Abstract
In my paper, I set out to analyse and quantify the occurrence of ambiguity of English structures with no or minimal context. To this end, I use an online corpus. First, I define the concept of ambiguity, using two renown dictionaries; second, briefly describe each structure with examples from the corpus and other sources; third, gain some quantified data regarding their occurrence in the corpus; four, find out whether my objective and assumptions prove to be true on the basis of my data; finally, draw the conclusions, and try to see if there are any other fields to be researched related to the topic of my paper.

Keywords: ambiguity, corpus, structure, context

Introduction
English is full of phrases, (sub)clauses and sentences which have more than one possible meaning. First of all, I set some theoretical foundation to the concept of ambiguity by resorting to two sources, checking their entries for ambiguity:

1 obsolete : intellectual uncertainty : DOUBT *resolve me of all ambiguities—Christopher Marlowe*
2 a (1) : the condition of admitting of two or more meanings, of being understood in more than one way, or of referring to two or more things at the same time *their very ambiguity is one source of their use in defense of any measure—John Dewey* (2) : looseness of signification or reference *the technical writer must rigorously avoid all ambiguity—C.E.Kellogg*
2 b (1) : uncertainty of meaning or significance or of position in relation to something or somebody else *a sufficiently detailed account T to remove all ambiguity—P.E.More* *the social ambiguity of his parents—Lionel Trilling* (2) : mystery or mysteriousness arising especially from a vague knowledge or understanding *there was an ambiguity about this young lady—Nathaniel Hawthorne*
3 : the intellectual or emotional interplay or tension resulting from the opposition or contraposing of apparently incompatible or contradictory elements or levels of meaning in a poem or other literary work; especially : the opposition or contraposition of two or more meanings inherent in one word or symbol or in a consistent set of metaphoric or symbolic words
4 : the maintaining of two or more logically incompatible beliefs or attitudes at the same time or alternately : inconsistency resulting from vacillation between two opposing views *the inner ambiguity in each of us between reason and coercion—T.V.Smith*
5 : an ambiguous word or expression *a poetical ambiguity depends on the reader's weighting the possible meanings according to their probability—William Empson*

(Merriam-Webster’s Unabridged Dictionary, Incorporated [Software] (2000), Version 2.5)
Write clear definitions in order to avoid ambiguity.
A lot of humour depends on ambiguity.
There were several inconsistencies and ambiguities in her speech.
You must understand the ambiguity of my position.

Definitions 2 a (1), 2 b (1) from Merriam-Webster’s dictionary and definitions 1 and 2 from the Oxford dictionary seem the most relevant from the point of view of my paper. These definitions are the basis of my paper, therefore I will not address incorrect comprehension, misunderstanding or insensible meaning created by for example language learners’ mistakes.

In his work, Parker grasps the very essence of how to cognitively avoid ambiguity:

The study of how sentences are woven into a discourse and interpreted in context (sometimes called “pragmatics”) has made an interesting discovery, first pointed out by the philosopher Paul Grice and recently refined by the anthropologist Dan Sperber and the linguist Deirdre Wilson. The act of communicating relies on a mutual expectation of cooperation between speaker and listener. The speaker, having made a claim on the precious ear of the listener, implicitly guarantees that the information to be conveyed is relevant: that it is not already known, and that it is sufficiently connected to what the listener is thinking that he or she can make inferences to new conclusions with little extra mental effort. Thus listeners tacitly expect speakers to be informative, truthful, relevant, clear, unambiguous, brief, and orderly. These expectations help to winnow out the inappropriate readings of an ambiguous sentence, to piece together fractured utterances, to excuse slips of the tongue, to guess the referents of pronouns and descriptions, and to fill in the missing steps of an argument. (Parker 228)

I completely agree with his observations, because speakers and writers of foreign languages – especially when they are parties of an international meeting, conference or agreement – always want to correctly understand each other, which is of paramount importance in situations of interpretation and translation. As a translator and interpreter, I have always believed it would be useful somehow to prefigure the probability of the ambiguity of the occurrence of English structures in order to successfully select the correct meaning (in my paper, I cover only intralingual, i.e. English-English ambiguity, and suppose also that language users synthetise meaning in English). Therefore, I attempt to set up a range of structures quantified according to their occurrence in the 1,147,097-word British English 2006 corpus, which is a present-day English corpus belonging to CQPweb at Lancaster (https://cqpweb.lancs.ac.uk). The huge set of Lancaster corpora displays its hits with their wide contexts, i.e. a text of about 10-15 sentences apart from the sentence in which the structure in question is found. Since my aim is to check these structures with so little contexts as possible, I examine them only at sentence level, bearing in mind that the wider a context is the less ambiguous a structure is; and the fact that ambiguity is also highly dependent on one’s individual levels of understanding and background information.

Obviously, only those structures (i.e. structures offered in my taxonomy) may be covered the occurrences of which may be rendered as numeric data; therefore, non-quantifiable structures such as ellipsis must be omitted from the search in the corpus. I assume that each search (i.e. each structure in the taxonomy I offer) will provide a huge number of tokens. My presupposition is that the higher their number is, the higher ambiguity’s probability is;
however, it is also presumed that not all tokens will mean ambiguous structures. Once in possession of these quantitative data, I will be able to set up an order of occurrence.

In short, I have the following four objectives: on the basis of the selected corpus, 1) finding the most frequent structure in the corpus; 2) examining the ambiguity of a set of English structures without context; 3) setting up an order of frequency on the basis of PER MILLION values; and 4) finding out the nature of correlation between the potential and probability of the ambiguity of the structures in context.

Restrictions on the second objective: only one-word nouns (both plural and singular) as objects of the of-phrase and as noun heads are covered in my paper, because one-word nouns minimalise the extent of their contexts; by the same token, I apply one-word premodifiers in my chart; since the level at which I want to analyse these structures is the level of maximum a sentence. To examine the structures in question without context, I omit the phenomena requiring a broader context (i.e. anaphoric and cataphoric reference) from my paper – similarly to ellipsis as it may not be quantified.

