

# A Note on the Derivation of English Free Relatives\*

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## 1. Introduction

This paper discusses the syntactic derivation of the *wh*-word *wh-ever* (e.g. *whatever*, *whoever*, *whichever*, etc.) in English free relative clauses. After reviewing two past analyses of the English free relative in Section 2, we observe (the lack of) the alternation of *whoever* and *whomever* of free relatives (Section 3) and then argue in Section 4 that the observed paradigm can be best captured by the third approach, which is based on McCawley's (1988) analysis.<sup>1</sup>

## 2. Two Approaches to English Free Relatives

### 2.1 The Head Account

There have been two major approaches to the derivation of *wh-ever* of the free relative. One approach, called "the head account" in the literature, claims that the *wh-ever* phrase *whichever flower* in (1) is located in the same position that the head nominal (*the flower* in (2b)) of the headed relative clause occupies (Bresnan and Grimshaw (1978), Larson (1987), Citko (2002)). This is illustrated in (2a).

(1) Take *whichever flower* you like.

(2) a. Free relative:

[<sub>DP</sub> whichever flower [<sub>CP</sub> [<sub>TP</sub> you like \_\_\_\_]]]

b. Headed relative:

[<sub>DP</sub> the flower [<sub>CP</sub> (which) [<sub>TP</sub> you like \_\_\_\_]]]

As one piece of evidence for this analysis, Citko (2002) observes the lack of the Principle C effect with the free relative as in (3):

(3) a. We will comment on whichever pictures on Hansel<sub>i</sub> he<sub>i</sub> displays prominently.

b. We will ignore whichever reports on Hansel<sub>i</sub>'s division he<sub>i</sub> won't like.

This is in contrast to the presence of the effect with the interrogative *wh*-phrase in (4).

(4) a. \* Which pictures of Gretel<sub>i</sub> does she<sub>i</sub> display prominently?

b. \* ? Which report on Hansel<sub>i</sub>'s division will he<sub>i</sub> not like?

As Citko argues, the lack of the Principle C effect in (3) is difficult to capture if we assume that the *wh-ever* phrase in (3), as with the *wh*-phrase in (4), is derived via movement from its original position inside the free relative clause. Citko then argues that the fact in (3) is nicely captured under the head account, which claims that the *wh-ever* phrase in (3) is generated in the same way that the

head nominal of the headed relative does. Indeed, the lack of the effect with the free relative in (3) is parallel to that with the headed relative in (5):

- (5) a. The pictures of Marsden<sub>i</sub> which he<sub>i</sub> displays prominently are generally the attractive ones.  
(Sauerland (1998), cited in Citko (2002))
- b. I have a report on Bob<sub>i</sub>'s division he<sub>i</sub> will not like.  
(Merchant (1998), cited in Citko (2002))

Thus this constitutes a piece of evidence for the head account of the English free relative.

## 2.2 The Comp Account

The other account, called "the Comp account," states that the *wh-ever* phrase occupies [Spec CP], on a par with a *wh*-phrase in interrogative sentences, and that the head of the free relative is occupied by an empty pronominal (Groos and Riemsdijk (1981), among others). The structure of sentence (1), on this account, is shown as (6a):

- (6) a. Free relative clause:  
[<sub>DP</sub> *pro* [<sub>CP</sub> whichever flower<sub>i</sub> [<sub>TP</sub> you like *t<sub>i</sub>*]]]
- b. Interrogative clause:  
[<sub>CP</sub> which flower<sub>i</sub> [<sub>C</sub> do [<sub>TP</sub> you like *t<sub>i</sub>*]]]

This account is supported by the distribution of the Nominative form *whoever* and its Accusative counterpart *whomever*. First, observe that the choice between the Nominative interrogative *who* and the Accusative *whom* is determined by their underlying argument position, and that the Accusative *whom* can be altered to *who* unless it is immediately preceded by a lexical head that assigns Accusative Case (a V or a P):

- (7) a. *Who<sub>i</sub>/Whom<sub>i</sub>* did you invite *e<sub>i</sub>* to the party?  
b. *Who<sub>i</sub>/\*Whom<sub>i</sub>* *e<sub>i</sub>* came to the party?  
c. \**With who<sub>i</sub>/With whom<sub>i</sub>* did you go to the party *e<sub>i</sub>*?

