1. **Appositive versus restrictive relatives**

Appositive relative clauses differ from restrictive relative clauses in a number of ways. The fundamental distinction is semantically based: an appositive relative like that in (1a) conveys an independent assertion about the referent of its associated head; the reference of the head is established independently of the appositive relative. In contrast, a restrictive relative like that in (1b) is interpreted as an intersective predicate modifier, restricting the reference of its head.

(1) a. The prince, who was wounded, withdrew from the battle.
   b. The prince who was wounded withdrew from the battle.

Correlating with this semantic distinction, several syntactic differences between appositive and restrictive relatives have been attested in English, most of which are discussed by Jackendoff (1976), who explains most of them in terms of the semantic distinction noted above. I will discuss just a subset of these differences here.

First, internal to the relative clause, appositive relatives require overt wh-pronouns to occur in the Spec of CP, as shown by (2a-c), while restrictive relatives do not, as shown by the existence of so-called *that*-relatives like (2e) and zero-relatives like (2f).

(2) a. Max wants to visit Doctor Brown, who his sister works for.
   b. *Max wants to visit Doctor Brown, that his sister works for.
   c. *Max wants to visit Doctor Brown, his sister works for.
   d. Max wants to visit the doctor who his sister works for.
   e. Max wants to visit the doctor that his sister works for.
   f. Max wants to visit the doctor his sister works for.

Second, appositive relative clauses naturally allow certain types of pied piping, an example of which is illustrated by this sentence, which are either awkward or ungrammatical with restrictive relative clauses.

Third, though definite and indefinite DPs may function as the head of either type of relative, certain types of QPs (including negative QPs) do not allow appositive relatives (3b). Conversely, proper names and certain types of pronouns (such as reflexives) allow appositive relatives but not restrictive relatives (4b,d):

(3) a. Nobody that George knows is qualified for this position.
    b. *Nobody, who George knows, is qualified for this position.

(4) a. ?Mary decided to hire herself, who needed the cash.
    b. *Mary decided to hire herself that needed the cash.
    c. Mary decided to hire Jim, who needed the cash.
    d. *Mary decided to hire Jim that needed the cash.

2. **Appositive versus parenthetical relatives**

Appositive relatives are also parenthetical. This is reflected in their pronunciation, which is marked intonationally in a way that is typical of parenthetical constituents, and which is conventionally represented in English orthography by means of commas or
parentheses. Sentence-medial parentheticals are surrounded by commas, while sentence-final parentheticals are introduced by a comma; both types can instead be enclosed in parentheses.

The fact that appositive relatives are interpreted as independent assertions is often attributed to their parenthetical status, since certain other types of parenthetical constituents, including parenthetical co-ordinate clauses, have the same kind of interpretation. Indeed, appositive relatives can often be paraphrased by means of other types of parentheticals. Emonds (1976, 1979), Safir (1986), and Potts (2002) have specifically addressed the parenthetical status of appositives within the context of a general theory of parentheticality. This close association between the semantics of appositive relatives and parentheticality has led to the notions of ‘appositive relative’ and ‘parenthetical relative’ often being conflated, so that these terms are often used as virtual synonyms.

In this short study I propose to examine the relationship between appositive relatives and parenthetical relatives more closely. While it may be that all appositive relative clauses are parenthetical, I will show that not all parenthetical relatives are appositive. There turn out to be (at least) two distinct semantic functions that parenthetical constituents may serve; one of these is compatible with appositive relatives and not with restrictive relatives, but the other type is compatible with restrictive relatives (and not with appositives). In some cases, the ability of a restrictive relative clause to function parenthetically seems to be contingent on its containing a parenthetical adverb; I will propose a derivational account of this involving pied piping.

