

# Delayed Merge and the Position of *Not*

Tomio Hirose  
Hiroyuki Nawata

否定辞 *not* が時制要素 *to* に先行する英語の不定詞節の語順は、T が普遍的に NegP 補部を従えとする句構造理論に対して問題となる。本稿では、Hale and Keyser (2002) で提案された「遅延併合 (delayed merge)」を採用し、この問題の解決を試みる。具体的には、不定詞節では、T と Neg が併合された後で *not* が Neg の指定部として TP に併合される。また、この一連の操作は、派生の経済性の観点から優先的に選択されると論じる。

キーワード：遅延併合、派生の経済性、否定、一致、for to 不定詞

## 1. Introduction

In English, the negative word *not* precedes what is considered a T in infinitival clauses, while the reverse order obtains in finite clauses:

- (1) a. \*John tried to<sub>T</sub> *not* leave.  
b. John tried *not* to<sub>T</sub> leave.
- (2) a. John will<sub>T</sub> *not* leave.  
b. \*John *not* will<sub>T</sub> leave.

This well-known contrast is a challenge for a theory that adopts the universal T-NegP complementation (Pollock 1989, Chomsky 1995,

among others). That is, if the T-NegP complementation is universal, the relative position of *not* should not differ between the two types of clauses, contrary to fact.

To capture the contrast in question, while maintaining the universal T-NegP complementation, Pollock (1989: 375) argues that (1b) derives from (1a) after the infinitival *to* “affix-hops” across *not* in Spec,NegP onto the empty Neg head. For one thing, this is a sheer stipulation. For another, it involves “lowering” in the overt syntax, an illegitimate operation within a highly restrictive theory of syntax where only “raising” is permitted (Chomsky 1995). Therefore, an alternative, more principled account must be sought that captures the contrast between (1) and (2).

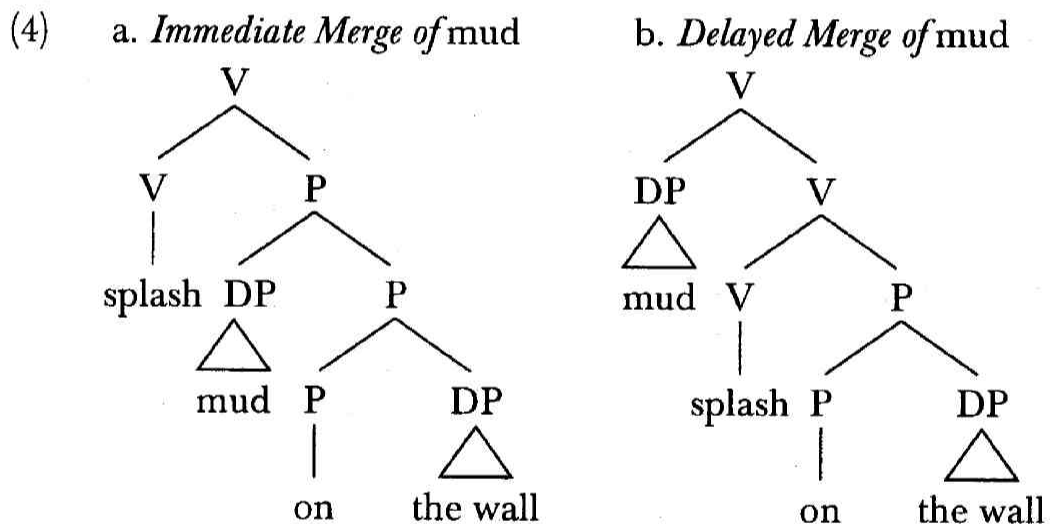
This paper advances such an alternative. For us, the position of *not* is a function of the timing of merge. More specifically, we argue that whether *not* precedes or follows a T head depends on whether “delayed merge” in the sense of Hale and Keyser (2002) applies or not; *not* merges with TP *after* a T head merges with NegP in infinitival clauses (i.e., delayed merge), while in finite clauses, *not* immediately merges with NegP *before* a T head does so (i.e., immediate merge). We argue that delayed merge of *not* is always a preferred option given derivational economy. The key element that determines the timing of merge itself is the agreement/Case property of T. We argue that the agreeing T induces an intervention effect in Rizzi’s (1990) sense, blocking delayed merge. The line of reasoning we adopt here implies that *for to* in Belfast English is an agreeing head.

## 2. Delayed Merge

In their illuminating work on argument structure, Hale and Keyser (2002) argue that one way to capture the transitivity alternation exemplified in (3) is to control the timing of merge of the theme argument *mud*.

- (3) a. The horses splashed mud on the wall.  
 b. Mud splashed on the wall.