Now observe the following paradigm:

- (8) a. [*Whoever<sub>i</sub>/Whomever<sub>i</sub>* you want to invite *e<sub>i</sub>*] will be welcome.  
b. [*Whoever<sub>i</sub>/\*Whomever<sub>i</sub>* *e<sub>i</sub>* wants to come] will be welcome.

As we see in (8), the choice between *whoever* and *whomever* is crucially affected by the underlying position that the *wh-ever* corresponds to in the free relative clause. In particular, the Accusative *whomever* is only possible when it corresponds to the object position in the free relative clause, and this distributional property is parallel to that of the interrogative *who/whom* in (7a-b).

This fact can be easily captured under the Comp account. The Accusative form *whomever*, as well as its Nominative counterpart *whoever*, is possible in (8a) since it originates as the object of the verb *invite*, in exactly the same fashion as the interrogative *who/whom* in (7a). (8b), on the other hand, allows only the Nominative form since the *wh-ever* has moved from the subject position, a derivation that parallels that of the interrogative *who* in (7b).

On the other hand, the paradigm in (8) cannot be expected under the head account. Since the head account assumes that *who(m)ever* in (8) is the head nominal, but not an element derived via movement from a position inside the free relative, it predicts that the choice between the two variants should be affected only by the position that the free relative clause as a whole occupies. Since the free relative in (8a) and the one in (8b) are both in the subject position, it would be predicted that the free relative pronoun should be the Nominative form, but not the Accusative. This prediction is not borne out, however, as we see above.

### 3. More on the Alternation of *Whoever* and *Whomever*

In the last section, we saw that the choice between *whoever* and *whomever* is determined by the argument position that they correspond to inside the free relative clause, and that this fact constitutes a piece of evidence for the Comp account. However, the relevant alternation is not as straightforward as the fact in Section 2 when the free relative as a whole is in the object position. Observe the following examples:

- (9) a. I will employ [*whoever<sub>i</sub>/whomever<sub>i</sub>* you recommend  $e_i$ ]. (Yasui (1996))  
 b. You may invite [*whoever<sub>i</sub>/whomever<sub>i</sub>*  $e_i$  wants to come].
- (10) a. You can give the ticket to [*whoever<sub>i</sub>/whomever<sub>i</sub>* you like  $e_i$ ]. (Egawa (1991))  
 b. You may give this picture to [*whoever<sub>i</sub>/whomever<sub>i</sub>*  $e_i$  wants it]

The point is that the Accusative form *whomever* is possible in (9b) and (10b), where the *wh-ever* corresponds to the subject position in the free relative clause. Note that this is in contrast to (8b), where *whomever* is impossible as it corresponds to the subject position.

The availability of *whomever* in (9b) and (10b) cannot be predicted under the Comp account. Under the Comp account, the Case of *wh-ever* should be determined by the argument position in the free relative. Since the *wh-ever* in (9b) and (10b) corresponds to the subject, it is predicted that the *wh-ever* should bear the Nominative, but not the Accusative.

On the other hand, the head account could account for the availability of *whomever* in (9b) and (10b) since the *wh-ever* under this account is part of the head nominal of the free relative and thus its Case morphology must be determined by the Case-assigner in its external environment (the verb *invite* in (9b) and the preposition *to* in (10b)), not by the position inside the relative clause.

However, the head account would have a difficulty in accounting for the availability of the Nominative form *whoever* in (9-10). Remember the fact in (7c) that the interrogative *wh*-element cannot be in the Nominative form when immediately preceded by a Case-assigning lexical head.

- (7) c. \**With who<sub>i</sub>/With whom<sub>i</sub>* did you go to the party  $e_i$  ?

In light of this fact, it is not clear why the Nominative form is possible in (9-10) in the presence of a V (in (9)) and a P (in (10)), a Case-assigning head which immediately precedes the Nominative form *whoever*.