Due to the vast realm of ambiguity, it seems to be impossible to create any general formulae to model ambiguous structures, this is why I suggest the following taxonomy of 16 quantifiable structures; I do not claim that there are no other possible structures, these are the ones I am presently able to quantify:

1.1 Premodification
   1.1.1 -ing verb + noun phrase
   1.1.2 adjective phrase + noun phrase + noun phrase
   1.1.3 noun phrase + ‘s-genitive + noun head

1.2 Postmodification
   1.2.1 noun head + of-genitive + noun phrase + ‘s-genitive
   1.2.2 noun head + of-genitive + noun phrase + adverb phrase
   1.2.3 noun head + of-genitive + noun phrase + -ing verb
   1.2.4 noun head + of-genitive + noun phrase + past participle
   1.2.5 noun head + prepositional phrase + prepositional phrase
   1.2.6 noun head + prepositional phrase + to be + past participle
   1.2.7 noun head + to-infinitive
   1.2.8 noun head + -ing verb + noun phrase
   1.2.9 adjective head + to-infinitive
   1.2.10 relative clauses (restrictive which clauses)
   1.2.11 relative clauses (restrictive that clauses);

1.3 Focussing adverbs
   1.3.1 also
   1.3.2 only

First, I attempt to find out which the most frequent structure of the corpus is. Therefore, I have had to compile a chart showing the above structures, frequency and PER MIL scores, the queries to input into the browser. Moreover, I have selected examples corresponding to the queries. Again, I examine the examples without context wherever possible. Second, I set up the order mentioned before; both my objectives will be completed at the end of my paper.

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1 We should bear in mind, however, that the ‘s-genitive is usually not modification; but sometimes it premodifies the noun head, like in my examples a bird’s nest, a summer’s day.
My point is that the structures shown above are centre cores around which their sentences are built. Since I want to examine these cores with no or as little context as possible, I present only word sequences as examples in my paper – the only exceptions being also and only, but they are only at sentence level in terms of context.

In my view, in the vast domain of linguistics the vast majority of the causes – i.e. class 1 – is situated somewhere between the two subdomains of pragmatics, which are defined by Crystal, in this way: one being pragmalinguistics, “the study of language use from the viewpoint of a language’s structural resources” (Crystal 2008: 379); and the second, applied pragmatics, which “focuses on problems of interaction that arise in contexts where successful communication is critical, such as medical interviews, judicial settings, counselling and foreign-language teaching” (Crystal 2008: 379).

On the basis of Crystal’s definitions and my own experiences, I believe that any ambiguous structure presupposes more than one understanding of the same context on the parts of the persons involved in the situation. But, paradoxically, context-free phrases may also be ambiguous, because the persons with the task of understanding them are rid of all contextual clues. Therefore, I conceive that, whenever possible, one should always retain and examine the context when it comes to dissolving ambiguity. I also provide the corpus examples in context later in my paper in order to see if there is any significant correlation between the potential and probability of ambiguity.

1.1 Premodification

1.1.1 -ing verb + noun phrase

Ambiguity appears if we have a sentence containing an -ing verb which is the premodifier of a noun head. If we are unable to differentiate between gerund and present participle, we might select an incorrect meaning from the set of meanings offered by the structure. Here, I list some of Budai’s examples, but written as seen in the 2016 Oxford dictionary; there are some examples from the British English 2006 Corpus, too: then I will detail my observation.

“taking place; helping people; sharing data” (British English 2006 Corpus)

“sitting room; dancing master” (Budai 1999: 279).

“running water; growing children” (Budai 1999: 280).

The various occurrence of -ing verb, either as gerund or present participle, may be misleading especially if the meanings of the verb and noun may form a sensible combination, such as: dancing master; growing children. Without the context, these phrases may be ambiguous. The actual meaning may be clarified through the method referred to by Budai: if the V-ing indicates the purpose of the head of its noun phrase, the verb is a gerund; if it indicates the action of the noun head, it is a participle (Budai 1999: 280).

As we can see from Quirk & Greenbaum’s sentences, -ing verbs may variously modify the meanings of sentences:

Brown’s paintings of his daughter (ie paintings owned by Brown, depicting his daughter but painted by someone else)
Brown’s paintings of his daughter (ie they depict his daughter and were painted by him)
The painting of Brown is as skillful as that of Gainsborough (ie Brown’s (a) technique of painting or (b) action of painting) Brown’s deft painting of his daughter is a delight to watch (ie it is a delight to watch while Brown deftly paints his daughter). Brown’s deftly painting his daughter is a delight to watch (either the action of painting is a delight to watch or it is a delight to watch while Brown deftly paints his daughter) I dislike Brown’s painting his daughter (ie I dislike either (a) the fact or (b) the way Brown does it) (…) I watched Brown painting his daughter (ie: either I watched Brown as he painted or I watched the process of Brown(‘s) painting his daughter)” (Quirk & Greenbaum 1978: 391).

Regarding the distribution of meanings in sentences like the above sentences, Budai (2007) writes that the selection of the correct verbal form – therefore, that of the unambiguous meaning on the level of the sentence – depends on the corresponding linguistic environments and meanings, and even the selection of the main verb makes a difference (Budai 2007: 246).

1.1.2 Adjective phrase + noun phrase + noun phrase

“national oil companies; composite shell elements; critical incident team” (British English 2006 Corpus)

I have deliberately not indicated any noun heads here to demonstrate the ambiguity of such phrases as these examples. What makes a difference here is whether we consider the two nouns as a two-unit noun; or the noun after the adjective phrase as the noun head, and the last noun as the head of that noun phrase. In this latter case, the adjective-noun compound premodifies the noun head.

1.1.3 Noun phrase + -‘s-genitive + noun head

“children’s film, Shakespeare’s fools, Anthony’s poems” (British English 2006 Corpus)

Here, ambiguity arises from the various kinds of genitives, for example possessive genitive, subjective genitive, objective genitive, etc. Without context, the specific meaning of a structure like that remains difficult to select.

1.2 Postmodification

Quirk & Greenbaum write about the ambiguity caused by multiple modification. They highlight “careful ordering of constituents in a noun phrase is essential to communicate all (and only) one’s intention” (Quirk & Greenbaum 1978: 394). The structure noun + postmodifier includes the most constituents, therefore they are the most likely to cause ambiguity; various examples demonstrate their complexity. Postmodifiers admit relative clauses (which and that-clauses) as well, but for clearer comprehension, I will cover them in a separate place in my paper. Additionally, we should bear in mind the typical hierarchy, i.e. subordination and co-ordination, of various structures, and what is termed as structural ambiguity (Quirk et al 1985: 1042).

