

A Note on Derivational Morphology

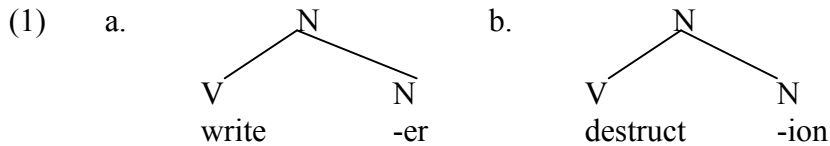
Chris Collins, NYU

August 2006

Abstract: This paper argues that derivational suffixes are verbal arguments.

Keywords: derivational suffix

A traditional analysis of such items as *writer* and *destruction* is that the derivational morpheme is a noun, and it heads the word. This analysis is illustrated below:



Suppose in this configuration that the verb is a complement to the noun. This analysis faces at least four problems. First, it is not clear how the derivational suffix is related to the argument structure of the verb. How can a derivational suffix which is a sister to the verb stand for the external argument of the verb (as in (1a)) and the event argument of the verb (as in (1b))? Second, if *write* and *destruct* are the complements of the derivational suffixes, these examples would be the only cases in English where a complement precedes its head. Third, as pointed out to me by Richard Kayne, if the V is a complement of the N, this configuration violates the generalization that nouns do not in general have complements (see Hale and Keyser 2002 :13, 250, fn. 2)). Fourth, if the verb were a complement to the noun, it would be a VP (since it does not project any further). But then it is unclear how to account for cases where the arguments of the verb appear to the right of the derivational suffix:

- (2) a. A writ-er of trashy novels
b. The destruct-ion of the city in less than two minutes

Suppose, on the other hand, that V is adjoined to N in the structures in (1). A straightforward way to account for (2a,b) is to posit a VP, out of which the verb moves (to the left).

- (3) a. [_N -er [_{VP} write trashy novels]]
b. [_N write-er [_{VP} <write> trashy novels]]

If this VP is a complement of the derivational suffix, the first and the third problems raised above remain. I will briefly run through all four problems here. First, it is not clear how the derivational suffix is related to the argument structure of the verb. Second, the complement VP would follow the derivational suffix, which would obey the generalization that complements follow heads. Third, the nominal derivational suffix would have a complement, violating the generalization that nouns do not have

complements. Fourth, since there is a VP in the structure, it is possible to account for cases where the arguments of the verb appear.

In order to address these problems, I would like to start with the following assumption:

- (4) Derivational suffixes are verbal arguments

Since the derivational suffixes are arguments, they must be merged into argument positions. Therefore, the following structures must be formed:

- (5) a. [VP -er write]
 b. [VP -ion destruct]

In (5a), *-er* is the external argument of the verb *write*. In (5b), *-ion* is the event argument of the verb *destroy/destroy*. I assume that the event argument is a real argument of the verb, projected internal to the VP just like the other arguments of a verb. I leave aside the distinction between vP and VP for reasons of simplicity.

If no other operations take place, the structures in (5a,b) will be VPs, which is not the desired result. Two operations need to take place. First, the derivational suffixes need to become the heads of the structures. Second, the verbs must move to a position preceding the derivational suffixes.

The first operation is similar to what happens in the head raising analysis of relative clauses (Kayne 1994):

- (6) a. [CP Comp [IP I saw man]]
 b. [DP the [CP man [C' Comp [IP I saw <man>]]]]

The NP *man* is an argument of *saw*, which raises to Spec CP in effect making a CP into a possible complement of the determiner *the*.

Following the logic of head raising in relative clauses, suppose that there is a CP that dominates the VP in the examples of derivational morphology:

- (7) a. [CP C [VP -er write]]
 b. [CP C [VP -ion destruct]]

There are two possible ways in which the derivational suffix could move out of the VP here. First, it could move to Spec CP. Second, it could move to C. Since I do not have evidence distinguishing these two possibilities, I will outline both of them here.

First, suppose that the derivational suffix raises to Spec CP, just as in the case of a relative clause where the nominal argument raises to Spec CP:

- (8) a. [CP -er [C' C [VP <-er> write]]]
 b. [CP -ion [C' C [VP <-ion> destruct]]]

In this structure, the derivational suffix still needs to satisfy its morphological property of being suffixed to a verb. This property motivates one last movement operation, where the VP raises to a second specifier of CP:

- (9) a. [CP [VP <-er> write] [C' -er [C' C <VP>]]
 b. [CP [VP <-ion> destruct] [C' -ion [C' C <VP>]]

Alternatively, suppose that the derivational suffix raises to Comp. We can still maintain that the VP raises to Spec CP. A sample derivation is given below:

- (10) a. [VP -er write] → Merge C
 b. [CP C [VP -er write]] → Move -er to C
 c. [CP -er [VP <-er> write]] → Move VP to Spec C
 d. [CP [VP <-er> write] [C' -er <VP>]]

Now note that on either account above ((9) or (10)) all four problems that I raised above are solved. First, the derivational affix is an argument of the verb by virtue of being generated in an argument position. Second, the verb moves into Spec CP, a position preceding the derivational suffix, so there is no issue of a complement preceding its head. Third, the nominal derivational suffix does not have a complement (rather it is an argument), so there is no issue of nouns taking complements. Fourth, *a writer of trashy novels* and *the destruction of the city* are simply cases where the direct object has moved out of the VP before the VP moves to Spec CP, a well-attested kind of remnant movement (see Muller 1998). Cases such as *the destruction of the city by the Romans* find a natural solution too. These examples simply are passives. What is embedded under CP in (7) is a passivized VP.

References

- Hale, Ken and Samuel J. Keyser. 2002. *Prolegomenon to a Theory of Argument structure*. MIT Press, Cambridge.
- Kayne, Richard. 1994. *The Antisymmetry of Syntax*. MIT Press, Cambridge.
- Muller, Gereon. 1998. *Incomplete Category Fronting*. Kluwer Academic Publishers, Dordrecht.