Hale and Keyser contend that prepositions such as *on* are a lexical category that denotes a relation, and accordingly requires a specifier as well as a complement. In accordance with the bottom-up structure building principle of the Bare Phrase Structure (Chomsky 1995: chap. 4), the preposition *on* first merges with its complement *the wall* to form the syntactic object *on the wall*. At this point of structure building, Hale and Keyser claim, there are two options to continue the derivation, as illustrated by the 1-syntactic configurations in (4).<sup>1</sup>



One is to satisfy the specifier requirement of the preposition *on* right away by merging *mud* with *on the wall* to project the syntactic object *mud on the wall*. This “immediate” merge is the conventional way to satisfy a category’s specifier requirement. Following the immediate merge of *mud*, the verb *splash* merges with the resultant prepositional syntactic object *mud on the wall*, as in (4a), giving rise to the transitive alternant in (3a). The other, unconventional way is depicted in (4b). This is an instance of “delayed” merge. In this derivation, the satisfaction of the specifier requirement of the preposition *on* is delayed in the sense that it is not met within its own projection, but rather

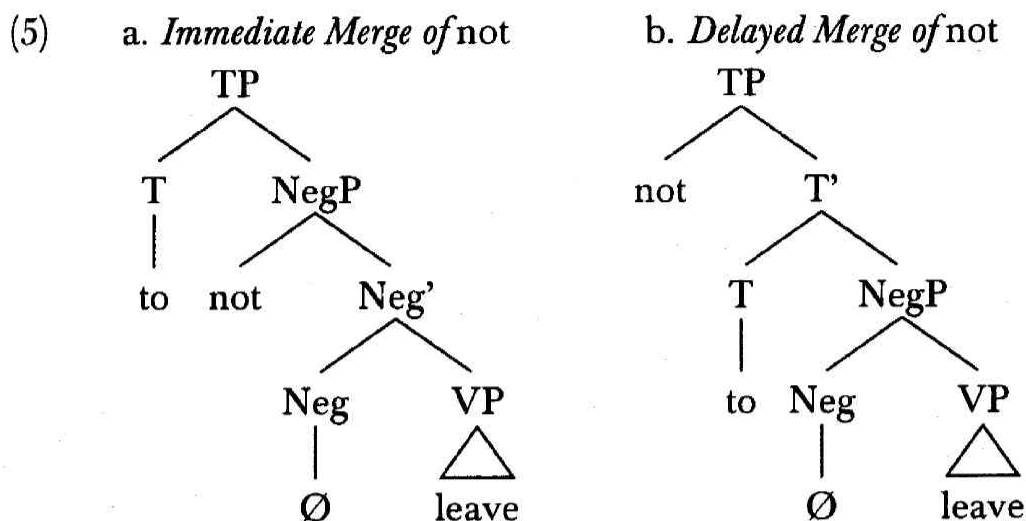
within the projection of the verb *splash* of which *on* is the complement head. This derivation will lead to the intransitive alternant in (3b).

Now, Hale and Keyser (2002) have introduced the option of delayed merge as a structure building instruction at the level of I-syntax. However, there is no a priori reason that delayed merge must be restricted to that particular level of grammar—if it is part of UG at all. In the ensuing sections, we will extend the application domain of delayed merge beyond I-syntax by adopting it in our analysis of the variable placement of *not*, an s-syntactic phenomenon.

### 3. Infinitival Clauses

In our analysis of the variable placement of *not*, we assume two things. First, a T head takes a NegP as its complement regardless of the finiteness of T, along with Pollock (1989) and Chomsky (1995), among others. This ensures the uniform T-NegP complementation in both finite and infinitival clauses. Second, the negative word *not* is not a Neg head, but the syntactic object that satisfies the specifier requirement of the phonologically-null Neg head (Brody 1995, Haegeman and Zanuttini 1991, among others).<sup>2</sup> This renders the negative word *not* subject to the choice between immediate and delayed merge. Given these assumptions, two configurations that differ in the placement of *not* would be available for both finite and infinitival clauses.

Let us consider infinitival clauses first. The two illustrating structures are given in (5).



In (5a), *not* occupies Spec,NegP after immediately merging with the projection of the null Neg head. In (5b), on the other hand, *not* occupies Spec,TP in conformity with delayed merge. In practice, however, only the delayed merge of *not* will lead to a grammatical output, as the grammaticality contrast in (1), repeated here as (6), shows.

- (6) a. \*John tried to<sub>T</sub> *not* leave.  
 b. John tried *not* to<sub>T</sub> leave.

The immediate merge of *not*, therefore, ought to be blocked in one way or another. The question is in what way.