On the basis of my search made in the British English 2006 Corpus (see Fig.1), we can see that structures including of- genitive do not create too numerous opportunities for ambiguity to occur, contrary to my previous assumptions. But, in my understanding, when word sequences like that do occur, their ambiguity might be caused by the possibility that a
postmodifier may refer either to the possession or the possessor: either of them may be the antecedent of a postmodifier. In my opinion, the context and common sense may help to clarify the meanings of such phrases and clauses.

Moreover, there are certain noun phrases that should be dealt with in a rather attentive manner – especially, if these phrases are of-phrases – when it comes to postmodification. Budai writes about such noun phrases that they “are generally treated as one word” (Budai 1999: 323).

1.2.1 Noun head + of-genitive + noun phrase+ ‘s-genitive;

“associate of Grant’s, doctrine of Christ’s” (British English 2006 Corpus)
“a portrait of Joe’s” (Budai 2007: 369).

“poem of Benny’s” (my example),

These phrases have three sensible meanings: it is a person who has made the possession and the possession belongs to him or her; the person has only created the possession; the person has a set of possessions, and we are referring to one of these in the sentence (double genitive).

1.2.2 Noun head + of-genitive + noun phrase + adverb phrase

“the neutrality of the monarch only; the surface of the sediment only; a removal of the restrictions currently” (British English 2006 Corpus)

In my understanding, the source of ambiguity of structures like these is the hierarchy of postmodifiers. For example, only may postmodify the entire structure of the neutrality of the monarch when it is regarded as a single unit; or either the neutrality or the monarch. If the neutrality is postmodified, that is postmodification with co-ordination, because of the monarch is also a postmodifier; if the monarch is postmodified by only, that is postmodification with subordination, because of the monarch itself is a postmodifier.

1.2.3 Noun head + of-genitive + noun phrase + -ing verb

“entrance of the night preceding; rest of the toys littering; part of a decade running” (British English 2006 Corpus)
“The winds of winter freezing everything.” (my example)

To my mind, the greatest source of ambiguity in this pattern is the subordination and co-ordination again. We must decide whether the -ing verb refers to the entire joint unit of possession + possessor, or only to the possessor. In this respect, this structure is similar to the structure noun head + of-genitive + noun phrase + past participle.

2 Budai mentions among other examples the prince of Wales (Budai 1999: 323), but my examples (the United States of America, or the man of the hour), etc. are also similar in this respect.
1.2.4 **Noun head + of-genitive + noun phrase + past participle**

"gut of a mosquito preserved; nature of the provision required; rest of the family gathered" (British English 2006 Corpus)

As I have already hinted at it in the previous section, postmodification with present and past participle is very likely to cause ambiguity: *The gate of the city built 5000 years ago*” (my example). In these cases as well, it is the context or our background knowledge that may help us in understanding these phrases correctly.

1.2.5 **Noun head + prepositional phrase + prepositional phrase;**

1. “(Put) // [the pizza in the box] // on the table.

“attack in an ambulance on the way; milk in a jug in the microwave; time on the phone in the garden” (British English 2006 Corpus)

As Budai also writes, there is a hierarchy between heads and postmodifiers, which is classified either as subordination or co-ordination or a combination of the two (Budai 2007: 418).

1.2.6 **Noun head + prepositional phrase + to be + past participle**

"van in the world to be given; workers on the island to be trained” (British English 2006 Corpus)

“A dish on the table to be eaten” (my example).
“A maggot in the apple to be eaten” (my example).

Under this heading come structures in which there is multiple postmodification, allowing either subordination or co-ordination – the question is whether the meaning we have attained is sensible or not. In this respect structures like these are similar to the ones in the previous structure.

1.2.7 **Noun head + to-infinitive**

"chance to see; opportunity to discuss; community to develop" (British English 2006 Corpus)

Structures like these may sometimes have an implicit passive meaning, in this respect this structure is similar to the previous one. The structure noun head + to-infinitive (*community to develop*) has much in common with postmodification with subordination in the case of a prepositional phrase + to be + past participle structure (*in the apple to be eaten*).

1.2.8 **Noun head + -ing verb + noun phrase**

"cars dominating the street; body regulating the use; people using the city” (British English 2006 Corpus)

This pattern may be the core of adverbial clauses of manner, time or place. Such clauses, however also might be easy to confuse with postmodifiers. We can see this phenomenon in the following example I have constructed using the above structure:
“The hoodlums were destroying the cars dominating the street.”

Especially participle phrases as adverbial phrases may be misleading:

“I was working at the Royal Academy of Music, organising big productions.” (Budai 2007: 693).
“The boys came into the room laughing loudly” (Budai 2007: 696).
“Good carbohydrates are low in sugar, providing energy throughout the day.” (Budai 2007: 696).

Appositive participle clauses as postmodifiers may also be understood as adverbial clauses of manner, cause, etc.:

 “[Dating back nearly 5,000 years, Stonehenge] will forever remain one of the world’s great unsolved mysteries” (Budai 2007: 416).
 “[Constructed nearly 5,000 years ago, Stonehenge] is the most popular prehistoric monument in the world” (Budai 2007: 416).

1.2.9 Adjective head + to-infinitive
“easy to use; best to separate; hard to believe” (British English 2006 Corpus)

Even this structure may have ambiguous meanings. As my sentence shows, the following example may be comprehended in two ways: “The lamb is ready to eat.” Its Hungarian equivalent is equally ambiguous: “A bárány evésre kész.” The only question is whether the lamb is a living creature which is about to eat, or a dish to be eaten.

1.2.10 Relative clauses (restrictive which-clauses)
Due to the careful and coherent syntax, the meaning of the following sentences is not ambiguous:

“The action is being taken partly in response to European laws which require all local authorities to reduce their reliance on landfill and, if action is not taken soon, councils will face fines.” (British English 2006 Corpus)

“What can be said with certainty is that by partially disowning a treaty which he has described as being good for Britain, Gordon Brown makes himself look ridiculous.” (British English 2006 Corpus)

“Then came the solos to introduce the band which led into their penultimate number entitled Blues in E, good bit of use of the wah wah on this one, and the tune drops down and then builds up.” (British English 2006 Corpus)

Budai, however, writes that relative clauses refer to a noun phrase or, less frequently, to the entire sentence; the linguistic unit to which a relative clause refers is termed antecedent (BUDAI 2007: 381). On page 420, BUDAI has a sentence, which may come under this heading: “The box was by the door which had contained valuables.” The Hungarian translation given next to the English original claims that it is the box that contained valuables3 – but is this the only possible understanding of this English sentence? Again, the context may decide if the box or the door is the antecedent of the that-clause; there may be doors with little secret places to hide something in them.