## 4. The Third Approach

### 4.1 The Proposal

In Sections 2 and 3 we saw that the two accounts of the English free relative each have both an advantage and a disadvantage, and thus fail to be descriptively adequate. This tells us that we need a third approach in order to attain a full coverage of the data that we have seen so far. In this section I propose a revised version of McCawley's (1988) original analysis of the *wh-ever* free relative, and show that it solves the problems of the two past accounts in the preceding sections.<sup>2</sup>

McCawley's (1988) original analysis of the free relative involving *wh-ever* is illustrated in (11):<sup>3</sup>

- (11) DS: [<sub>NP</sub> **-ever** student [<sub>S'</sub> [<sub>COMP</sub>  $e$ ] [<sub>S</sub> you will invite **which**]]]]  
 SS: [<sub>NP</sub> **which<sub>i</sub>-ever** student [<sub>S'</sub> [<sub>COMP</sub>  $t'_i$ ] [<sub>S</sub> you will invite  $t_i$ ]]]]

What is characteristic of McCawley's proposal is that the *wh* portion of the prenominal *wh-ever*, but not the nominal portion *student*, originates inside the relative clause, moves into Comp, and is raised up into the determiner position to the left of the head nominal, which is underlyingly occupied by *-ever*. A piece of evidence for this derivation, as McCawley shows, comes from the fact that the sequence *student you will invite* in (11) forms a constituent, as we see from the fact in (12) that the

relevant portion can be coordinated:

- (12) Whatever [[books John wants] and [records Mary has requested]] are sure to cost us a lot.

(McCawley (1988))

It is necessary to revise McCawley's (1988) original proposal, however, since questions arise as to the legitimacy of the movement from the Comp position to the prenominal position in (11). Firstly, it is not clear whether the movement to the prenominal position in (11) is an instance of head movement or phrasal movement. The second question is whether there are any other phenomena that involve the movement of a determiner out of a relative clause into a nominal projection.

In the face of these two questions I propose to modify McCawley's analysis in the following way:<sup>4</sup>

- (13) a. [<sub>DP1</sub> [<sub>D1</sub> -**ever**] [<sub>NP</sub> student [<sub>CP</sub> *e* [<sub>C</sub> [<sub>TP</sub> you will invite [<sub>DP2</sub> [<sub>D2</sub> **which**] [<sub>NP</sub> ]]]]]]]]]  
 b. [<sub>DP1</sub> [<sub>D1</sub> -**ever**] [<sub>NP</sub> student [<sub>CP</sub> [<sub>DP2</sub> [<sub>D2</sub> **which**] [<sub>NP</sub> ]]]<sub>i</sub> [<sub>C</sub> [<sub>TP</sub> you will invite *t<sub>i</sub>*]]]]]]  
 c. [<sub>DP1</sub> [<sub>D1+2</sub> **which-ever**] [<sub>NP</sub> student [<sub>CP</sub> [<sub>DP2</sub> [<sub>D2</sub> *t<sub>j</sub>*] [<sub>NP</sub> ]]]<sub>i</sub> [<sub>C</sub> [<sub>TP</sub> you will invite *t<sub>i</sub>*]]]]]]

The step of movement up to (13b) is a familiar instance of *wh*-movement, in which the DP *which* moves into [Spec CP]. It is the second step of movement in (13c) that needs to be defended. I take this movement to be an instance of the determiner raising (head-movement) proposed in Takahashi (2000) for the movement of the determiner *mo* in Japanese. Takahashi proposes the derivation in (14b) for the subject DP of sentence (14a):

- (14) a. Dare-ga kaita hon mo omosiroi  
 who-Nom wrote book every is-interesting  
 'lit. Every book that a person wrote is interesting.'  
 b. [<sub>DP1</sub> [<sub>NP</sub> [<sub>CP</sub> [<sub>DP2</sub> [<sub>NP</sub> dare] [<sub>D2</sub> *t<sub>i</sub>*]]]-ga kaita] [<sub>N</sub> hon]] [<sub>D1+2</sub> mo<sub>i</sub>]] ...

