

The Classification of Finite Subordinate Clauses

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1. Introduction

Traditional grammar has classified the finite subordinate clauses of English in the same way for a century or more. What the tradition asserts is that there are three major types: **noun clauses**, **adjective clauses**, and **adverb clauses**. The basis for this classification is a belief in a functional analogy with nouns, adjectives, and adverbs, respectively. We argue here that the classification is of no use. It should have been abandoned long ago. It is jettisoned completely in *The Cambridge Grammar of the English Language* (Huddleston and Pullum 2002, henceforth *The Cambridge Grammar*). Here we develop the arguments that led us to this course of action and outline our alternative analysis.

Consider first some examples that illustrate why traditional grammarians thought that noun clauses were like nouns, adjective clauses were like adjectives, and adverb clauses were like adverbs:

- | | | | | |
|-----|------|----|--|--------------------|
| (1) | i. | a. | <u>That things will improve</u> is likely. | [noun clause] |
| | | b. | <u>Improvement</u> is likely. | [noun] |
| | ii. | a. | The boys <u>who were guilty</u> were expelled. | [adjective clause] |
| | | b. | The <u>guilty</u> boys were expelled. | [adjective] |
| | iii. | a. | She left <u>before I could speak to her</u> . | [adverb clause] |
| | | b. | She left <u>immediately</u> . | [adverb] |

In (i) the subordinate clause of (a) (underlined) is subject of *is likely*, like the noun *improvement* in (b).¹ In (ii) the subordinate clause of (a) is modifier of *boys*, like the adjective *guilty* of (b); the difference in position relative to the head does not detract from the functional likeness – compare also *The boys guilty of this misconduct were expelled*, where the adjective phrase likewise follows the head noun. And in (iii) the underlined expression functions as modifier of the verb *left*, or adjunct, like the adverb *immediately* of (b).

The main argument of this paper is that such functional analogies provide an unsatisfactory basis for the classification of subordinate clauses. The traditional set of categories needs to be replaced by one based on features of the internal structure of subordinate clauses, as is done in *The Cambridge Grammar*. The traditional scheme is open to objection on three counts: (i) it involves a huge and unmotivated overlap between the categories, notable between noun and adverb clauses; (ii) it assumes an inappropriate division between subordinating conjunctions and preposition; and (iii) it overlooks major functional differences between subordinate clauses and the above three word categories.²

2. Overlap between the Categories

On the traditional analysis we find a massive overlap between the noun clause and the adverb clause categories. The examples in (2) are illustrative.

| (2) | NOUN CLAUSE | ADVERB CLAUSE |
|-----|--|--|
| i. | a. She told me <u>that he fainted</u> . | b. He was so exhausted <u>that he fainted</u> . |
| ii. | a. I can't remember <u>whether the meeting is on Monday or Tuesday</u> . | b. I won't be able to attend, <u>whether the meeting is on Monday or Tuesday</u> . |

There is, however, no justification for such a dual-category analysis. The underlined subordinate clauses have different **functions** in the (a) and (b) examples, but it is an unnecessary complication to say that they also belong to different **categories**. What is especially unsatisfactory is that the overlap is quite systematic: subordinate clauses that occur as adjunct in the (b) constructions illustrated here can all occur also as complement in the (a) constructions. The case is thus comparable to that found with the nouns (or noun phrases) in (3), for example:

| | | |
|-----|----|---|
| (3) | i. | <u>That day</u> was one of the happiest I can remember. [subject] |
|-----|----|---|

¹ Most modern grammars would say that the subject in (b) is a noun phrase rather than, immediately, a noun. On this account, the functional similarity is not between a clause and a noun but between a clause and a phrase headed by a noun. The distinction between noun and noun phrase is of considerable importance for syntactic theory, but it is not crucial for the issues discussed in this paper and hence will be glossed over here. Similarly for adjectives and adverbs.

² It is a pleasure to dedicate this paper to Aimo Seppänen: his numerous articles on English Grammar and the extensive email correspondence we had with him during the preparation of *The Cambridge Grammar* were of immense benefit to our work.