3 Az ajtónál volt a doboz, amelyben értékes dolgok voltak.
1.2.11 Relative clauses (restrictive that-clauses)

Again, carefully arranged words provide for clear meaning in the following sentences:

“Naturally, she has insured the item and this may be the only time in my life that I would be keen to read a policy document.” (British English 2006 Corpus)

“Then, when I was five (it may have been around the time that Allan joined our family), on one magical night that I’ve never forgotten, everything changed.” (British English 2006 Corpus)

“On the bus to Glebe, I picked up a Sydney newspaper that I found on the seat next to me.” (British English 2006 Corpus)

But, Quirk & Greenbaum have a brilliant example to illustrate ambiguity caused by a relative-clause: “The smiles of delight on all the faces that he liked” (Quirk & Greenbaum 1978: 394). Their question is mine as well: “was it the smiles or the faces that he liked?” (Quirk & Greenbaum 1978: 394). In sentences like this, the of- genitive is another factor of ambiguity, because, as we can see, the that-phrase may refer to either the possession or the possessor, as I have already detailed it earlier in my paper. A phenomenon similar to BUDAI’s hints on page 381 is described by Quirk & Greenbaum which is a special type of non-restrictive clause, the sentential relative clause: it “has as its antecedent not a noun phrase but a whole clause or sentence or even sequence of sentences” (Quirk & Greenbaum 1978: 383). Sentences including sentential relative clauses may be extraordinarily ambiguous; a dash before such relative clauses usually makes the sentence clear.

1.3 Focussing

Here, I can only comment very briefly on a tiny segment of the huge field of focussing. What I describe here is the two focussing adverbs also and only. They are highly ambiguous due to their forward-backward correlation with other units within the sentence (this correlation is, however, not identical with anaphoric and cataphoric references). This time, I present examples for both structures separately, and they are described together.

1.3.1 Also

“Sports days were also cancelled for fear of heat exhaustion.” (British English 2006 Corpus)

“People can also log on to the website and select any items they want to be delivered to their desired library.” (British English 2006 Corpus)

“The courts will also be asked to increase the number of compensation orders handed out to muggers, burglars and thugs who escape jail.” (British English 2006 Corpus)

1.3.2 Only

“In one county, 999 callers were told there were only THREE police on duty in a town of 22,000 people.” (British English 2006 Corpus)

“Currently only six out of 10 offenders ordered by the courts pay compensation to victims.” (British English 2006 Corpus)

“They’re under new ownership now but that is all irrelevant to me, I’m only concerned about getting a win at a very difficult place.” (British English 2006 Corpus)
Description of also and only

The above sentences may have several interpretations, depending on the correct intonation and placing of only and also. Budai highlights the ambiguity of these two adverbs in so clear and concise a manner that I quote here the entire passage:

Szőban a hangsúly és az intonáció egyértelművé teszi a jelentést, de írásban – különösen szövegösszefüggés nélkül – sokszor nem egyértelmű, hogy mire vonatkozik az alany és az állítmány közé helyezett fókuszáló határozószó:4

Betűkiemelések nélkül két olvasata van például a következő angol mondatnak.5
MY BROTHER also speaks a little Italian. (A fivérem is tud egy kicsit olaszul.)
My brother also speaks A LITTLE ITALIAN. (A fivérem tud egy kicsit olaszul is.)

Betűkiemelések nélkül az alábbi mondatnak négy olvasata van.6
TOM only phoned his mother today. (Csak Tomi telefonált ma az édesanyjának.)
Tom only PHONED his mother today. (Tomi csak telefonált ma az édesanyjának.)
Tom only phoned HIS MOTHER today. (Tomi ma csak az édesanyjának telefonált.)
Tom only phoned his mother TODAY. (Tomi csak ma telefonált az édesanyjának.)

(Ugyanezt bemutathatnánk az also-val is: Tomi is; telefonált is; az édesanyjának is; ma is.)7

Természetesen az angolban is megvan a lehetősége a határozószók mozgatásának:8
MY BROTHER also speaks a little Italian. My brother speaks A LITTLE ITALIAN also.
Only TOM phoned his mother today. Tom phoned only HIS MOTHER today. Tom phoned his mother only TODAY / TODAY only” (Budai 2007: 602).

Checking the corpus examples in context

On the next pages, I examine the examples taken from the corpus. This time the context is also provided for the structures which have not been analysed in context so far. Now, I would like to see if the structure in question is also ambiguous in context (highlighting in bold is mine).

Taking place occurs 14 times in the British English 2006 corpus;

1. The trips will be taking place until September.
2. South Gloucestershire is next on the list with events taking place in Yate today and Emersons Green and Kingswood tomorrow.
3. Details of when and where a court case is taking place.
4. Are there any major building or road-works taking place in or near your parish this year?
5. Entitled Home Is Where the Heart Is the exhibition comprises photographs taken by Jacob Crawford that show African cultural practices taking place both in Africa and Europe.
6. Two days before this however, we were informed that the Council were taking out an injunction “preventing the opening day from taking place” and that they would be seeking a possession order for the land and buildings.

Stress and intonation make the meaning clear in spoken language, but in the case of written forms – especially without context – it is often unclear what the focussing adverb placed between the subject and predicate refers to: (translation mine)

For example, without highlighting, this English sentence has two interpretations: (translation mine)

Without highlighting, the sentence below has four interpretations: (translation mine)

(This could be demonstrated by means of also as well: Tom also; also phoned; also his mother; also today) (translation mine)

Moving the positions of adverbs is of course possible in English as well: (translation mine)
7. If the second or third event 5 July 2006: Column 40WS resulted in disorder, the police would have lost their right to intervene to stop the fourth and subsequent events from taking place.