3. Not all parenthetical relatives are appositive

It is widely assumed that all parenthetical relative clauses are appositive. This leads us to expect that that-relatives and zero-relatives should be incapable of functioning as parentheticals. This turns out to be almost correct for zero-relatives, but not for that-relatives:

(5) a. The guy who you sold your car to was arrested today.
b. The guy that you sold your car to was arrested today.
c. The guy you sold your car to was arrested today.
d. The guy next door (who I sold my car to) was arrested today.
e. *The guy next door (I sold my car to) was arrested today.
f. The guy next door (that I sold my car to) was arrested today.

The grammaticality of (5f) shows either that not all parenthetical relatives are appositive, or that not all appositives require an overt relative wh-pronoun.

The correct answer, I believe, is the first: not all parentheticals are appositive. Three considerations support this conclusion. First, the relative clause in (5f) has the flavor of a mid-sentence amendment, as though the speaker, having uttered the guy next door, decides that a further restriction is necessary to unambiguously identify the referent, and adds the parenthetical relative to this end. Though the relative clause is parenthetical, its semantic function is to restrict the reference of the head.

Second, parenthetical that-relatives similar to that in (5f) can occur with quantified heads, something that ought to be impossible if they were appositive, especially in the case of (6b), where the QP does not refer:

(6) a. All the students (that I have managed to speak to, at least) support the president.
b. None of the faculty (that I know of, anyway) have said they will attend.

In both examples, the relative clause clearly functions as a restriction on the quantifier.
A third reason for assuming that the parenthetical *that*-relatives in (5f) and (6) are restrictive relatives, rather than appositive *that*-relatives, is that they may never have proper names as their heads:

(7) a. *Jack Martin (that was a grad student here) likes trees.  
    b. *Hilary (that Bill met in college, reportedly) works hard.

Thus, it seems that parenthetical relative clauses can be restrictive.

4. Restrictions on Parenthetical restrictive relatives
The parenthetical restrictive relative clauses in (5f) and (6a-b) are all interpreted as mid-sentence corrections—either repairing an insufficiently explicit definite description (5f) or scaling back the denotation of a QP (6a-b). The latter examples are analogous to parenthetical DPs or QPs (8a) or quantificational adverbs (8b):

(8) a. All the students (all the American ones, at least) support the president.  
    b. We are satisfied with your work (somewhat, anyway).

These are all examples of what I will refer to as repair-parentheticals; they are used to revise, or amend, the assertion of the main clause, rather than supplementing it with an independent and consistent assertion. Within the domain of relative clauses, restrictive relative clauses have a semantics that enables them to function as repair-parentheticals, whereas appositive relatives have a semantics that enables them to function as the standard type of parenthetical, conveying an independent assertion that is consistent with that of the main clause. Coordinated constituents and certain types of adverbs may also function in this way:

(9) a. Martha loves her secretary, who loves her too. 
    b. Martha loves her secretary (and he loves her too)  
    c. All the students (and many of the faculty) support the president.  
    d. All the students support the president (and will vote for him too). 
    e. All the students support (and depend on) the president. 
    f. All the students support the president, unfortunately.

Henceforth I will refer to these “standard parentheticals” as additive parentheticals.

If parenthetical relatives may in principle be either appositive or restrictive, the question arises why zero-relatives like those in (5e) and (10a-b) are disallowed as parentheticals, in contrast to *that*-relatives like (5f) and (6a-b):

(5) e. *The guy next door (I sold my car to) was arrested today. 
    f. The guy next door (that I sold my car to) was arrested today. 
(10) a. *All the students (I admire very much) support the president. 
    b. *Max gave a book (I tried to borrow once) to my sister.

It cannot be because zero-relatives do not contain an overt wh-phrase, since the same is true of the parenthetical *that*-relatives in (5f) and (6a-b). Nor can we assume that the complementizer *that* may behave like a wh-pronoun when it occurs in a relative clause, because this would undermine the traditional account of why *that*-relatives may not function as (true) appositives in examples like (7a-b).