- | | | |
|------|--|-----------------------------|
| ii. | I spent <u>that day</u> in hospital. | [object] |
| iii. | I haven't seen her since <u>that day</u> . | [complement of preposition] |
| iv. | I didn't go to work <u>that day</u> . | [adjunct] |

The function of *that day* is different in each of these examples, but there is no difference in category: *day* is a noun in each case, and *that day* a noun phrase. There is no more justification for assigning *that he fainted* and *whether the meeting is on Monday or Tuesday* to different clause categories in (2) than there is for assigning *day* to different word categories in (3).

3. The Division between Subordinating Conjunctions and Prepositions

In traditional grammar subordinating conjunction are words which introduce subordinate clauses, whereas prepositions are words which, in principle, combine with nouns or pronouns. The qualification “in principle” is needed because in practice words standardly analysed as prepositions are found with a range of other kinds of elements too. Compare (4) – (5), where double underlining marks the preposition or subordinating conjunction, and single underlining the following element, whose category is given on the right:

- | | | |
|-------|--|-----------------------------|
| (4) | TRADITIONAL PREPOSITION | |
| i. | It is made [<u>of</u> <u>wood</u>]. | [noun] |
| ii. | I regard it [<u>as</u> <u>outrageous</u>]. | [adjective] |
| iii. | You won't need it [<u>until</u> <u>later</u>]. | [adverb] |
| iv. | She emerged [<u>from</u> <u>under the table</u>]. | [preposition phrase] |
| v. | I haven't seen her [<u>since</u> <u>leaving London</u>]. | [gerund-participial] |
| vi. | We couldn't agree [<u>on</u> <u>which one to choose</u>]. | [infinitival interrogative] |
| vii. | It depends [<u>on</u> <u>how much you want it</u>]. | [finite interrogative] |
| viii. | I recall his surprise [<u>at</u> <u>what an improvement I'd made</u>]. | [finite exclamative] |
| (5) | TRADITIONAL SUBORDINATING CONJUNCTION | |
| | I won't do it [<u>unless</u> <u>you pay me</u>]. | [finite declarative] |

The range of categories following the preposition in (4) is comparable to that found with the major parts of speech, verb, noun, and adjective. This provides strong evidence for analysing the racketed sequences in (4) as head + complement constructions, with particular prepositions taking – that is, **licensing** – particular categories as complement, just as particular verbs, nouns, and adjectives do. *On*, for example, takes nouns, gerund-participials³, interrogatives, and (somewhat marginally) exclamatives, but not adjectives, adverbs, or preposition phrases.

³ In traditional terms, *leaving* here is a gerund, but since no verb in English has distinct forms for the traditional gerund and present participle we use the term “gerund-participle” for the verb-form marked by the suffix –ing, and “gerund-participial” for the clause headed by this verb-form (Huddleston and Pullum 2002, 80 - 83).

This should make it clear that it is quite arbitrary to exclude finite declaratives from the set of permitted categories for prepositions. We get a much simpler and more general account if we reanalyse such words as the *unless* of (5) as prepositions, so that (5) merges with (4), as an example of a ninth kind of complement for prepositions.

The case for this reanalysis is strengthened by the fact that there are a good number of items, such as *after*, *before*, *since*, *till*, *until*, which combine with either nouns or finite declaratives. These items are comparable to such verbs as *regret* that take noun (phrase) or finite declarative complements:

| (6) | PREPOSITION + COMPLEMENT | VERB + COMPLEMENT |
|-----|---|---------------------------------------|
| i. | a. The business collapsed [<u>after her departure</u>]. | b. I [<u>regret her departure</u>]. |
| ii. | a. The business collapsed [<u>after she left</u>]. | b. I [<u>regret she left</u>]. |

There is no more justification for assigning *after* to two different parts of speech in the (a) examples than there is for doing with *regret* in the (b) examples. For note that the difference in form of the complement has no bearing on the modifiers permitted: in both (ia) and (iia), for example, *after* can be modified by such temporal expressions as *two weeks* (*The business collapsed two weeks after her departure / two weeks after she left*).⁴

Once consequence of reanalysing *unless* in (5) and *after* in (6iia) as prepositions is that the expressions they introduce, *unless you pay me* and *after she left*, are phrases (preposition phrases), no subordinate clauses (hence not, in particular, adverbial clauses, as in the traditional analysis). The complements within the phrases, *you pay me* and *she left*, are subordinate clauses, but there is no basis for analysing them as adverbial; such functional similarity to an adverb as there is applies to the preposition phrase, not to the subordinate clause within it. In terms of the traditional classification they would have to be noun clauses since the characteristic complement of a preposition is a noun. Indeed, within the traditional framework, noun clause, adjective clause, and adverb clause are special cases of the more general concepts of noun-equivalent, adjective-equivalent, and adverb-equivalent (see Onions 1971, 8 – 13 for a particularly clear exposition of this approach), and it would seem a natural extension of that analysis to treat these subordinate clauses as noun-equivalents, hence noun clauses.