8. In our earlier Special Report on School Admission and Exclusion Appeal Panels ( Cm 5788 ) we specifically highlighted our concerns about the operation of appeal panels for foundation and voluntary-aided schools , particularly as regards : * the unacceptable arrangements for the appointment of panel members , which we did not consider to be sufficiently open and transparent ; * the isolated position of the clerks to the panels ; * the lack of expertise of the appeals clerks ; * the lack of training for panel members ; and * hearings taking place in inappropriate venues , such as the Headteacher’s study.

9. Ministers decided subsequently not to issue the updated Code of Practice and we understand that a more thorough revision of the Code is taking place, on which we look forward to being consulted in due course.

10. It is also possible to attach an intermediate treatment requirement to a supervision order made in civil proceedings, although we have never heard of this taking place.

11. What appears to be taking place in the situations reported in this study is that when teachers introduce, or " scaffold", a nave version of a threshold concept ( in that it is a deliberately simplified and limited delineation ) , it seems to act to a certain extent as a proxy for the threshold concept .

12. As this was taking place, the door to meeting room one opened and Ishida ’s secretary rolled in a trolley laden with fresh pots of coffee, pristine white cups and a large selection of cream cakes.

13. It’s the new sexual revolution darling, but instead of Woodstock and flower power orgies, it’s taking place through your fingertips.

14. All the activity seemed to be taking place on the other side of the track.

We can see that this structure is ambiguous in none of these sentences.

Helping people occurs 4 times in the British English 2006 corpus;

1. There will have eventually to be cuts in overall taxation but these have to be directed towards helping people clear their own debts rather than recreating another binge.

2. I also hope that the same media focus and energy given to Gillian ’s case may now be directed to those helping people in Darfur , and pressure may be applied upon the president to ensure his own people are released from their suffering.

3. Many employers from a range of industries are helping people to develop in this way.

4. The overall philosophy is helping people to help themselves.

This structure does not cause any ambiguity in these sentences.

Sharing data occurs 6 times in the British English 2006 corpus;

1. Departmental Ministers , including the Minister responsible for ONS ... authorise Heads of Profession for statistics and their staff to make a full professional contribution to National Statistics activities and authorise access to all data within their control for statistical purposes across government subject to confidentiality considerations and statutory requirements This guide aims to help the Government Statistical Service ( GSS ) meet this clear requirement of government by addressing some of the confidentiality and statutory requirements for sharing data for statistical purposes .

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9 We can see that only sentence 2 is slightly ambiguous, where those is the substitution of people. This ambiguity is, however, not caused by helping people.
2. In the United Kingdom, sharing data originally provided for administrative purposes for the production of Neighbourhood Statistics and other National Statistics is not incompatible with the original purpose indeed this important principle is found in section 33(2) of the Data Protection Act.
3. To manage risk, it is necessary to know where risk arises and to have a mechanism in place that, for each instance of sharing data, checks for and confirms compliance with the law and the National Statistics Code of Practice.
4. Sharing data to improve statistics and reduce respondent burden is consistent with government policy.
5. We have also provided DCA with the case for improving statistics through sharing data (see Annex D).
6. The case argues that the current legislative framework for sharing data for statistics is overly complex, given that our products can not identify individuals, nor cause any direct harm or distress to individuals.

This structure causes no ambiguity in these sentences.

Children’s film occurs twice in the British English 2006 corpus;
1. Wonder just how brain-dissolvingly dull a children’s film can be?
2. “If you can hear me” -- I remembered a Children’s Film Foundation film where this happened -- ” tap the phone, once.

This structure causes no ambiguity.

Shakespeare’s fools occurs twice in the British English 2006 corpus;
1. The influence of Shakespeare’s fools on Cavendish’s dramatic writings is examined in Lesley Peterson’s "Defects Redressed ..: Margaret Cavendish Aspires to Motley" (EMLS 14[2004] 8.130).
2. Peterson argues that Shakespeare’s fools are kindred spirits with his cross-dressing women, who dress, speak, and negotiate their liminal positions with those in power in similar ways.

This structure causes no ambiguity.

Anthony’s poems occurs twice in the British English 2006 corpus;
1. She looked at Anthony’s poems and stories when everyone else was there, read into them a suppressed violence which she hadn’t previously noticed.

This structure causes no ambiguity in this sentence.

National oil companies occurs twice in the British English 2006 corpus;
1. With the notable exception of Saudi Aramco, nearly all the Middle East's state-owned national oil companies are also technologically deprived.
2. But Arab national oil companies are increasingly bypassing such prohibitions by employing western contractors, such as Amec, Fluor and Foster Wheeler, instead.

This structure causes no ambiguity.
Composite shell elements occurs twice in the British English 2006 corpus;

1. The dodecahedron carcass panels were discretised into a mesh of 3D linear interpolated, triangular **composite shell elements**, with quadrilateral shell elements used to define the stitching region.
2. The use of **composite shell elements** permitted multiple material models to define each constituent layer of the complete ball material.

This structure causes no ambiguity.

Critical incident team occurs twice in the British English 2006 corpus;

1. A **critical incident team** has been pulled together, including senior members of staff, police and a psychologist me.
2. The **critical incident team** is shouting at the chief fire officer, who is shouting at his second-in-command, who is shouting at someone else.

This structure causes no ambiguity.

Associate of Grant’s occurs once in the British English 2006 corpus;

1. "Five years before, an **associate of Grant**’s, ambitious enough to try and freelance some Colombian cocaine conveniently mislaid between Amsterdam and the Sussex coast, had been shot dead at the traffic lights midway along Pentonville Road, smack in the middle of the London rush hour.

This structure causes no ambiguity.

Doctrine of Christ’s occurs twice in the British English 2006 corpus;

1. However, the metaphysics Jenson underpins his **doctrine of Christ**’s pre-existence with (and his doctrine of God too), is difficult to make sense of.
2. Recall that, in explaining the third of his observations governing his **doctrine of Christ**’s pre-existence, Jenson says, "God’s eternity is the infinity of a life.

This structure causes no ambiguity.

The neutrality of the monarch only occurs once in the British English 2006 corpus;

1. It "reflects on "**the neutrality of the monarch only** in the judgment of fastidious commentators.

Here, the focusing role of **only** may lead to various interpretations, therefore this structure is ambiguous.