Actually, zero-relatives are not, in fact, completely excluded as parentheticals. Though (5e) and (10a-b) are clearly much worse than (5f) and (6a-b), examples like those in
sound only marginally less acceptable to my ear:

a. ?All the students (I have managed to speak to, at least) support the president.

b. ?None of the faculty (I know of, anyway) have said they will attend.

c. ?An old man (Bill met in Kansas, reportedly) has moved in next door.

d. ?Max gave a book (he later spilled coffee on, unfortunately) to his teacher.

The zero-relatives in (11) and the that-relatives in (6a-b) differ from the zero relatives in (5e) and (10a-b) in that the former include an additional parenthetical adverb of qualification, evaluation, or evidentiality. The contrast between the two sets of examples seems to hinge at least partly on this.

One possibility is that the parenthetical adverb simply serves a performance function, reinforcing the parenthetical status of the relative, which is otherwise difficult to distinguish from its non-parenthetical counterpart. This seems dubious, however, given that the parenthetical can be clearly identified by its intonation contour. A second, more interesting, possibility is that the parenthetical adverbs in (6a-b) and (11a-d) actually have a grammatical licensing effect on the relative clauses that contain them, enabling them to function as parentheticals.

5. A Derivation for Repair-Parenthetical relatives

I propose to explain the adverbs’ licensing effect in (6a-b) and (11a-d) as follows. First, I will assume, as many previous studies of parentheticals have done, that parenthetical constituents (including adverbs) occupy a structural position distinct from that of their non-parenthetical counterparts. Emonds (1976, 1979) located this position as being right-adjoined to the main clause; parentheticals may surface in this position, as in (12):

(12) a. All the students support the president, at least.

b. None of the faculty have said they will attend, anyway.

c. An old man has moved in next door, unfortunately.

d. Max gave a book to his teacher, unfortunately.

Emonds assumed, with Ross (1967), that parentheticals originate in this sentence-final position; this implies that, when parentheticals occur sentence-medially, as in (13), some portion of the surrounding clause must have moved around them.

(13) a. All the students, at least, support the president.

b. None of the faculty, anyway, have said they will attend.

c. An old man, reportedly, has moved in next door.

d. Max gave a book, unfortunately, to his teacher.

Emonds provided compelling evidence in support of this view, by showing that the portion of the main clause following the parenthetical (henceforth, the coda) must always form a single constituent; thus, examples like (14) are excluded because the parenthetical relative clause is followed by a non-constituent:

(14) a. *He shouldn’t have sent that kid, who is so contentious, out that record.

b. *The prince of Holland, which is a country of honest businessmen, with the most stock visited NATO headquarters.

His analysis captured this by positing a derivation for sentence-medial parentheticals
whereby some main clause constituent (the coda) moves to the right of the parenthetical; thus (13a-d), would originate as (12a-d), with the main clause VP undergoing rightward movement to derive the examples in (13). (A derivation consistent with Kayne’s antisymmetry theory would require a more complex derivation here, involving a left-peripheral merge position of the parenthetical, with leftward movement of both the coda (to a position immediately following the parenthetical), followed by leftward movement of the remnant of the main clause to a position preceding the parenthetical.)

Emonds’s analysis has the disadvantage, however, of being unable to distinguish between cases like (12) and (13), where the parenthetical adverb modifies the entire clause, and cases like (11), where it modifies just a subconstituent (in this case, the relative clause). Since parentheticals of both types are supposed to originate in the same position (peripheral to the main clause), the distinct interpretations of the adverbs in (11) and (12/13) cannot be captured in terms of assigning the adverbs to distinct initial-merge positions. If, however, parenthetical adverbs originate (initially merge) in the same positions as their non-parenthetical counterparts, and undergo movement to Emonds’s parenthetical position peripheral to the main clause, then the interpretative distinction between the main clause adverbs in (12/13) and the relative clause adverbs in (11) can be captured in terms of their distinct source (initial merge) positions: in the main clause in (12/13) and within in the relative clause in (11).

