny	usual
difficult	heavy	odd	short	wide
dirty	helpful	ordinary	silent	young

3.2. Procedure

The aim of the quantitative and qualitative analysis was to establish which type of adjectival postmodification in noun phrases is most common. Furthermore, we aimed at describing some interesting cases found in the corpus.

The corpus study was conducted on the British National Corpus (BNC) which is "a 100 million word collection of samples of written and spoken language from a wide range of sources, designed to represent a wide cross-section of British English from the later part of the 20th century, both spoken and written" (www.natcorp.ox.ac.uk). The SARA text searching software available at the official site provided a random selection of fifty sentences for each of the hundred adjectives (5000 sentences altogether). The position of adjectives in 5000 sentences obtained was then analysed. The sentences in which adjectives were postposed were further analysed and classified according to the type. The sentences were kept in the original form found in the BNC even though there were some obvious typing errors in some of them.

As expected, there were no cases of predicative-only, postpositive-only or participial adjectives, and all postposed adjectives in the sample sentences fell into one of the following types:

- Type 1: Adjectives modifying a compound indefinite pronoun,
- Type 2: Adjectives with complementation or modification,
- Type 3: Coordinated descriptive adjectives,
- Type 4: Adjectives with some clause element added,
- Type 5: Adjectives postposed in order to achieve a striking effect,
- Type 6: Adjectives preceded by a definite article,
- Type 7: Adjectives in some set phrases and institutionalised expressions.

It should be mentioned here that there were some sentences in our sample which could be placed into two of the seven types mentioned above. For instance, in example [1] where we investigated the position of the adjective *horrible*, this adjective modifies the compound indefinite pronoun *something* (type 1) but it is also coordinated with the adjective *obscene* (type 3).

[1] For a moment Franca thought that something *obscene and horrible* was about to happen.

To avoid confusion, the priority was given to the types of postmodification which are obligatory. Thus, this example was classified as type 1 since it is possible to say *obscene and horrible* things but not **obscene and horrible something*.

After counting the number of postposed adjectives of each type, we compared the numbers, trying to establish which of the seven types was most common.

In the second phase of the analysis we aimed at describing and illustrating some of the interesting cases of postmodification which had been found in the sample sentences.

4. Corpus findings and discussion

As mentioned above, the first part of the analysis aimed at comparing the numbers of various types of adjectival postmodification and finding out which type is most frequent. Chart 1 shows the number of the various types of adjectival postmodification. There were 125 postposed adjectives altogether. Type 1 accounted for 25.6 % of the total number of postposed adjectives. The most frequent type was type 2 which made up 35.2% of the total number. 22.4% of the postposed adjectives were type 3, 8.8% were type 4, 4.8% were type 5, only 0.8% were type 6 and 2.4% were type 7.

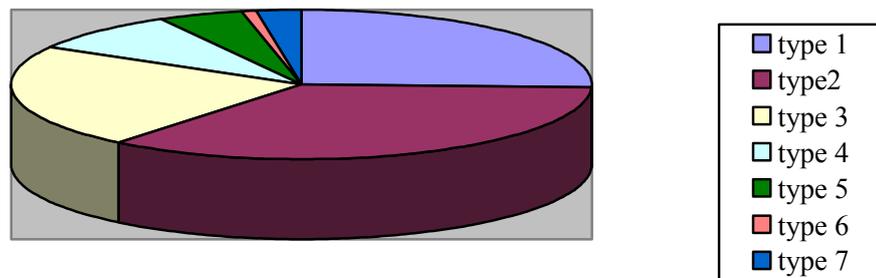


Chart 1

The results presented in Table 1 show the total number of postposed adjectives of each type as well as well as an illustrative example.

Type 1	32	Seventeen and a half per cent is something <i>horrible</i> , it just doesn't work out to anything reasonable.
Type 2	44	The agreement itself was realistic and flexible: Eastern Europe was to have 'free elections' and governments ' <i>friendly</i> ' to <i>Russia</i> .
Type 3	28	'I have seen at first hand her effect on people <i>young and old</i> .'

Type 4	11	Sheldon, <i>though personally friendly</i> , had never considered Taylor sound since the time when he opposed his appointment as a Fellow of All Souls.
Type 5	6	Heinzer, the Mister Nice of the Swiss Team, exploiting an avowed intent to turn Mister <i>Ugly</i> —‘I want to go for the big wins’— won the first race.
Type 6	1	Little is known of Cameron's subsequent activities, except for a series of financial differences with his father, until he is recorded in 1779 as being established in St Petersburg at the court of Catherine the <i>Great</i> .
Type 7	3	That'd be a B <i>sharp</i> .