The surface of the sediment only occurs once in the British English 2006 corpus;

1. The effect of evaporation from **the surface of the sediment only** becomes important if the water level remains close to the surface for a considerable time, i.e. where there is a low velocity.

Again, the focusing role of **only** may lead to various interpretations, therefore this structure is ambiguous.
A removal of the restrictions currently occurs once in the British English 2006 corpus;

1. "Consumers would benefit from fair remuneration for sub-postmasters and a removal of the restrictions currently imposed on retailers by Post Office Limited.

This structure is not ambiguous in the sentence.

Entrance of the night preceding occurs once in the British English 2006 corpus;

1. In 1658, Archbishop James Ussher had calculated that the beginning of time fell upon the entrance of the night preceding the 23rd day of October in the year 4004 and this remarkable figure was included in the English Bible.

This structure is not ambiguous in the sentence.

Rest of the toys littering occurs once in the British English 2006 corpus;

1. She sighed, picked up the rest of the toys littering the floor and decided to relocate to the bedroom to escape the demands of her kitchen.

This structure is not ambiguous in the sentence.

Part of a decade running occurs once in the British English 2006 corpus;

1. Going to boarding school also meant that I spent the better part of a decade running around outside playing sports a dream for a lot of young kids as well as a privilege and an opportunity that is no longer available in most state schools.

This structure is not ambiguous in the sentence.

Gut of a mosquito preserved occurs once in the British English 2006 corpus;

1. Extract 'dino DNA' from dinosaur blood in the gut of a mosquito preserved in amber, combine with amphibian DNA (the only type of animal known to regenerate its own limbs), add a pinch of salt, heat at gas mark 4 et viola!

Very painstakingly speaking, we may have two possible comprehensions, regarding the first clause: it is gut which is preserved in amber (coordination); or mosquito (subordination). In the case of this sentence, however, the difference between these meanings is marginal; still I believe this sentence ambiguous.

Nature of the provision required occurs once in the British English 2006 corpus;

1. Whilst this target appears to be on track for achievement, it is clear that the nature of the provision required is changing.

Again, we may have several possible readings, regarding the second clause: it is nature which is required (coordination); or provision (subordination); or, a third reading is if we consider nature of the provision as one unit. This makes me think this sentence is ambiguous.
Attack in an ambulance on the way occurs once in the British English 2006 corpus;

1. Fourteen years ago, 71-year-old John Wright from Stroud in Gloucestershire had a heart attack in an ambulance on the way to hospital.

This structure is not ambiguous in the sentence.

Milk in a jug in the microwave occurs once in the British English 2006 corpus;

1. Warm the milk in a jug in the microwave (or in a pan).

This structure is not ambiguous in the sentence.

Time on the phone in the garden occurs once in the British English 2006 corpus;

1. But I was equally desperate to work out what was going on with these photos, and spent most of the time on the phone in the garden, to their mounting—and quite reasonable—fury.

This structure is not ambiguous in the sentence.

Van in the world to be given occurs once in the British English 2006 corpus;

1. This is the first fish-and-chip van in the world to be given a Les Routiers award; the guide even created a new structure in order to include it.

This structure is not ambiguous in the sentence.

Workers on the island to be trained occurs once in the British English 2006 corpus;

1. Liam Murtagh, Project Manager of the Borderwise Project said that Citizens Advice and Comhairle had successfully developed a cross border information and advice service with Peace 2 funding and had successfully deployed the first advice workers on the island to be trained in both jurisdictions.

This structure is not ambiguous in the sentence.

Chance to see occurs 4 times in the British English 2006 corpus;

1. It’s a beautiful place, and I had a chance to see some of the countryside.
2. Reluctant to engage immediately with these theoretical debates, Hamilton took every chance to see the signs of volcanic action for himself by spending many hours on the often inhospitable slopes of Vesuvius, reaching the crater more than sixty times.
3. We could lose our final chance to see our charred father in the terminal ward.
4. He was missing lunch and Science Club neither of which mattered that much; but he was also missing out on the chance to see Fiona and that did.

This structure is not ambiguous in these sentences.
Opportunity to discuss occurs 3 times in the British English 2006 corpus;

1. I have no doubt that racism, whether coming from Nazi ideology or perverted genetics, is wrong, but I for one would have enjoyed the opportunity to discuss this with a proponent, no matter how abhorrent his views.

2. Although both presented affinities in terms of historical scope, their distinct approaches offer the reviewer an opportunity to discuss the relation between curatorial practice and the dissemination of an art history that, despite its relative obscurity, is increasingly attracting international attention.

3. My opportunity to discuss Hope’s future with Father never arrived.

This structure is not ambiguous in these sentences.

Community to develop occurs twice in the British English 2006 corpus;

1. There are some lovely touches – local children are trained to be “mini-guides” outside school hours, helping the community to develop its own appreciation of the importance of conservation – but the centre’s slightly sheepish apology for the tiny size of its tanks (only one in 100,000 turtles bred on the beaches ends up in a tank for “environmental education purposes,” declare a few small notices) feels pretty lame.

2. It came into existence because of the pressing need recognised by the Muslim community to develop places of worship and learning also as centres of excellence of good governance and community cohesion, involving all sections of the community especially women and youth.

This structure is not ambiguous in these sentences.

Cars dominating the street occurs once in the British English 2006 corpus;

1. Without cars dominating the street, they simply strolled around.

This structure is not ambiguous in this sentence.

Body regulating the use occurs once in the British English 2006 corpus;

1. But a government body regulating the use of healthcare products, has now issued new advice that some departments are so distant from equipment that there is no risk from mobile phones.

This structure is not ambiguous in this sentence.

People using the city occurs once in the British English 2006 corpus;

1. Bristol’s head of libraries, Kate Davenport, hopes the new system will get more people using the city’s libraries.

This structure is not ambiguous in this sentence.
Easy to use occurs three times in the British English 2006 corpus;

1. The other less bandwidth-intensive tasks like viewing lower-quality video, streaming music and browsing through pictures is very nippy and easy to use, though it might have been nice if the interface had a few more graphical touches.
2. "The website is very easy to use and taking part couldn't be simpler.
3. This may mean exempting small businesses from regulation or where that is not possible, other approaches such as simpler guidance and easy to use forms.

This structure is not ambiguous in these sentences.