3.1. Expandable vs Unexpandable Finite Declarative

One difference between the finite declarative *she left* of (6iia) and that of (6iib) is that the latter can be expanded by *that* but the former cannot: *I regret that she left* but not **The business collapsed after that she left*. We need therefore to distinguish between **expandable** and **non-expandable** finite declarative complements. But this does not provide a justification for assigning the *after* of (iia) to a distinct part of speech, subordinating conjunction, because some of traditional grammar's subordinating conjunctions do in fact take expandable finite declaratives. These include *except*, *notwithstanding*, *given*, *provided* and the complex expression *in order*:

(7) You can borrow the report [provided that you don't take it out of the building].

⁴ This argument for reanalysing subordinating conjunctions as prepositions was presented in Jespersen (1924, 89 - 90). Many researchers in modern linguistics follow him (see, e.g., McCawley 1998, 195-6).

It is a common practice to treat this *that* as part of a “complex subordinating conjunction” (giving, therefore, *provided that you don’t take it out of the building*), but this analysis is quite untenable. Most obviously, it fails to account for the repetition of *that* in coordinative constructions like (8):

- (8) You can borrow the report [provided that you don’t take it out of the building and that you keep its contents completely confidential].

3.2. *That* and *Whether*

The proposed reanalysis applies to most of traditional grammar’s subordinating conjunctions, but not quite all. In particular, *that* and *whether* (together with the *if* that is in many cases an alternant of *whether*) are not prepositions, not heads of the constructions they introduce. *That* is unlike a head in that it is often freely omissible. *Whether* is not omissible, but it is simple the interrogative counterpart of *that*, and should be treated in the same way as *that*. Declarative is the default term in the system of clause type, and it is unexceptionable that the marker of this type should be in many cases optional, while the marker of the interrogative type should be always obligatory.

4. Failure of the Functional Analogies with Word Classes

The third objection to the traditional scheme is that the distribution and potential functions of subordinate clauses are much more different from those of the three parts of speech than is implied by that scheme. We confine our attention in this section to noun clauses and adjective clauses since virtually all of traditional grammar’s adverb clauses have been disposed of by the arguments of §§1 – 2.

4.1. Functional Differences between Noun Clauses and Nouns

There are three cases of difference in function between noun clauses and nouns that we must consider.

- (a) Clauses functioning as complement to verbs, nouns, and adjectives

Noun clauses commonly function as complement to a preceding verb, noun, or adjective. Compare:

- | | | |
|--------|---|---------------------------|
| (9) i. | He [regretted that her had lied to her]. | [complement to verb] |
| ii. | He told me of [his regret that he lied to her]. | [complement to noun] |
| iii. | He was [<u>sorry that he lied to her</u>]. | [complement to adjective] |

It is, however, a major syntactic difference between verbs on the one hand and nouns and adjectives on the other that verbs commonly take nouns (noun phrases) as complement, whereas nouns and adjectives, with very minor exceptions, do not. Compare again, then:

- | | | |
|---------|---|----------------------|
| (10) i. | He [<u>regretted that lie</u>]. | [complement to verb] |
| ii. | *He told me of [his <u>regret that lie</u>]. | [complement to noun] |

- iii. *He was [sorry that lie]. [complement to adjective]

The subordinate clauses in (9ii–iii) are thus not functioning like nouns; they are not “noun-equivalents”.

The traditional answer to the problem posed by examples like (9ii) – those where the subordinate clause is in construction with a preceding noun – is to say that the clause is in apposition to the noun. The construction is thus claimed to be like that of [*my son Robert*], with the clause *that he had lied to her* functionally like the noun *Robert*.

