Little Words

Leow, Ronald P, Campos, Héctor, Lardiere, Donna

Published by Georgetown University Press

Leow, Ronald P., et al.
Little Words: Their History, Phonology, Syntax, Semantics, Pragmatics, and Acquisition.

For additional information about this book
https://muse.jhu.edu/book/13060

For content related to this chapter
https://muse.jhu.edu/related_content?type=book&id=395218
The Complementizer *The*

HEATHER LEE TAYLOR  
University of Maryland, College Park

**THIS CHAPTER CONCERNS** comparative correlatives [in (1) and (2)] and the “little word” *the* that obligatorily begins both phrases/clauses. The syntactic structure of such expressions is far from apparent.

(1) *The more a student studies, the better grades she will receive*

(2) *The longer the storm lasts, the worse the damage is*

A comparative correlative looks like two nominals, obligatorily headed by the determiner *the*, with no clear indication of what the relationship between these two “nominals” is. English comparative correlatives consist of two phrases, no more and no less, as seen in (3) through (5). This characteristic is not limited to comparative correlatives in English; to the extent that comparative correlatives have been documented cross-linguistically, all languages require that exactly two phrases/clauses be present.¹

(3) *The more a student studies*

(4) *The better grades she will receive*

(5) *? The more a student studies, the better grades she will receive, the better job she’ll land*

Because we do not have evidence at this point to make a distinction between the two parts of the comparative correlative or to determine their syntactic status in terms of a category, I will temporarily refer to them as phrases, and individually to the “first phrase” and the “second phrase” as it corresponds to their linear order, as in (6). This terminological issue will be resolved below.

(6) *The more a student studies, the better grades she will receive*

   first phrase                                               second phrase

In English, both the first phrase and the second phrase obligatorily begin with the little word *the*. The unacceptability of (7a) is due to the absence of *the* in the first
clause, in (7b) in the second clause, and last, in (7c), the absence of the in both clauses unsurprisingly also results in unacceptability.

(7) a. * More a student studies, the better grades she will receive
    b. * The more a student studies, better grades she will receive
    c. * More a student studies, better grades she will receive

Another characteristic of comparative correlative (CCs) is that A´-movement of a constituent within either the first or the second phrase can occur (Culicover and Jackendoff 1999). To see this clearly, consider (8) through (10) [Culicover and Jackendoff’s examples (68) through (70)]. Both the first and the second phrase in the CC in (8) have an object of a verb, this problem and the folks up at corporate headquarters, respectively, and these objects can be targeted for A´-movement out of its phrase. In (9) we see movement of each for the purpose of forming a relative clause, and in (10) each object can be topicalized. Culicover and Jackendoff argue that movement of a wh-phrase in order to form a question is not possible, but in (11), when a CC is embedded under a certain class of predicates (think, believe, say), each object can be replaced with an appropriate wh-phrase and A´-moved to form a question.2

base sentence

(8) The sooner you solve this problem, the more easily you’ll satisfy the folks up at corporate headquarters.

relative clause

(9) a. ✓ This is the sort of problem which, the sooner you solve t1, the more easily you’ll satisfy the folks up at corporate headquarters.
    b. ✓ The folks up at corporate headquarters are the sort of people who, the sooner you solve this problem, the more easily you’ll satisfy t1.

topicalization

(10) a. ✓ This problem, the sooner you solve t1, the more easily you’ll satisfy the folks up at corporate headquarters.
    b. ✓ The folks up at corporate headquarters, the sooner you solve this problem, the more easily you’ll satisfy t1.

wh-question formation

(11) a. ✓ Which problem, do you think that the sooner Bill solves t1, the more easily he’ll satisfy the folks up at corporate headquarters
    b. ? Who, do you think that the sooner that Bill solves this problem, the more easily he’ll satisfy t1?

These collective characteristics of CCs provide some clues to what the syntactic structure of the expressions is and what the nature of the word the turns out to be. What I suggest here is that the word the that obligatorily appears at the start of both the first and the second phrase of the English CC is a complementizer. The CC con-
sists of two CPs, the first adjoined to the second. The complementizer selects for a FocusP (FocP), something we would expect of a complementizer phrase (C0) and not of a determiner.