Best to separate occurs once in the British English 2006 corpus;

1. But, as this account grew and became more detailed in its attempt to become as comprehensive as possible (an impossible task to execute), it seemed best to separate it altogether from the sequel, establishing it as an independent, reflective essay on what is the focus of my own theological project: the negotiation between Christian living and thinking and the contemporary world.

This structure is not ambiguous in this sentence.

Hard to believe occurs once in the British English 2006 corpus;

1. His cousin had always enjoyed playing the field and it was hard to believe that he would remain faithful to her for the rest of his life.

This structure is not ambiguous in this sentence.

Conclusion

Having searched in the British English 2006 Corpus, I found that hits of extremely various frequencies and PER MILLION values were returned. In Chart 1, I show the structures in order of decreasing frequency per million words.

<table>
<thead>
<tr>
<th>The List of All the Structures in Order of Permillionage Frequencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structures with their Numbers used in the Taxonomy</td>
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<tr>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>1.1.2 adjective phrase + noun phrase + noun phrase</td>
</tr>
<tr>
<td>1.2.11 relative clauses (restrictive that clauses)</td>
</tr>
<tr>
<td>1.2.7 noun head + to-infinitive</td>
</tr>
<tr>
<td>1.1.3 noun phrase + -'s-genitive + noun head</td>
</tr>
<tr>
<td>1.1.1 -ing verb + noun phrase</td>
</tr>
<tr>
<td>1.2.10 relative clauses (restrictive which clauses)</td>
</tr>
<tr>
<td>1.2.9 adjective head + to-infinitive</td>
</tr>
<tr>
<td>1.3.2 only</td>
</tr>
</tbody>
</table>
1.3.1 also 1,141.14
1.2.1 noun head + of-genitive + noun phrase + 's-genitive 244.09
1.2.8 noun head + -ing verb + noun phrase 231.89
1.2.5 noun head + prepositional phrase + prepositional phrase 94.15
1.2.4 noun head + of-genitive + noun phrase + past participle 54.92
1.2.3 noun head + of-genitive + noun phrase + -ing verb 44.46
1.2.2 noun head + of-genitive + noun phrase + adverb phrase 15.69
1.2.6 noun head + prepositional phrase + to be + past participle 1.74
Total PER MIL: 23,250.84

Chart 1

By far the most frequent structure is adjective phrase + noun phrase + noun phrase (PM: 5,866.11). In spite of that, its examples were not ambiguous. The least frequent structure is the noun head + prepositional phrase + to be + past participle, with a permillionage value of 1.74, which amazed me very much, I had expected more hits.

As also seen in Figure 1, there seem to be 4 structure groups according to their frequencies:¹⁰

Group 1

1.2.11 relative clauses (restrictive that clauses) 3,276.09
1.2.7 noun head + to-infinitive 3,172.36
1.1.3 noun phrase + -'s-genitive + noun head 3,052.05
1.1.1 -ing verb + noun phrase 2,144.54
Total PER MIL: 11,645.04

Group 2

1.2.10 relative clauses (restrictive which clauses) 1,429.69
1.2.9 adjective head + to-infinitive 1,267.55
1.3.2 only 1,214.37
1.3.1 also 1,141.14
Total PER MIL: 5,052.75

Group 3

1.2.1 noun head + of-genitive + noun phrase + 's-genitive 244.09
1.2.8 noun head + -ing verb + noun phrase 231.89
Total PER MIL: 475.98

¹⁰ I do not consider adjective phrase + noun phrase + noun phrase (PM: 5,866.11) as a separate group.
If we examine these groups, we can see that Group 1 includes 2 postmodifying (relative clauses (restrictive that clauses) and noun head + to-infinitive) and 2 premodifying structures (noun phrase + -‘s-genitive + noun head and -ing verb + noun phrase). This group is almost twice bigger than the remaining two combined. It may be worth another study to shed light on the reason for that phenomenon.

Group 2 comprises 2 structures of postmodification (relative clauses (restrictive which clauses) and adjective head + to-infinitive), and 2 focussing structures (only and also). The permillionage value of these four structures provides for about 25 per cent of the total permillionage value in Chart 1 (23,250.84).

Groups 3 and 4, the lower extremity of my frequency list, show only postmodifying structures (noun head + of-genitive + noun phrase+ ‘s-genitive; noun head + -ing verb + noun phrase; and noun head + prepositional phrase + prepositional phrase; noun head + of-genitive + noun phrase + past participle; noun head + of-genitive + noun phrase + -ing verb; noun head + of-genitive + noun phrase + adverb phrase; noun head + prepositional phrase + to be + past participle, respectively.

Summing up the data and observations regarding these groups, I find it odd that while postmodifying structures are quite frequent, the structure being the first in Chart 1 is a premodifying structure, in itself demonstrating a PER MIL value of 5,866.11. Focussing adverbs are not so numerous, their total value being only 2,355.51.
We should bear in mind, however, that a single study on word frequency done in only one corpus may not produce any general claims regarding the use of a certain structure in either written or spoken language. Only comparing several corpora in terms of word frequency may be the grounds for formulating such claims that this or that structure is rarely used.\(^\text{11}\)

Regarding the correlation between frequency of a structure and the potential of ambiguity, we may say they are proportional; the higher probability of ambiguity, however, does not follow directly from the higher potential of ambiguity, according to my observation.