Table 1

As it can be seen from Table 1 there were 125 cases of adjectival postmodification altogether. Most of the adjectives (44) were postposed due to the heaviness of the adjectival phrase. In this type of postmodification the choice of the position of adjectives is dependent on syntactic factors, i.e. it is obligatory.

The number of cases of postmodification type 1 and 3 is approximately the same – 32 and 28 respectively. However, it is interesting to mention that in type 1, where adjectives modify compound indefinite pronoun, the choice of position is governed by the head of the noun phrase, which makes this type of postmodification obligatory, whereas in type 3 the postposition of the adjective is optional. Knowing this, we expected the number of postposed adjectives type 3 to be much lower than the number of postposed adjectives type 1, but the analysis showed that that was not the case.

There were 11 cases of postposed adjectives with some clause element added, 6 adjectives were postposed in order to achieve striking effect and 3 adjectives were in this position because they were a part of a set

phrase. Interestingly, there was one case of a postposed adjective preceded by a definite article (Catherine the *Great*), which, in our sample, turned out to be the least common type of adjectival postmodification.

Table 2 provides more details on the types of postmodification found for each of the adjectives. The adjectives which were not postposed in any of the fifty sentences provided by the SARA text searching software are not included in the table.

	Type 1	Type 2	Type 3	Type 4	Type 5	Type 6	Type 7
active	2	-	-	-	1	-	-
ancient	-	-	1	-	-	-	-
arrogant	-	-	1	-	-	-	-
bitter	-	1	-	-	-	-	-
brave	2	-	-	-	-	-	-
bright	-	1	1	-	1	-	-
comfortable	1	1	-	-	-	-	-
confident	-	1	1	1	-	-	-
creepy	2	-	-	-	-	-	-
dangerous	-	1	-	-	-	-	-
deep	-	1	-	-	-	-	-
delicious	1	-	1	-	1	-	-
delightful	-	-	-	1	-	-	-
different	1	-	-	-	-	-	-
difficult	-	-	1	-	-	-	-
eager	-	5	-	-	-	-	-
empty	-	-	-	2	-	-	-
envious	-	1	-	-	-	-	-
evil	1	-	-	-	-	-	-
fresh	1	2	-	-	-	-	-
friendly	-	1	1	1	-	-	-
furious	-	3	-	-	-	-	-
great	-	1	-	-	-	1	-
grim	-	-	-	-	2	-	-
handsome	-	1	-	-	-	-	-
healthy	1	-	-	-	-	-	-
heavy	-	-	2	-	-	-	-
helpful	-	1	-	-	-	-	-
horrible	2	-	-	-	-	-	-
hungry	-	-	-	1	-	-	-
icy	-	-	-	2	-	-	-
juicy	1	1	-	-	-	-	-
large	-	1	1	-	-	-	-

lucky	-	-	-	-	-	-	1
mysterious	1	-	2	-	-	-	-
narrow	-	-	2	-	-	-	-
noisy	-	1	1	-	-	-	-
obedient	-	2	-	1	-	-	-
odd	2	-	-	-	-	-	-
peaceful	-	-	1	-	-	-	-
persuasive	-	-	1	-	-	-	-
pleasant	-	-	1	-	-	-	-
polite	-	-	1	-	-	-	-
precious	1	-	-	-	-	-	-
proud	1	-	-	-	-	-	-
ripe	-	6	-	-	-	-	-
risky	3	1	-	-	-	-	-
rough	1	-	-	-	-	-	-
scary	2	-	-	-	-	-	-
serious	-	1	-	-	-	-	-
sharp	-	-	-	-	-	-	1
shiny	-	3	4	-	-	-	-
short	1	-	-	-	-	-	-
silent	-	-	1	-	-	-	-
simple	-	-	1	-	-	-	1
slippery	-	2	-	-	-	-	-
solid	1	-	-	-	-	-	-
strange	2	-	-	-	-	-	-
tall	-	-	1	-	-	-	-
terrible	1	-	-	-	-	-	-
thoughtful	1	-	-	1	-	-	-
ugly	-	1	1	-	1	-	-
wide	-	4	-	1	-	-	-
young	-	-	1	-	-	-	-

Table 2

The second part of our analysis aims at describing some interesting cases of adjectival postmodification found in our sample.

Adjectival phrases modifying a compound indefinite pronoun vary in their complexity. Some of them are realised by the head element alone, i.e. the adjective, as in example [2], while the others are more complex as in example [3], where the adjectival phrase contains a pre-head element (a modifier), and in example [4], where the adjectival phrase contains a post-

head element (a complement). In some cases, the adjectival phrase contains both pre-head and post-head elements (example [5]).