We propose that the ungrammaticality of (6a) is due to derivational economy. The relevant economy condition dictates that a derivation involve as few steps as possible to yield a structure with a particular semantic interpretation (see Hale and Keyser 2002: 247–248). On the assumption that to establish the scope of sentential negation, *not* must command the syntactic object bearing tense—i.e., a T head—at LF (see Chierchia and McConnell-Ginet 1990: 232), the derivational economy takes effect to choose as grammatical the convergent derivation that achieves the required sentential negation configuration in the fewest steps possible. With this in mind, let us return to (5).

In (5a), *not* immediately merges into Spec,NegP, satisfying the

specifier requirement of the Neg head. In order to obtain the required scope of sentential negation, however, *not* must covertly move to a position where it takes scope over T, presumably Spec,TP. Thus, the early merge of *not* needs two steps to establish the proper scope of *not* relative to T. In (5b), on the other hand, the number of steps needed to do the same is only one. That is, delayed merge of *not* into Spec,TP not only satisfies the specifier requirement of Neg (because the distance between *not* in Spec,TP and Neg is local enough), but achieves the structural relation expressing sentential negation. This renders further LF movement unnecessary for the delayed merge option. The economy condition, therefore, favors delayed merge of *not* over early merge of *not*, which requires the extra Move operation for convergence.

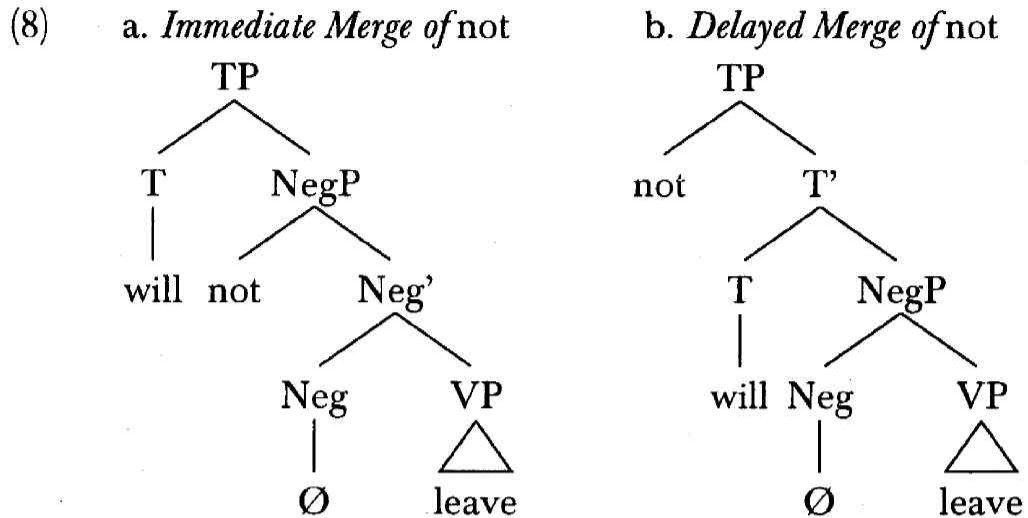
Having seen economy of derivation do justice to the grammatical contrast between (6a) and (6b), we now turn to the placement of *not* in finite clauses, where the opposite grammaticality judgments obtain.

#### 4. Finite Clauses

In finite clauses, the ungrammatical T-*not* order in infinitival clauses is grammatical, while the grammatical *not*-T order in infinitival clauses is ungrammatical. This is demonstrated by (2), repeated here as (7).

- (7) a. John will<sub>T</sub> *not* leave.  
 b. \*John *not* will<sub>T</sub> leave.

In our proposal, these examples are given the following partial structures:



(8a) is the structure for grammatical (7a), while (8b) is the structure for ungrammatical (7b). Thus, in finite clauses, it is immediate merge, rather than delayed merge, that leads to grammaticality, the reverse of what we learned about infinitival clauses in the previous section. We need to answer why this is so.

Recall that delayed merge is chosen over immediate merge in light of economy of derivation. As such, delayed merge is permissible on the condition that it gives a convergent derivation (Chomsky 1995: 220–221). Building on this, we propose that delayed merge of *not* in finite clauses is prohibited because it fails to give a convergent derivation. Supposing so, why is it that delayed merge of *not* cannot lead to a convergence? We answer this question in terms of agreement.