This does not provide a satisfactory solution, however. In the first place, it destroys the parallelism between (9ii) and (9i), in that the relation between the clause and the preceding word is no longer the same. Evidence that it does indeed need to be recognised as the same, namely that the relation between complement and head, is provided by the facts of licensing. The occurrence of a clause as complement to a verb, as in (9i), depends on the head verb being one that licenses such a complement: compare *She thought that he had lied to her* and **She cogitated that he had lied to her*. And similarly in (9ii) the occurrence of a clause requires a head noun that licenses it: compare *his regret that he had lied to her* and **his book that he had lied to her*.⁵

That is an argument in favour of complementation; an argument against apposition is that in many cases the clause cannot stand instead of the whole construction. Compare, for example:

- (11) i. a. [My son Robert] lives here. b. Robert lives here.
 ii. a. [Her belief that he had lied to her] b. *That he had lied to her was shared by
 was shared by most of her family. most of her family.

In a standard case of apposition, like that in (ia), the second term is equivalent to the first and hence can substitute for the combination. The subordinate clause in (iia), however, merely gives the content of the belief: it is not equivalent and cannot substitute for the whole.

As for constructions like (9iii), with the noun clause dependent on an adjective, the traditional account involves assuming a suppressed preposition. Thus Curme (1947, 175, in a section headed “Accusative clause after prepositions”) says that “the preposition that should stand before the conjunction that introduces the clause is often suppressed”, and likens *I am much please that he has gained such a victory over himself* to *I am much pleased over his great victory over himself*. Onions (1971, 48) combines this with an appositional account, saying that the noun-clause may be regarded as being in apposition to a pronoun implied in the main clause, as in *I am glad that you have not been unjust*, relating it to *I am glad of this*. The postulation of such suppressed prepositions, however, is a complication motivated only by the need to justify classifying as a noun clause a subordinate clause that is not in fact replaceable by a noun. And there is at least one adjective which, with a particular meaning, licenses a subordinate clause as complement but not a preposition phrase. This is *afraid*, in the sense ‘sorry (to say)’:

- (12) I’m [afraid I haven’t had time to read your report].

⁵ We confine our attention here to the construction where the subordinate clause is integrated into the structure, as complement, rather than being set apart prosodically or by punctuation, as a supplement (for the latter construction, see *The Cambridge Grammar of the English Language*, 1351-52, 1358).

It makes no sense to postulate a suppressed preposition in a case like this, where no preposition is permitted (**I'm afraid of my failure to read your report* is not right, and replacing *of* by some other preposition like *for*, *about*, or *over* makes no difference).

We should add that there are also a fair number of verbs that license subordinate clause complements but not nouns. Examples are given in (13):

- (13) i. She [insists that we all attend the meeting].
ii. She [objected that there were too many students].

The verbs concerned generally also license preposition phrases as complement, but again to postulate suppressed prepositions in examples like (13) is an unnecessary complication and is semantically implausible in some cases, such as (ii). The latter doesn't mean that she objected to there being too many students: rather, there being too many students was the basis for her objection to some contextually retrievable proposal (e.g. that classes be held in the departmental seminar room rather than some outside lecture theatre).

The key point is that licensing of subordinate clause complements has to be specified directly for particular verbs, nouns, and adjectives: it is not predictable from the admissibility of nouns or preposition phrases as complement. Subordinate clauses cannot be relegated to the status of equivalents, or expansions, of words of one category or another.

(b) Extraposition

A second distributional difference between traditional noun clauses and nouns is seen in their behaviours with respect to extraposition. Compare:

- (14) i. a. That he didn't turn up was strange. b. It was strange that he didn't turn up.
ii. a. His behaviour was strange. b. *It was strange his behaviour.

In (ia) the subordinate clause is subject of the matrix clause, while in (ib) it is extraposed subject. The subject of (ib) is *it*: extraposed subject is not a kind of subject, but an element semantically like the subject of the syntactically more elementary construction without extraposition. With subordinate clauses, version (b) is more frequent and less restricted than the (a) version, but with nouns (noun phrases) only the (a) version is normally admissible. The subordinate clause in (ib) thus cannot properly be regarded as a noun-equivalent: syntactically, it is distinctively different from a noun.⁶

(c) Clauses licensed by *so*, *such*, etc.

The third case has already been mentioned, in §1. Many subordinate clauses that occur in the constructions considered in (9) – (14) are also found in combination with *so* and *such*, as in:

- (15) He had been [so intimidated that he had lied to her].