\(^\text{11}\) Infrequent usage, however, does not necessarily lead to high or low probability of ambiguity (e.g. the context and some background knowledge clarify the meaning).
<table>
<thead>
<tr>
<th>British English 2006 Corpus</th>
<th>Structures with No or Minimal Context</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Premodification</td>
</tr>
<tr>
<td>Number in the Taxonomy</td>
<td>1.1.1</td>
</tr>
<tr>
<td>Structure Searched</td>
<td>-ing verb + noun phrase</td>
</tr>
<tr>
<td>Example:</td>
<td>taking place, helping people, sharing data</td>
</tr>
<tr>
<td>Frequency:</td>
<td>2,460</td>
</tr>
<tr>
<td>PER MIL:</td>
<td>2,144.54</td>
</tr>
<tr>
<td>Query:</td>
<td>_VVG* _N*</td>
</tr>
<tr>
<td>Number in the Taxonomy</td>
<td>1.1.2</td>
</tr>
<tr>
<td>Structure Searched</td>
<td>adjective phrase + noun phrase + noun phrase</td>
</tr>
<tr>
<td>Example:</td>
<td>national oil companies, composite shell elements, critical incident team</td>
</tr>
<tr>
<td>Frequency:</td>
<td>6729</td>
</tr>
<tr>
<td>PER MIL:</td>
<td>5,866.11</td>
</tr>
<tr>
<td>Query:</td>
<td>_JJ* _N* _N*</td>
</tr>
<tr>
<td>Number in the Taxonomy</td>
<td>1.1.3</td>
</tr>
<tr>
<td>Structure Searched</td>
<td>noun phrase + -s-genitive + noun head</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>Example:</td>
<td>children’s film, Shakespeare’s fools, Anthony’s poems</td>
</tr>
<tr>
<td>Frequency:</td>
<td>3,501</td>
</tr>
<tr>
<td>PER MIL:</td>
<td>3,052.05</td>
</tr>
<tr>
<td>Query:</td>
<td>_N* 's _GE _N*</td>
</tr>
<tr>
<td>Number in the Taxonomy</td>
<td>1.2.4</td>
</tr>
<tr>
<td>Structure Searched</td>
<td>noun head + of-genitive + noun phrase + past participle^{12}</td>
</tr>
<tr>
<td>Example:</td>
<td>gut of a mosquito preserved, nature of the provision required, rest of the family gathered</td>
</tr>
<tr>
<td>Frequency:</td>
<td>63</td>
</tr>
<tr>
<td>PER MIL:</td>
<td>54.92</td>
</tr>
<tr>
<td>Query:</td>
<td>_N* of _IO _AT* _N*</td>
</tr>
<tr>
<td>Number in the Taxonomy</td>
<td>1.2.5</td>
</tr>
<tr>
<td>Structure Searched</td>
<td>noun head + prepositional phrase + prepositional phrase</td>
</tr>
<tr>
<td>Example:</td>
<td>attack in an ambulance on the way, milk in a jug in the microwave,</td>
</tr>
</tbody>
</table>

^{12} Morphologically, gerund and present participle are identical, therefore they are discussed under one heading. In terms of morphology, however, to-infinitives and past participles have different forms, therefore they are discussed under different headings.
<table>
<thead>
<tr>
<th>Structure Searched</th>
<th>Query</th>
<th>Number in the Taxonomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>noun head + prepositional phrase + to be + past participle</td>
<td>(_N^* _II^* _AT^* _N^*)</td>
<td>1.2.6</td>
</tr>
<tr>
<td>van in the world to be given, workers on the island to be trained</td>
<td>(_N^* _II^* _AT^* _N^<em>) to be (_V^</em>)</td>
<td>1.2.7</td>
</tr>
<tr>
<td>noun head + to-infinitive</td>
<td>(_N^* _TO _VVI^*)</td>
<td>1.2.8</td>
</tr>
<tr>
<td>chance to see, opportunity to discuss, community to develop</td>
<td>cars dominating the street, body regulating the use, people using the city</td>
<td>266</td>
</tr>
<tr>
<td>noun head + -ing verb + noun phrase</td>
<td>231.89</td>
<td></td>
</tr>
<tr>
<td>Query:</td>
<td><em>N*</em> <em>VVG*</em> <em>AT*</em></td>
<td>N*</td>
</tr>
<tr>
<td>-------</td>
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</tr>
<tr>
<td>Number in the Taxonomy</td>
<td>1.2.9</td>
<td></td>
</tr>
<tr>
<td>Structure Searched</td>
<td>adjective head + to-infinitive</td>
<td></td>
</tr>
<tr>
<td>Example:</td>
<td>easy to use, best to separate, hard to believe</td>
<td></td>
</tr>
<tr>
<td>Frequency:</td>
<td>1,454</td>
<td></td>
</tr>
<tr>
<td>PER MIL:</td>
<td>1,267.55</td>
<td></td>
</tr>
<tr>
<td>Query:</td>
<td><em>JJ*</em> to <em>V*</em></td>
<td></td>
</tr>
<tr>
<td>Number in the Taxonomy</td>
<td>1.2.10</td>
<td></td>
</tr>
<tr>
<td>Structure Searched</td>
<td>relative clauses (restrictive which clauses)</td>
<td></td>
</tr>
<tr>
<td>Example:</td>
<td>See the randomly selected sentences from the corpus in the body of the text.</td>
<td></td>
</tr>
<tr>
<td>Frequency:</td>
<td>1,640</td>
<td></td>
</tr>
<tr>
<td>PER MIL:</td>
<td>1,429.69</td>
<td></td>
</tr>
<tr>
<td>Query:</td>
<td>which\13 which \ which \ which _V*_ which</td>
<td></td>
</tr>
<tr>
<td>Number in the Taxonomy</td>
<td>1.2.11</td>
<td></td>
</tr>
<tr>
<td>Structure Searched</td>
<td>relative clauses (restrictive that clauses)</td>
<td></td>
</tr>
<tr>
<td>Example:</td>
<td>See the randomly selected sentences from the corpus in the body of the text.</td>
<td></td>
</tr>
<tr>
<td>Frequency:</td>
<td>3,758</td>
<td></td>
</tr>
<tr>
<td>PER MIL:</td>
<td>3,276.09</td>
<td></td>
</tr>
</tbody>
</table>

13 Here, I had to deduct the sum of the figures of queries \ which, \ which \ which \_V*_ which (920+44+21+55, resp. = 1040) from the figure of which (2680). Thus, the frequency of restrictive which-clauses is 1,640. Then, PER MIL was calculated.
Chart 2 shows how I have attained my data; it also includes queries, raw frequency and permillionage values. Done in another corpus, my searches would have probably returned different results. It may be worth doing some profound research to find out the reason for this frequency order of these structures. From my data I come to the conclusion that the probability of the ambiguity is extraordinarily low despite high values of corpus frequencies or per million values. Context and background knowledge help us in selecting the correct way of understanding the message conveyed.

Bibliography


Electronical sources


Online sources

https://cqpweb.lancs.ac.uk

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14 Here, I had to deduct the sum of the figures of queries \ that, \ that \ that \ V* that and \ that_DD1 (404+42+42+3,614+2,638, resp. = 6,740) from the figure of that (10,498). Thus, the frequency of restrictive that-clauses is 3,758. Then, PER MIL was calculated

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