As we see in (14b), the determiner *mo* originates in the Determiner position of the *wh*-phrase (DP2) inside the relative clause, and is raised by head movement to the Determiner position of the outer DP (DP1).

As for (13c), the *wh*-element *which* in the D position in DP2 moved by *wh*-movement undergoes head movement to the D position of the outer DP (DP1), just in the same fashion as the determiner *mo* in Japanese does. The difference between (13c) and (14b) can be ascribed to a familiar difference between the two languages. English has overt *wh*-movement, so that the head *which* is launched from a moved *wh*-phrase in [Spec CP], whereas *mo* in Japanese comes from an unmoved *wh*-phrase, simply because Japanese lacks overt movement of *wh*-phrases.

## 4. 2 Accounting for the Alternation of *Whoever* and *Whomever*

In Section 3 we saw that both of the two past accounts of the English free relative fail to give an adequate account of the alternation of the Nominative form *whoever* and its Accusative counterpart *whomever*, as in (9-10), repeated here:

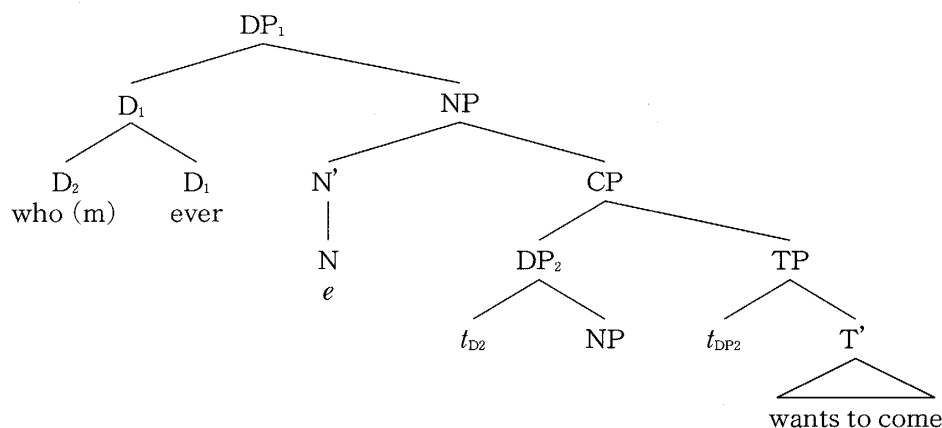
- (9) a. I will employ [*whoever<sub>i</sub>/whomever<sub>i</sub>* you recommend *e<sub>i</sub>*]. (Yasui (1996))  
 b. You may invite [*whoever<sub>i</sub>/whomever<sub>i</sub>* *e<sub>i</sub>* wants to come].  
 (10) a. You can give the ticket to [*whoever<sub>i</sub>/whomever<sub>i</sub>* you like *e<sub>i</sub>*] (Egawa (1991))  
 b. You may give this picture to [*whoever<sub>i</sub>/whomever<sub>i</sub>* *e<sub>i</sub>* wants it]

Now our third approach to the derivation of *wh-ever* can open up a way of accounting for this paradigm. In our approach, since the *wh*-element originates inside the free relative clause, its Case morphology is determined by its position inside the free relative clause. The Accusative form *whomever* is possible in (9a) and (10a) since the *wh*-element originates in the position where the Accusative is assigned. It is also possible to have the Nominative form *whoever* in (9a) and (10a) since, as we assume, *whomever* can be altered to *whoever* unless immediately preceded by a Case-

assigning head, on a par with the interrogative *wh*-element. We can also account for the availability of the Nominative form *whoever* in (9b) and (10b) since the *wh*-element originates as the subject of the relative clause, to which the Nominative Case is assigned.