Again the clause is not replaceable by a noun: it is clearly not a noun-equivalent. As we noted, traditional grammar sidesteps this problem by analysing *that he had lied to her* as an adverb clause,

⁶ In the construction with *seem*, which Seppänen & Herriman (2002) argue persuasively does not involve extraposition, the subordinate clause cannot occur in subject position: *It seems that she's right*, but not **That she's right seems*. Here, then, there is no possibility of having a noun in place of the noun clause (without a change in the interpretation of *it*, i.e. a change of construction).

but it is just the same clause as occurs in (9): the difference, we argued, is one of function, not category. The example thus reinforces the point that subordinate clauses of this kind differ markedly in their distribution from nouns.

4.2. Functional difference between Adjective Clauses and Adjectives

Adjective clauses are often identified with relative clauses – cf. Matthews (1997, 8, “adjective clause = relative clause”); Barnard (1993, 80, “Adjectival (or Relative) Clauses”). In practice, however, they constitute a subset of traditional relative clauses, excluding those without and antecedent, as in *I’ll give him what he asked for* (we return briefly to this latter construction in §5.1).

The most common type of relative clause is illustrated in (16):

- (16) I’ve been speaking to [the guy who made the complaint].

The relative clause here functions within the noun phrase structure, modifying the noun *guy*, the antecedent for the pronoun *who*. The most elementary type of noun modifier is an adjective, so it is reasonable to say that the relative clause here is functionally like an adjective. There is, however, a considerable range of constructions containing relative clauses, and a good number of them are not adjective-like in function. Compare:

- (17)
- i. He’s looking [the fattest he’s ever been].
 - ii. She ran [the fastest she had ever run].
 - iii. Where can I hide that isn’t too obvious?
 - iv. It was Sue who first thought of the idea.
 - v. It was at that moment that I realised my mistake.
 - vi. They appointed his brother-in-law, which turned out to be a bad mistake.
 - vii. They appointed Kim, who was by far the best-qualified candidate.

In (17i–ii) the antecedent is respectively an adjective and an adverb, and words of these categories do not take adjectives as modifier. In (iii) the antecedent is *where*, traditionally an adverb, though better classified as a preposition; in either case, however, it belongs to a category which again does not take adjectives as modifier.

Examples (17iv–v) belong to the cleft construction: they are cleft versions of *Sue first thought of the idea* and *I realised my mistake at that moment*. In (iv) the antecedent is a noun, but the relative clause does not modify it, and antecedent + relative clause does not form a syntactic constituent. The construction allows a very wide range of antecedent types functioning as complement to the verb *be*, and the relative clause is not replaceable by an adjective: it is not remotely adjective-like in its function.

Whereas the relative clauses in (16) and (17i–v) are **integrated**, those in (17vi–vii) are, by contrast, **supplementary** (in traditional terminology, the former are restrictive, the latter non-restrictive; see *The Cambridge Grammar*, 1058–66, for this distinction). In (vi) the antecedent for the relative pronoun *which* is a clause, and there is no basis for saying that the most characteristic supplement to a clause is an adjective; the relative clause here could again not be replaced by an adjective and cannot plausibly be said to be adjective-like in function. In (vii) the antecedent is a

noun, but the relative clause does not have a modifying function (as indeed is acknowledged by, for example, Curme 1947, 167-8), and there are again no convincing grounds for treating it as an adjective-equivalent.

Relative clause is of course a traditional category, and undoubtedly a valid, even indispensable one. But it is seriously misleading to characterise relative clauses as adjective clauses.

5. A revised System of Classification

We argue, therefore, that the categories of noun clause, adjective clause, and adverb clause should be discarded from the repertoire of grammatical categories applicable to English. In their place we propose a system based on features of the internal form of finite subordinate clauses. At the first level, following *The Cambridge Grammar* (1950), we distinguish three categories: **relative clause**, **comparative clause**, and **content clause**. The last of these is the default category, lacking the distinctive features of the first two.

5.1. Relative Clauses

These clauses contain a relative phrase and/or a gap related anaphorically to an antecedent. In (16), for example, *who* is related anaphorically to *guy*, the head of the noun phrase containing it. In *This is [the knife I used]* there is a gap after *used* that is related anaphorically to *knife: used* is understood transitively even though there is no over object present.

Membership of this category is to a large extent the same as in traditional grammar. There are, however, two differences that should be noted here.