[2]nothing *mysterious*

[3]something *unbeatably creepy*

[4]nothing *short of sensational*

[5]something *visually 'different' from the mass of photography which has gone before*

In six out of the thirty-two cases of type 1 postmodification adjectives were coordinated as in example [6].

[6]something *homely and delicious*

The most common type of postmodification was type 2 where the adjectival phrases is invariably complex or 'heavy'. These adjectival phrases contain either a complement (example [7]) or a modifier (example [8]).

[7]governments *'friendly' to Russia*

[8]a Street or way *60 feet wide*

The postposition of adjectives in type 3 is optional and it is typically used in order to emphasise the adjectives. Interestingly, in five out of the twenty-eight sentences those adjectives are opposites as in examples [9] and [10].

[9]people *young and old*

[10] streets *broad and narrow*

Postposed adjectives classified as type 5 are postposed in order to achieve a striking effect. There were only six of them, which shows that this type of postmodification is not very common. The examples found in our sample are from literature [11] and [12], the name of a company [13] and a newspaper article [14].

- [11] Star light, star *bright*, first star I see tonight...
- [12] castles *grim* towering to heaven
- [13] by Hamnett *Active*
- [14] Mister *Ugly*

There was only one case of postposition of an adjective preceded by a definite article - Catherine the *Great*. This type of postposition is not very common, and we assume that the main reason that we had this case of postposition is due to the fact that our random selection of central adjectives contained the adjective *great* which was used to describe many rulers (Frederick the *Great*, Alfred the *Great*, Alexander the *Great*, Tamburlaine the *Great*, Constantine the *Great*).

Postposed adjectives in the sentences classified as type 7 are a part of a set phrase (examples [15], [16] and [17]).

- [15] third time *lucky*
- [16] That'd be a B *sharp*.
- [17] fee *simple*

Since set phrases with this word order are not very numerous, we consider these examples very important since they have helped us expand the limited database of examples.

5. Conclusion

Adjectival postmodification in noun phrases is not very common in English and the postpositive use of adjectival phrases is subject to some severe syntactic restrictions. However, some types of adjectival postmodification seem to be more frequent than the others. Our analysis, which aimed at establishing which type is most common, has revealed that the postposition of adjectival phrases is most often due to the heaviness of the adjectival phrase (heavy adjectival phrases being the ones where the

adjective has a complement or a modifier). The second most frequent type is the one in which adjectives modify a compound indefinite pronoun. Furthermore, our analysis has shown that postposition of coordinated descriptive adjectives is more frequent than expected, considering that this type of postmodification is not obligatory.

Even though this analysis has given us some insight into the postposition of central adjectives, it has by no means exhausted this research topic. The most interesting question raised by this analysis is the stylistic effect of this unusual word order which remains to be explored.

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Apstrakt

POSTPOZICIJA PRIDEVA U ENGLESKOM JEZIKU – ISTRAŽIVANJE NA KORPUSU

Ovaj rad se bavi postpozicijom prideva u imeničkim frazama. To je retka i nedovoljno istražena pojava u engleskom jeziku. Cilj istraživanja koje smo sproveli na Britanskom nacionalnom korpusu bio je da utvrdimo koji tip postmodifikacije je najčešći. Analizirali smo položaj sto centralnih prideva u pet hiljada rečenica tragajući za slučajevima u kojima pridev stoji iza imenice. U našem uzorku našli smo sledeće tipove postpozicije:

- Tip 1 – pridevi koji modifikuju složene neodređene zamenice
- Tip 2 – pridevi sa dopunom ili modifikacijom
- Tip 3 – opisni pridevi koji su u koordinaciji
- Tip 4 – pridevi kojima je dodat neki rečenični element
- Tip 5 – pridevi koji su u postpoziciji iz stilskih razloga
- Tip 6 – pridevi kojima prethodi određeni član
- Tip 7 – pridevi u nekim ustaljenim izrazima.

Kvantitativna i kvalitativna analiza pokazala je da je u najvećem broju slučajeva postpozicija uzrokovana složenošću pridevske fraze. Česti su i slučajevi postpozicije prideva u kojima pridev modifikuje složene neodređene zamenice (something, nobody...). Malobrojni ali veoma interesantni su slučajevi postpozicije pridevi u nekim ustaljenim izrazima i iz stilskih razloga jer kod tih tipova postpozicija nije uslovljena sintaksičkim razlozima.