Although parenthetical adverbs often seem to occupy the same (linear) positions as their non-parenthetical counterparts, casting suspicion on the type of parenthetical movement suggested here, their distribution is not in fact identical. Many classes of adverbs, consisting of those that Cinque (1999) assigns to a relatively high source position in the functional structure of the clause, can surface in clause-final position only when they are parenthetical:

\[(15)\]  
\[\quad a.\] John has robbed a bank, allegedly/regrettably.  
\[\quad b.\] *John has robbed a bank allegedly/regrettably.

This suggests that Emonds’s right-peripheral position is available to these classes of adverbs only as a result of parenthetical movement. Cinque’s lower adverbs can occur sentence-finally even if they are not parenthetical, but he provides a distinct derivation for these, involving leftward movement of the VP around them (though not to a position to the left of the higher adverbs such as those in (15)).

Turning back now to the licensing effect of the adverbs in (11), we can understand this to involve pied piping of the relative clause to the derived parenthetical position of the adverb, followed by Emonds’s rightward movement of the coda around it (or the antisymmetric variant of this derivation described above). The idea is that the restrictive relative clauses cannot get to this position under its own steam, though it may pied pipe along with a parenthetical adverb to this position.

This account now leads us to reconsider the status of parenthetical appositive relative clauses, as well as parenthetical restrictive relative clauses like that in (5f), neither of which requires an adverb (at least an overt adverb) to undergo parenthetical movement. Here I have little to offer in the way of an explanation. Perhaps appositive relatives can undergo parenthetical movement without a licensing adverb because they must be interpreted parenthetically. Put another way, perhaps some semantic feature of an appositive relative triggers this movement, making an adverb unnecessary.

This still leaves parenthetical that-relative clauses such as that in (5f) unaccounted for, however. This type of relative clause differs semantically from the repair-parentheticals in (11a-b), in three respects. First, it lacks a quantificational head; its head is interpreted with specific reference. Second, its function is to clarify the reference of its head, rather than to
revise or scale back the scope of the original claim. Actually, the same is true of the relative clauses in (11c-d). In both (5f) and (11c-d), it is less clear that the interpretation is unambiguously restrictive than in the case of (11a-b). Moreover, the relative clauses in (11c,d) cannot occur with quantificational heads like those in (11a-b), which would be consistent with their actually being appositives, despite the lack of an overt wh-phrase.

(16) a. *All the students (Bill met in Kansas, reportedly) support the president.
b. *None of the faculty (he later spilled coffee on, unfortunately) have said they will attend.

On the other hand, these relative clauses may not occur with proper names as their heads, contrary to what we would expect if they were appositive:

(17) a. *Sam, (that) Bill met in Kansas, reportedly, supports the president.
b. *George, (that) he later spilled coffee on, unfortunately, may not attend.

Curiously, the correct descriptive generalization seems to be that relative clauses lacking both an overt wh-phrase and an adverb of the type found in (11a-b) may function parenthetically only if the nature of their head does not serve to identify them unambiguously as either a restrictive or as an appositive relative. I leave the explanation for this generalization to further study.

Before closing, I should comment on one important difference between parenthetical adverbs and parenthetical relatives: while main-clause parenthetical adverbs can occur sentence-finally, parenthetical relative clauses must be string-adjacent to their head. This can be accounted for in terms of the theory of cyclic linearization of syntactic structure proposed by Fox and Pesetsky (2004), provided that it is assumed that parenthetical movement is the type of movement that does not operate successive-cyclically, but rather is subject to the principles of linearization that give rise to Holmberg's generalization in the case of object shift. Provided that the relative clause, like other subconstituents of DP, must be linearly ordered within the clause, if parenthetical movement disrupts the ordering instructions imposed by cyclic linearization will trigger repair movement(s) to restore the original order, so that the relative clause will have to surface adjacent to its head in clause medial position.

References