The first difference concerns the construction with no separate antecedent, the **fused relative** construction:

- (18) i. He wantonly destroyed [what she had so painstakingly created].
 ii. [Whoever he marries] will have to be extremely tolerant.
 iii. [What mistakes they made] were not very serious.

The bracketed sequences are analysed in traditional grammar (and many modern grammars too) as relative clauses, but there are strong reasons for saying that they are noun phrases. The one in (i), for example, is equivalent to the obvious noun phrase *that which she has so painstakingly created*. *Whoever he marries* in (ii) is like a noun phrase rather than a clause in that it denotes a person, and *what mistakes they made* in (iii) is grammatically plural, whereas clauses are treated as singular. These expressions contain relative clauses, but the relative phrase is fused with the head (or, in the case of (iii), determiner + head) of the noun phrase: in (i), for example, *what* corresponds to head *that* + relative phrase *which* in the non-fused construction. (For further discussion and justification of this analysis, see *The Cambridge Grammar*, 1068 – 70.)

The second difference concerns what we refer to as **ungoverned exhaustive conditionals**, illustrated by the bracketed parts of these examples:

- (19) i. I won't let you down, [whatever happens].

- ii. [Whoever he marries,] his children are going to give him a hard time.

Traditional grammars analyse the bracketed sequences here as relative clauses, like those in (18) (cf. Onions 1971:61, Zanvoort 1969, 166). The two constructions are, however, markedly different. Those in (19) are not relative: They do not involve the fusion of an antecedent and a relative phrase. Thus, while *whoever he marries* in (18ii) is equivalent to *the person whom he marries*, there is no such equivalence in (19ii) (note the ungrammaticality if we make the substitution: **The person whom he marries, his children are going to give him a hard time*). The bracketed sequences in (19) are a special kind of interrogative clause, the construction being equivalent to one in which an ordinary subordinate interrogative is complement to a preposition, as in:

- (20) i. I won't let you down, [irrespective of what happens].
 ii. [Regardless of who he marries,] his children are going to give him a hard time.

We call (19) – (20) **exhaustive conditionals**, since the interpretations are that I won't let you down under any condition of the type “if *x* happens”, that his children are going to give him a hard time under any condition of the type “he marries *x*”. The subordinate clauses in (20) are **governed** by a preposition, while those in (19) are **ungoverned**. (Again, for fuller discussion, see *The Cambridge Grammar*, 985-991.⁷)

The interrogative clauses in (19) – (20) are of the **open** type (so called because the set of possible answers to the corresponding questions is open-ended). **Closed** interrogatives are introduced by the subordinator *whether*:

- (21) i. [Whether he marries Sue or Ann], his children are going to give him a hard time.
 ii. [Regardless of whether he marries Sue or Ann], his children are going to give him a hard time.

As interrogatives, the subordinate clauses in (19) – (21) belong to the content category.

5.2. Comparative Clauses

Comparative clauses function as complement to one of the prepositions *as* and *than* (or, with dialect restrictions, *like*):

- (22) i. She is nearly as old [as I am].
 ii. He wrote more symphonies [than he wrote piano concertos].

The syntactically distinctive feature of comparative clauses is that they are structurally reduced relative to main clauses. In (i), for example, there is a missing predicative adjective (+ abstract degree modifier): we understand “I am *x* old”, but cannot have **as old as I am old*, or (worse) **as*

⁷ An additional argument for distinguishing the bracket sequences in (18) and (19) as respectively fused relatives and interrogatives is provided by the *wh* word *while*, which is a marginal member of a set of relative words but is never interrogative. This the underlined sequence in *While ever it remains in the party's best interests and my colleagues want me to, I'd be honoured to continue as leader* (from a statement by the Australian Prime Minister, June 2003) can only be a fused relative functioning as adjunct of duration (“For as long as it remains...”). It cannot be an interrogative functioning as exhaustive conditional adjunct (“Regardless of how long it remains...”)

old as I am very old. And in (ii) there is a missing quantificational determiner: we understand “he wrote *x* many piano concertos”, but cannot have **than he wrote five piano concertos*.

Traditional grammar does of course also have a category of comparative clause, but it differs in two respects from that proposed here. In the first place, the traditional comparative clause includes the *as* or *than* (or *like*) as part of the clause, as a subordinating conjunction, instead of analysing it as a preposition governing the subordinate clause (cf. §2 above). Secondly, the traditional comparative clause is one of a fairly large number of semantic subtypes of adverbial clause, on a par with temporal clause, conditional clause, concessive clause, and so on. Here, by contrast, it is a syntactic category at the highest level of subclassification of finite subordinate clauses, contrasting with relative and content clauses by virtue of obligatory reduction.