A problem arises as to the availability of *whomever* in (9b) and (10b), however. Our approach predicts that the Accusative form is not possible in these instances since the *wh*-element originates in the subject position of a finite clause, to which the Nominative Case is assigned. Although this constitutes a counterexample, our approach can present a solution to this problem. Recall that the *wh*-element in our approach ends up in D of the outer DP, as shown in:

(15)



The position that *who* finally reaches, namely  $D_1$ , is another position that is morphologically affected by the Case assigned to its dominating projection ( $DP_1$ ), in the same sense that  $D_2$  is morphologically affected by the kind of Case assigned to  $DP_2$ . Now suppose that there is an extra Case-assignment process in which the Case assigned to  $DP_1$  percolates down to  $D_2$ , as well as to  $D_1$ , overriding the morphology of the structural Case that has been assigned (checked) in the relative clause. This extra Case-assignment is at work in the case of *whomever* in (9b) and (10b): the Accusative Case assigned to  $DP_1$  by the verb ((9b)) or the preposition ((10b)) percolates down to  $D_2$ , as well as to  $D_1$ . When we have the Nominative form *whoever*, there are two possibilities. It may be the result of the *who-whom* alternation in which the Accusative *whom* is altered to the Nominative *who*. It may also be that the extra Case-assignment process is not at work, in which case *who* in  $D_2$  is not affected by the extra Case from an outer source.

In proposing this extra Case-assignment process, we have been assuming that a D may be morphologically affected by Case more than once. It is necessary to defend the existence of this process, since “multiple Case-assignment” of DPs has been strictly banned in the standard framework of generative syntax.

Thus I would like to propose that the relevant extra Case-assignment process is quite distinct in its nature and theoretical status from the usual, structural Case-assignment, or rather, Case-checking mechanism. I would like to suggest two ways of implementing this idea, although I do not discuss which possibility is more promising. One possibility is to posit this extra Case-assignment as a PF process, distinct from the structural Case-checking, which is assumed to work at the Spell-Out or LF. Let us call the relevant Case “Extra-Case” and formulate the relevant process in the following way:

(16) A DP receives Extra-Case from X iff

- (i) the DP and the X are in the appropriate configurational relation for Case-assignment (Case-checking), and
- (ii) the DP is immediately adjacent to X in their linear order.

A consequence of positing this as a PF process is that, as a PF process, the assignment of Extra-Case is expected to be conditioned by the surface linear order of the elements involved. Observe the following examples:

- (17) a. You may invite *whoever/whomever* wants to come. (= (9b))  
 b. *Whoever/\*Whomever* wants to come you may invite.

Recall that under our analysis, the form *whomever* in (17a) is the result of the assignment of Extra-Case by the matrix verb *invite*. However, as we see in (17b), where the free relative is topicalized, the Accusative form *whomever* is no longer possible. This is because the *wh*-element is no longer immediately adjacent to the Case-assigning head *invite* as a result of topicalization.

A similar account is available for (8), where the free relative is in the subject position:

- (8) a. [*Whoever<sub>i</sub>/Whomever<sub>i</sub>* you want to invite *e<sub>i</sub>*] will be welcome.  
 b. [*Whoever<sub>i</sub>/\*Whomever<sub>i</sub>* *e<sub>i</sub>* wants to come] will be welcome.

In (8b), there is no immediately preceding head that could assign Extra-Case to the *wh*-element. Hence the only Case available for the *wh*-element is the structural Nominative Case and this is why *whoever*, but not *whomever*, is possible in (8b).

The second possibility of formulating the relevant Case-assignment process is to appeal to “head-government,” a notion once available in the Government and Binding framework (Chomsky (1981)), and to formulate the extra Case-assignment as follows:

- (18) Extra Case is assigned to a DP by a lexical head X iff X head-governs the DP.

This can equally capture the above paradigm (the examples in (8b), (9b), (10b) and (13b)). *Whomever* is possible in (9b) and (10b) since the Extra-Case (Accusative) is assigned by V or P, which head-governs the DP containing the *wh-ever*. On the other hand; the DP containing *wh-ever* in (8) is not head-governed by a lexical head since the DP is in the subject position. Thus the Extra Case is not available in (8b). Likewise, the Extra Case is not available in (17b), either, since the containing DP is topicalized and detached from its potential head-governor (the V *invite*).

