On the Category-Changing Prefixation in English

Akiko Nagano and Masaharu Shimada (University of Tsukuba)

1. Our aim is to examine the hypothesis that conversion underlies category-changing prefixation. "Category-changing prefixes" refer to derivational prefixes that change the syntactic category of the base. For example, PE (Present-day English) has the following category-changing prefixes, all of which produce a V(erb) from a N(oun) or A(djective):

(1) **be-**: [be-[fool]$_N$]$_V$, [be-[little]$_A$]$_V$, **de-**: [de-[louse]$_N$]$_V$, **dis-**: [dis-[bar]$_N$]$_V$,
en-: [en-[cage]$_N$]$_V$, [en-[noble]$_A$]$_V$, **out-**: [out-[jockey]$_N$], [out-[smart]$_A$]$_V$, **un-**: [un-[bottle]$_N$]$_V$

This type of prefixation goes against the determinant-determinatum structure of English words (Marchand 1969) or the RHR (Righthand Head Rule) (Williams 1981). One solution to this issue is to assume that the prefixed Vs in (1) are based on a denominal or deadjectival converted V, as follows:

(2) [be-[[fool]$_N$]$_V$]$_V$, [be-[[little]$_A$]$_V$]$_V$, [de-[[louse]$_N$]$_V$]$_V$, [dis-[[bar]$_N$]$_V$]$_V$, [en-[[cage]$_N$]$_V$]$_V$, [out-[[smart]$_A$]$_V$]$_V$, [un-[[bottle]$_N$]$_V$]$_V$ (cf. Marchand 1969:134-137, Kastovsky 2006:215)

Given the validity of the RHR in PE, this "conversion analysis" is preferable to the analysis in (1), but there seems to be no study that investigates its empirical validity in a systematic way. We will address this issue from both synchronic and diachronic perspectives. Conversion analysis hypothesizes that category-changing prefixation is a successive application of N/A-to-V conversion and V-to-V prefixation. If this hypothesis is correct, the following statements are predicted to be true:

(3) a. Synchronic properties of category-changing prefixation can be accounted for in terms of conversion and V-to-V prefixation. Its derivative inherits properties of the head converted V, and the prefix as a non-head modifies these properties.
b. Diachronic development of category-changing prefixation results from the development of conversion and V-to-V prefixation.

By verifying these predictions, we will claim that conversion analysis is valid both synchronically and diachronically: category-changing prefixation develops as an extension of unmarked non-category-changing prefixation. The data to be introduced below are taken from *OED*.

2. The prediction in (3b) will be verified in terms of the following three facts.

First, the RHR, the motivation of conversion analysis, holds true throughout the history of English. OE (Old English) exhibited the right-headed morphology (Kastovsky 1992), and Romance influences on ME (Middle English) were not destructive enough to disturb this Germanic word structure.

Second, all the prefixes in (1) have a non-category-changing V-to-V usage besides their category-changing usage (e.g. *bebite, encarve, uninvent, outachieve, deeducate, disclose*), and the former usage historically precedes the latter usage in each prefix. It will be shown that the category-changing usage established itself in the 16th and 17th centuries in all the prefixes except *de-*, which was established in the 19th century.

Third, conversion has constituted an unmarked word-formation process throughout the history of English. In particular, N/A-to-V conversion has been the most productive process in verbal derivation from OE to PE (Biese 1941, Kastovsky 1996).

In sum, since all the prefixes in (1) are originally of V-to-V type, and since conversion consistently produces Vs from N/As, there emerges the possibility that the right-headed morphology produces Vs of the structure [Prefix + [[N/A]$_V$]$_V$.

3. For the examination of the prediction in (3a), we will focus on ModE, for this is the period when all the category-changing prefixes in (1) except *out-* attained their highest productivity.

The first support for (3a) comes from the fact that most of the denominal/deadjectival prefixed Vs have a converted counterpart; most of their base N/As have a converted V which can be the base of V-to-V prefixation. Witness the following "doublets" (the number means the year of first attestation):

(4) begay 1648/ gay$_V$ 1581, outsubtle 1619/ subtle$_V$ 1340, entower 1649/ tower$_V$ 1400, unfrill 1791/ frill$_V$ 1574, disring 1836/ ring$_V$ 1552, defrost 1895/ frost$_V$ 1807