5.3. Content Clauses

The term **content clause** is adapted from Jespersen (1909-1949, Pt III:23), who proposes it as preferable to ‘noun clause’. As observed above, this is the default category of finite subordinate clauses, lacking the distinctive features of relative and comparative clauses. Content clauses thus typically differ less from main clauses than do the other types – and indeed they are often identical to main clauses, as in *I think you’re right* or *I wonder who opened the window*.

Like main clauses, content clauses select from the system of clause type (except that the imperative type is restricted to main clauses):

- | | | | |
|------|------|---|------------------------|
| (23) | i. | He didn’t tell me that they had escaped. | [declarative] |
| | ii. | He didn’t tell me <u>whether they had escaped</u> . | [closed interrogative] |
| | iii. | He didn’t tell me <u>who had escaped</u> . | [open interrogative] |
| | iv. | He didn’t tell me <u>what a lot of them had escaped</u> . | [exclamative] |

The declarative type may be expandable or non-expandable, depending on whether the subordinator *that* is permitted (as in (i)) or not (as in *He spoke to me before they had escaped*) – cf. §2 above. Various other subcategories need to be recognised, such as subjunctive content clauses (*We demand that they be released*), the *-ever* type open interrogatives found in the ungoverned exhaustive conditional construction (as in (19)), inverted conditionals (as in *Had you told me earlier, I might have been able to help*), and so on.

The content clause category covers all of traditional grammar’s finite noun clauses and adverb clauses except those that are not properly analysed as clauses at all. This exclusion applies to fused relatives like those of (18) and adverb clauses beginning with one of the subordinating conjunctions that we have reanalysed as prepositions, as discussed in §2. But the clausal complements of these latter prepositions are content clauses, except for comparative clause complements of *as* and *than* (and *like*).

5.4. Content Clauses and the Complement Clauses of Modern Linguistics

In modern formal linguistics we generally find the term “complement clause” used for a category that corresponds closely to our content clause. We have not taken over the former term for two

reasons. In the first place, comparative clauses also function as complement – specifically, complement to *ca* preposition. Secondly, content clauses are not restricted to complement function. Clear cases of their occurrence in adjunct function are illustrated in:

- (24)
- i. What has happened, that you are looking so worried?
 - ii. They took the matter directly to the manager, that it might be dealt with more expeditiously.
 - iii. I'm taking the job, whether or not you approve.
 - iv. I'll support you, whatever you decide to do.

The declarative content clause in (i) indicated the reason for asking the question: the fact that you are looking so worried suggests that something untoward has happened. The subordinate clause in (ii) is a somewhat archaic expression of purpose. The closed and open interrogatives in (iii-iv) are exhaustive conditional adjuncts of the type discussed above. The *-ever* in (iv) distinguishes it from interrogatives in complement function, but the subordinate clauses in (i-iii) could all appear readily as complements of one kind or another: as we have emphasised, the functional difference here provides no justification for assigning these to a different category from those in complement function.

6. Conclusion

To summarise: we have argued that the traditional analysis of subordinate clauses should be abandoned. We have discussed three of its failings. First, it assigns some types of subordinate clause a dual classification (“noun clauses” overlap heavily with “adverb clauses”). Second, it leans heavily on a distinction between prepositions and subordinators (“subordinating conjunctions”) which is drawn in the wrong place. And third, the supposed functional analogy that motivated it breaks down: noun clauses, for example, just do not pattern like nouns.

We have also offered an alternative. The finite subordinate clauses of English can be divided into three major types on a rational basis with a justification stemming from their internal syntactic structure. The three main kinds of subordinate clause in English are the relative clause, the comparative clause, and the content clause. Traditional “adjective clauses” belong to the relative category, and nearly all “noun clauses” are content clauses – the others, our fused relatives, are not clauses at all. As for “adverb clauses”, we claim that most of them are again not themselves clauses but preposition phrases in which the head preposition takes a clausal complement (a content clause or a comparative clause); the others fall together with noun clauses in the content clause category.

The classification of subordinate clauses is just one matter on which traditional grammars of English need a conceptual update, and have needed it for at least a hundred years.

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