This chapter is broken into five sections. The first considers a treatment of CCs as a type of equative and explores the lack of empirical support for that analysis. The next section is a presentation of other analyses of the English CC’s the. The following section contains the analysis that the the in English CCs is in fact a complementizer. The next section expands this proposal by providing evidence from Nominal Extraposition expressions in English and cross-linguistic evidence from CCs in Basque. The final section presents my conclusions.

Comparative Correlatives as Equatives
Cross-linguistically, CCs consist of exactly two phrases. In English, both of these phrases obligatorily begin with the word the. These two characteristics hold for equatives as well, as exemplified in (12). An equative consists of two and only two arguments of a copular verb, and those arguments are nominals that can begin with the determiner the. The structure of an equative, using the lexical items in (12) to demonstrate, is that in (13).

(12) The president of AT&T is (also) the president of Cingular

(13) [Diagram of the structure of an equative with the lexical items in (12) and a null copula]

If CCs are a type of equative, this suggests that its structure consists of a main verb, a null copula, which takes two arguments, the first and second phrases. Thus the structure of the CC in (14) would look much like the structure of the equative in (12). This is illustrated in comparing (13) and (15).

(14) The more a student studies, the better grades she will receive
Evidence for This Analysis

One unusual characteristic of equatives is that movement out of both the subject and object is permitted, as in (16) and (17). This mirrors extraction behaviors observed for CCs in (8) through (11). This appears to offer support for a similar analysis of both types of expression.

(16) [Which company]$_1$ is the president of $t_1$ also the president of Cingular?

(17) [Which company]$_2$ is the president of AT&T also the president of $t_2$?

Treating CCs as a type of equative would explain the observations made at the beginning of the chapter. CCs have two, but not one or three or more phrases, because a copular verb takes only two arguments. Movement out of the phrases of a CC would be permitted the same way that it is in equatives. Last, and most important to the investigation here, the word the that appears at the start of each phrase could be classified as a determiner, the D$^0$ that heads the DP.

Strong Evidence against the Equative Analysis

As it turns out, this analysis has been considered, and rejected, in the literature. Culicover and Jackendoff (1999) present two strong pieces of evidence maintaining that this analysis cannot be correct. First, when a CC hosts a tag question, it is the second phrase that obligatorily hosts this tag, as in (18), (19), and (20).

(18) The earlier Bill arrives home, the more time the kids spend with him

(19) * The earlier Bill arrives home, the more time the kids spend with him, doesn’t he?

(20) ✓ The earlier Bill arrives home, the more time the kids spend with him, don’t they?
Second, when the CC is embedded under a predicate that triggers subjunctive mood, that mood is hosted on the verb in the second phrase, not the first. Culicover and Jackendoff (1999) provide evidence from English, reproduced here in (21) and (22). Though morphological evidence of subjunctive mood in English is weakly used by most speakers, the judgments for (21) and (22) are robust. Furthermore, cross-linguistically, languages that contrast indicative and subjunctive mood by use of morphological marking also display this use of subjunctive mood on the second clause.

(21) a. ✓ I demand that the more John eats, the more he pay(s)
   b. * I demand that the more John eat, the more he pay(s)

(22) a. ✓ It is imperative that the more John eats, the more he pay(s)
   b. * It is imperative that the more John eat, the more he pay(s)

Given this evidence, it is clear that the two phrases of the CC are not on equal standing. The second phrase displays all the characteristics of a main clause, and the first phrase does not. If CCs had a structure like equatives, these characteristics of a main clause would be seen in different constituents: tag questions would form on the null copula and the subject, and subjunctive mood would be hosted on the null copula (or rather not heard at all because the verb would be null). Further, even if an analysis of CCs as a type of equatives did not suffer the previously stated problems, this analysis still does not provide an explanation for why the arguments in the CC require the determiner the. This is not a general property of equatives; the internal structure of the two arguments in equatives can have a wide array of structures, with or without the definite determiner (see Adger and Ramchand [2003] for extensive discussion of this point). Thus if CCs are a type of equative and the word the is a determiner, the treatment of the word the would still require some special explanation.

It appears that treating CCs as a type of equative is the wrong way to proceed. The evidence we have just seen forces us to conclude that CCs consist of a main clause (the second) and a subordinate clause (the first). Yet now the word the seems very curious. A word normally classified as a determiner is obligatorily appearing at the start of something that is not a nominal (the entire first or second clause).