The second support for (3a) comes from the fact that the semantics of N/A-to-V prefixation is equivalent to the semantics of N/A-to-V conversion modified by the semantics of V-to-V prefixation. For example, given Blom and Booij's (2003) view of grammaticalization from particles to prefixes, the semantics of the V-to-V usage of *be-*, intensification and transitivization, can be generalized as follows:

(5) [*be*-V]$_V$ expresses the holistic interpretation "affect Theme completely by Ving"

Theme in (5) corresponds to the direct object of the base transitive V or to the prepositional object of the base unergative V (e.g. *beblast X* "affect X completely by blasting it," *beshout X* "affect X completely by shouting at it"). N/A-to-V conversion, on the other hand, expresses diverse meanings, as shown in Clark and Clark 1979 and Plag 1999. Our argument is that the input and output semantic properties of denominal/deadjectival *be*-verbs can be accounted for in terms of conversion's semantic diversity plus (5). The prefix cannot attach to unaccusative converted Vs. Its output is always transitive and telic, and shows the same semantic diversity as converted Vs as long as compatibility with (5) is guaranteed: locatum (e.g. *bepearl*), location (e.g. *bebog*), goal (e.g. *befool*), privative (e.g. *belimb*), manner (e.g. *bedevil*), instrument (e.g. *beglue*), action (e.g. *bethump*), production (e.g. *belitter*). These *be*-Vs differ from the converted-V forms (e.g. *to pearl*) in their holistic interpretation; *bepearl X* means not to "adorn X with pearls" but to "adorn X all over with pearls" (= (5) "affect X completely by pearling it"). This holistic interpretation gives rise to the nuance of ridicule typical of *be*-Vs.

The third support for (3a) lies in the fact that denominal/deadjectival prefixed Vs are subject to the same morphological constraints as converted Vs. For example, Hammond (1993) observes that *be-*, *en-*, and *de-* can attach to a suffixed word when they are non-category-changing (e.g. *encapsulate*), but cannot when category-changing. Suffixed words cannot be the input to category-changing prefixation because they cannot be the input to conversion (e.g. **to arrival*, **to kindness*).

4. On the basis of the arguments summarized above, we will conclude that category-changing prefixation developed in ModE from N/A-to-V conversion and V-to-V prefixation. In a word, category-changing prefixation is nothing but a type of V-to-V prefixation. This raises two questions:

(6) a. Why is category-changing prefixation restricted to the output V, when conversion is not?
    b. Why isn't it the case that all the prefixes with a V-to-V usage have category-changing prefixation usages?

We will answer (6a) in terms of the particularly high productivity of V-forming conversion. For (6b), we will claim that all the productive V-to-V prefixes do exhibit category-changing prefixation. Not only the prefixes in (1) but also *fore-*, *inter-*, *mis-*, *pre-*, *re-*, *sub-*, *super-*, and *trans-* have V-to-V usage (e.g. *forebode*, *interaccuse*, *misread*, *premake*, *rewrite*, *sublet*, *superfix*, *trans-situate*), and they produce the "denominal V" instances in ModE:

(7) foreprophecy, interpage, miscipher, pretune, subminister, superdevil, tran(s)ship, repulpit, reking

5. References

Biese, Y. M. 1941. *Origin and development of conversions in English*, Helsinki: Suomalainen Tiedeakatemia./ Blom, C. and G. Booij. 2003. "The diachrony of complex predicates in Dutch: A case study in grammaticalization," *Acta Linguistica Hungarica* 50, 61-91./ Clark, E. and H. Clark. 1979. "When nouns surface as verbs," *Language* 55, 767-811./ Hammond, M. 1993. "On the absence of category-changing prefixes in English," *Linguistic Inquiry* 24, 562-567./ Kastovsky, D. 1992. "Semantics and vocabulary," R. M. Hogg (ed.) *The Cambridge history of the English language Vol. I*, 290-408, Cambridge: Cambridge UP./ Kastovsky, D. 1996. "Verbal derivation in English: A historical survey or much ado about nothing," D. Britton (ed.) *English historical linguistics 1994*, 93-117, Amsterdam: John Benjamins./Kastovsky, D. 2006. "Vocabulary," R. Hogg and D. Denison (eds.) *A history of the English language*, 199-270, Cambridge: Cambridge UP./ Marchand, H. 1969. *The categories and types of present-day English word-formation*, Munich: C.H. Beck./ Plag, I. 1999. *Morphological productivity: Structural constraints in English derivation*, Berlin: Mouton de Gruyter./ Williams, E. 1981. "On the notions 'lexically related' and 'head of word'," *LI* 12, 245-274.