The specifier requirement of the phonologically-null Neg head to be met by the negative word *not* can be recast in terms of agreement; i.e., Neg agrees with *not* in negative force. In this respect, note that a finite T is an established agreeing head; it agrees with the subject DP in Case and  $\phi$ -features. Accordingly, (8b) is a configuration in which an agreeing head (i.e., T) intervenes between another agreeing head (i.e., Neg) and its specifier (i.e., *not*). We claim that this is a configuration in which a potential agreement relation is blocked, as an intervention effect advanced by Rizzi (1990). This is why the delayed merge of *not* in (8b) is ruled out. By contrast, the immediate merge in (8a) is ruled in,

for economy is relative to convergence; it will converge and *not* will involve the fewest possible steps to reach its LF position.

At this point, let us return to the fact that in infinitival clauses, the delayed merge of *not* in Spec,TP in (5b) succeeds. This is because the intervening infinitival T head *to* is not an agreeing head.<sup>3</sup> The immediate merge of *not* in Spec,Neg P in (5a) fails, due to economy of derivation. This completes our account of the contrast between (1) and (2).

In the next section, we examine relevant data from Belfast English that at first glance undermine our intervention account of the illicit delayed merge in (8b), but in actual fact supports it if properly understood.

## 5. Belfast English

Belfast English is known for its use of *for to* as the T head of infinitival clauses in place of *to* in Standard English. For example, where Standard English uses (9a), Belfast English uses (9b).

- |        |                                 |                         |
|--------|---------------------------------|-------------------------|
| (9) a. | John tried <i>to</i> leave.     | <i>Standard English</i> |
| b.     | John tried <i>for to</i> leave. | <i>Belfast English</i>  |

This parallelism gives an initial impression that *for to* in Belfast English may behave the same way as *to* in Standard English in other respects as well, e.g., its relative position to the negative word *not*. That this expectation is unwarranted is shown by the fact that *not* in infinitival clauses of Belfast English does not precede *for to*; it must follow *for to* (Henry 1995: 86):<sup>4</sup>

- |         |  |
|---------|--|
| (10) a. | *I would prefer [them <i>not for to</i> go]. |
| b.      | I would prefer [them <i>for to not</i> go].  |

In terms of merge, the contrast in (10) implies that in infinitival clauses



of Belfast English, delayed merge is not a grammatical option, but immediate merge is. Why is it the case that Belfast English and Standard English differ with regard to the timing of merge of *not* in infinitival clauses the way they do? What brings about this difference? We suggest that the reason be attributed to the presence of *for* in Belfast English and the absence thereof in Standard English in infinitival clauses (modulo a phonologically-null subject), an obvious difference between the two dialects. We argue immediately below that *for* gives rise to an intervention effect, just like a finite T.

First, we take *for to* as the complex infinitival marker under T in Belfast English, along with Tanaka and Miyashita (1999). Second, we propose that *for* of *for to* has Case-agreeing ability (i.e., accusative). This ability remains inactive under T, while it becomes active when it moves to C (Henry 1995: 85):

- (11) a. \*It was stupid [them *for*<sub>T</sub> to<sub>T</sub> do that].  
 b. It was stupid [*for*<sub>C</sub> them to<sub>T</sub> do that].

If inactiveness does not deprive *for* of its blocking ability (cf. Chosmky 2000, 2001), it follows that delayed merge of *not* in infinitival clauses is disallowed in Belfast English, since *for* under T would interfere the agreement relation between *not* and the Neg head. This explains why (10a) is ungrammatical, unlike its Standard English equivalent *I would prefer them not to go*.

## 6. Conclusion

If what we have argued in the preceding sections is correct, neither affix hopping nor alternating complementation relation between TP and NegP is necessary to describe the variable placement of *not*. Rather, it follows from the availability of delayed merge interacting with the agreement/Case property of T and derivational economy (where delayed merge is possible at all). Thus, to the extent that

delayed/immediate merge is an option allowed for natural language structure building, as Hale and Keyser (2002) claim, the variable placement of *not* will simply be a manifestation of UG, desirably.

### Notes

- 1 Approximately, l-syntax is a level of syntax that handles the lexical semantics (i.e., the argument structure) of a lexical item. The conventional level of syntax is called s-syntax. See Hale and Keyser 1993, 2002 for details.
- 2 That *not* is a non-head syntactic object is historically motivated, as Pollock (1989: 366–367, fn. 3) notes. See Williams (1994: sec. 5.1.2) for evidence to the contrary, however.
- 3 We disregard the EPP feature (Chomsky 1995) on T as an agreement property relevant here. Similarly disregarded is the possibility of control T assigning Null Case to its empty subject (Chomsky 1995).
- 4 Along with (10a), (i) is ungrammatical, too.
  - (i) \*I would prefer [them *for not to go*].
 This follows, we believe, if *for* and *to* form a complex syntactic head under T (Henry 1995, Tanaka and Miyashita 1999, among others).

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