**Previous Analyses of CCs’ the**

Perhaps it is the case that the in CCs is not a determiner at all but a lexical item of some other category. If this were the case, it would provide a way to label the main clause (the second) and the subordinate clause (the first) something other than DP. Two separate proposals for English CCs are reviewed here, Culicover and Jackendoff (1999) and den Dikken (2005).

Culicover and Jackendoff (1999) treat the comparative as a quantifier and the word the as a determiner of that quantifier (following Bresnan 1973), sitting in Spec,QP. This quantifier phrase (QP) is in the specifier of an XP, which in turn is in the specifier of a complementizer phrase (Spec,CP). The XP is coindexed with a trace in inflection phrase (IP), where this constituent is logically understood. The structure is illustrated in (23).
Den Dikken (2005) instead treats *the* in English as a degree head (Deg0), and the morpheme *more/less/-er* is part of an AdjP, the complement of this degree head.

These prior detailed analyses have three key components. First, the word *the* is given a label other than determiner. These two analyses differ in a number of ways, yet both conclude that *the* cannot be an instance of the definite determiner. Second, the morpheme *more/less/-er* is treated as something other than a degree head. Last, in both of these analyses, Spec,CP of both clauses is filled, allowing no possibility for A’-movement out of a clause to proceed successive cyclically. The proposal put forth in the next section will address each of these components. As in these analyses, *the* is analyzed as something other than the definite determiner. In contrast to these analyses, though, the morpheme *more/less/-er* is a degree head (following Kennedy 1997), and the structure has an available Spec,CP position in both the main and subordinate clauses so that successive cyclic A’-movement out of the clauses is permitted.

The Is a Complementizer

*Proposal for the Structure of CCs*

Both of the clauses of the English CC obligatorily begin with the word *the*. I propose that this *the* is a complementizer and that both clauses of the CC are CPs. The first clause, the subordinate clause, is adjoined to the main clause. In both the main and subordinate clauses, the complementizer *the* takes a FocP complement. The morpheme *more/less/-er* and the constituent it modifies occupy Spec,FocP. FocP immediately dominates IP. The entire structure is given immediately following as it is
abstractly construed for any CC in English [in (25)], and then specifically [in (26)] as it applies to the CC in (1).

(25)

\[ \text{CP}_M \]
\[ \text{CP}_S \]
\[ C' \]
\[ C \]
\[ \text{the} \]
\[ \text{DegP}_1 \]
\[ \text{Deg'} \]
\[ 'more' \]
\[ X_1 \]
\[ \text{Foc'} \]
\[ \text{Foc} \]
\[ \text{IP} \]
\[ \ldots t_1 \ldots \]

(26)

\[ \text{CP}_M \]
\[ \text{CP}_S \]
\[ C' \]
\[ C \]
\[ \text{the} \]
\[ \text{DegP}_1 \]
\[ \text{Deg'} \]
\[ 'more' \]
\[ X_1 \]
\[ \text{Foc'} \]
\[ \text{Foc} \]
\[ \text{IP} \]
\[ a \text{ student studies } t_1 \]

The structure of degree phrase (DegP) that I adopt here is Kennedy’s (1997), in (27). If the modified constituent is adjective phrase (AdjP), adverb phrase (AdvP), or IP, it is this DegP that occupies Spec,FocP. In the case of IP modification, Deg⁰ has no complement. In the case of noun phrase (NP) modification, DegP is adjoined to NP (following Kennedy and Merchant’s [2000] proposal for attributive comparative deletion), and as with IP modification, Deg⁰ has no complement. In the case of NP modification, then, it is the NP to which the DegP is adjoined that holds the position of Spec,FocP.

(27)

\[ \text{DegP} \]
\[ \text{XP} \]
\[ \text{Deg'} \]
\[ \text{measure} \]
\[ \text{Deg} \]
\[ (\text{AP}) \]
\[ \text{phrase} \]
Why not classify *the* as a definite determiner so that it is part of the comparative constituent in Spec,FocP? I follow Taylor’s (2006) proposal that the comparative constituent in Spec,FocP has been base-generated in its canonical position and A´-moved to this higher position. Further evidence for this is the existence of almost synonymous expressions to CCs, like that in (28). These have been referred to as CC´ (Culicover and Jackendoff 1999) and ICC (Inverted Comparative Correlative; Culicover and Jackendoff 2005, 505). In ICCs, the main clause appears first linearly, and the subordinate clause follows. Also in ICCs, the word order of the main clause is different from the word order of the main clause in the CC. In (28) and (29), the main clause contains the compared constituent worse (suppletive form of “bad” + “more”). In (28), this compared constituent has raised to Spec,FocP and is preceded linearly by *the*. But in (29), where the compared constituent appears in its base-generated position, the word *the* is missing. If it is assumed that CCs and ICCs are derivationally related, the absence of the word *the* in the ICC suggests that it is not a part of the comparative constituent.