In either way, the proposed Extra-Case-assignment mechanism is a Case process distinct from the structural Case-checking, and is a “peripheral” mechanism in the syntactic component. Indeed, there is speaker variability as to its applicability. One speaker that I have consulted judged *whomever* to be impossible in (17a). For this speaker, the only Case available for *wh-ever* in (17a) is the structural Nominative Case that is assigned (checked) inside the free relative clause.

## 5. Accounting for the Lack of Principle C Effect

Before closing, let us see how our analysis can account for the lack of Principle C effects with the free relative that we reviewed in Section 2. Consider again:

- (3) a. We will comment on whichever pictures on Hansel<sub>i</sub> he<sub>i</sub> displays prominently.  
 b. We will ignore whichever reports on Hansel<sub>i</sub>'s division he<sub>i</sub> won't like.

Under our analysis, it is only the *wh*-element *which* that is moved from inside the free relative and the head nominal (*pictures on Hansel* in (3a) and *reports on Hansel's division* in (3b)) is base-generated in the nominal projection, on a par with the relevant portion of the headed relative in (5). Therefore, the lack of Principle C effect is equally accounted for with our analysis since the name *Hansel* is never c-commanded by the pronoun *he* at any point in the derivation.

## 6. Conclusion

In this paper we have argued for the third approach to the syntax of English free relatives. We

have shown that our approach can open up a possibility of accounting for the apparently complex phenomenon of *whoever/whomever* alternation, and that it can also equally account for the facts that the two past accounts of English free relatives have accounted for. In this sense our third approach is empirically more adequate than the two past approaches.

## Notes

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- 1 This paper is only concerned with the free relative clauses with *wh-ever*. Those free relatives without *-ever* have different syntactic properties from those with *-ever*, as McCawley (1988) points out, and thus are not dealt with in this paper.
- 2 This is also proposed in Homma (to appear).
- 3 A similar proposal is made in Culicover (1999).
- 4 Another possibility would be to assume that *-ever* is attached to the *wh*-element *which* from scratch. However, I do not discuss which option is more adequate, and hence leave this matter for future research.

## References

- Bresnan, Joan and Jane Grimshaw (1978) "The Syntax of Free Relatives in English," *Linguistic Inquiry* 9, 331-391.
- Chomsky, Noam (1981) *Lectures on Government and Binding*. Foris, Dordrecht.
- Citko, Barbara (2002) "(Anti)reconstruction Effects in Free Relatives: A New Argument Against the Comp Account," *Linguistic Inquiry* 33, 507-511.
- Culicover, Peter (1999) *Syntactic Nuts*. Oxford University Press, Oxford.
- Egawa, Taiichiro (1991) *Eibunpo Kaisetsu*. Kaneko Shobo, Tokyo.
- Groos, Anneke and Henk van Riemsdijk (1981) "The Matching Effects in Free Relatives: A Parameter of Core Grammar," *Theory of Markedness in Generative Grammar*, ed. by Adriana Belletti, Luciana Brandi and Luigi Rizzi, 171-216, Scuola Normale Superiore, Pisa.
- Homma, Shinsuke (to appear) "Derivation of Free Relatives in English," *A Festschrift for Prof. Hidekazu Suzuki: Eigo to Bunpo to (English and Grammar)*, ed. by Hiromi Onozuka et al., Kaitakusha, Tokyo.
- Larson, Richard (1987) "'Missing Prepositions" and the Analysis of English Free Relative Clauses," *Linguistic Inquiry* 18, 239-266.
- McCawley, James (1988) *The Syntactic Phenomena of English*. Chicago University Press, Chicago.
- Merchant, Jason (1998) "On the Extent of Trace Deletion in ACD," ms., Utrecht University and University of California, Santa Cruz.
- Sauerland, Uli (1998) *The Meaning of Chains*. Doctoral Dissertation, MIT, Cambridge, MA.
- Takahashi, Daiko (2000) "Determiner Raising and Scope Shift," *Linguistic Inquiry* 33, 575-615.
- Yasui, Minoru (1996) *Eibunpo Soran*. Kaitakusha, Tokyo.