(28) The damage is worse, the longer the storm lasts

(29) The longer the storm lasts, the worse the damage is

**The Induces that-trace Effect**

As proposed, the complementizer *the* is phonologically overt, therefore it should have the same effect as an overt complementizer . . . and it does—it induces that-trace effect. (30d) and (30e) are unacceptable. If we hypothesize that this unacceptability is also due to a that-trace effect induced by the C0 *the*, then the presence of a heavy AdvP between the comparative string and the wh-trace should improve the expression. Indeed, this is exactly what happens, as can be seen in (30f) and (30g).

(30) a. I said that *the* more Bill eats vegetables, the less Mary wants sweets

   b. ✓ What1 did I say that *the* more Bill eats *t1*, the less Mary wants sweets

   c. ✓ What1 did I say that the more Bill eats sweets *the* less Mary wants *t1*?

   d. * Who1 did I say that *the* more *t1* eats vegetables, the less Mary wants sweets?

   e. * Who1 did I say that the more Bill eats vegetables, *the* less *t1* wants sweets?

   f. ✓ Who1 did I say that *the* more for all intents and purposes *t1* eats vegetables, the less Mary wants sweets?

   g. ?? Who1 did I say that the more Bill eats vegetables, *the* less for all intents and purposes *t1* wants sweets?

**More Evidence for the Proposal**

If the word *the* in CCs is a complementizer, a bolster for this claim could be found in two kinds of empirical observations. First, thus far the complementizer *the* is unique to CCs. We would be fortunate if this complementizer could be found in other types of expressions in English. Second, no other language for which CCs have so far been documented begins both clauses with what looks like a definite determiner.
(but see Beck [1997] for a proposal that German je and unso/desto can be glossed as “the,” and Roehrs, Sprouse, and Wernter [2002] for a more lengthy discussion of the contrast between these two lexical items in comparative correlatives). However, if another language used a lexical item that was unique to CCs, this would suggest that the relatively unique lexical item the of English CCs is not so ad hoc. As it turns out, both of these bolsters exist.

**The Complementizer the in Other Expressions in English**

The examples in (31) are named nominal extraposition (NE) by Michaelis and Lambrecht (1996), who examined the data in detail. The sentences appear to consist of a saturated expression (It’s amazing/perfect/sickening), followed by head noun and a relative clause, as evidenced by the data in (32). But if the apparent relative clauses in (31) are indeed relative clauses, this constitutes a problem for the selectional properties of the predicates that precede them. Normally, the predicates amazing, perfect, and sickening subcategorize for a CP, as in (33). If the predicate is followed by a nominal other than the apparent relative clauses in (31), the result is unacceptable, as in (34).

(31) a. It’s amazing the people you see here these days
   b. It’s perfect the way the sun sets in the winter
   c. It was sickening the amount of waste there was

(32) a. [The people you see here these days] are weird
   b. [The way the sun sets in the winter] is beautiful
   c. Please give me a report of [the amount of waste there was]

(33) a. It’s amazing [CPthat [we survived]]
   b. It’s perfect [CPthat [the weather cooperated]]
   c. It was sickening [CPthat [the waste was so excessive]]

(34) a. * It’s amazing the people/that person/those people/a person/some people
   b. * It’s perfect the way/that way/those ways/a way/some ways
   c. * It was sickening the amount/that amount/those amounts/an amount/some amount

If we treat the the at the start of these apparent nominals as a complementizer, then these clauses are CP complements of the predicates. It is not that the predicates amazing, perfect, and sickening in NEs have taken a complement other than CP, or that a relative clause has been right dislocated; rather, the predicates in NEs have taken a CP complement just as they do in expressions like (32). Further evidence that the word strings beginning with the in (31a) through (31c) are CPs comes from NEs that take other kinds of CPs, such as (35), and Michaelis and Lambrecht’s (1996) virtually synonymous examples (32a) and (32b), reproduced here as (36a) and (36b).⁴

(35) It was sickening [how much waste there was]

(36) a. It’s amazing [what things children say]
   b. It’s amazing [the things children say]
Cross-linguistically, we see many languages (Dutch, Spanish, Brazilian Portuguese, and Latin, as reported by den Dikken [2005], for example) use a morpheme meaning “how much/how more” to introduce the adjunct clause of a CC. Russian and Turkish introduce the first clause with a similar type of string—a wh-item corresponding to what + much is used [see (41) and (42)].

(37) Dutch

Hoe meer je leest, hoe meer je begrijpt

*How more you read how more you understand*

“The more you read, the more you understand”

(38) Spanish

Cuantos Más problemas resolvió Joan, mejor puntuación recibió

*How-much more problems solved Joan better score she-received*

“The more problems Joan solved, the better score she received”

(39) Br. Portuguese

Quanto mais problemas a Joana resolve, melhores notas ela recebe

*How-much more problems the Joana solves better scores she receives*

“The more problems Joan solved the better score she received”

(40) Latin

Quanto in pectore hanc rem meo magis voluto, tanto mi aegritudo auctior est in animo

*How-much-ABL in heart this matter my more ponder that-much-ABL me grief greater is in spirit*

“The more I turn this matter over in my mind, the greater grief is in my soul”

(41) Russian

Chem bol’she vina, tem veseleyeye

*What-INST more wine-GEN that-INST merrier*

“The more wine, the merrier”

(42) Turkish

Ne kadar rahatla-r- sa- k, o kadar vakit kaybed- er- iz

*what much relax aorist COND. 1P it much time lose- aorist 1P*

“The more we relax, the more we waste time”

**Unique Lexical Items in Languages Other Than English**

In Basque CCs, two lexical items, *gero* and *eta*, appear together and introduce both clauses of the CCs, as in (43). *Gero eta* is unique to CCs. Elsewhere in Basque, *gero* and *eta* appear independent of one another—*gero* is an adverb meaning “after,” and *eta* is a conjunction meaning “and.” Within CCs the two words must both be present; they must be adjacent; to restate, nothing can intervene between the two in
a CC, and neither gero nor eta can occur alone in the CC. Yet there is nothing compositional about the lexical items that would render a meaning in the CC equivalent to that of “the more” in English. This suggests that Basque speakers treat the gero eta in CCs as a single lexical item and one that exists only in CCs.

(43) Basque

Gero eta Jonek sagar gehiago bildu, gero eta pastel gehiago egiten
CC John-ERG apples more pick, CC pies more did
zituen bere amak
AUX-TRNS-PAST his mom-ERG
“The more apples John picked, the more pies his mother baked”

Conclusion

This chapter has largely looked at the microsyntax of one specific word, the, in English comparative correlatives. But from this investigation of one small lexical item, the syntactic structure of this type of expression can be understood as very similar to other expressions in the grammar. Further, another unusual type of expression, nominal extrapositions, can also be analyzed without proposing anything special within the grammar. From this analysis, the question arises as to what it means for a single lexical item to have two different category types. Semantic analyses of the definite determiner have encoded features such as maximality and uniqueness, and perhaps these features are part of the compositional semantics of comparative correlatives. Work on this question as it relates to these data and elsewhere in the grammar remains to be investigated.

NOTES


2. For more extensive discussion of this point, see Taylor (2006) and Taylor (unpublished manuscript).

3. This FocP was simply “FP” in prior writings by this author, meaning “functional projection.” However, there is evidence from Greek that this functional projection is indeed a Focus projection (Kapetangianni and Taylor 2007). I follow the analysis in that paper and assume that this functional projection in English in FocP, just as it is in Greek.

4. Michaelis and Lambrecht (1996) provide these examples to contrast NEs with Right Dislocation, such as (i-a) and (i-b).

   (i) a. ✓ They’re amazing, the things children say.
      b. * They’re amazing, what things children say.

Despite the presence of the examples in (9a) and (9b) in their paper, they do not consider the possibility that the is a complementizer rather than a determiner.
5. This example is originally given by Michaelis (1994) and is repeated as example (10) by den Dikken (2005).

REFERENCES


