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Proceedings of the Eleventh Annual Meeting of the Berkeley Linguistics Society (1985), pp. 337-357

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The Annual Proceedings of the Berkeley Linguistics Society is published online via [eLanguage](#), the Linguistic Society of America's digital publishing platform.

EN-PREFIXATION AND THE SYNTACTIC DOMAIN OF ZERO
DERIVATION

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The goal of this study is to develop a local transformational analysis of the en-prefixed verbs, some of which are exemplified below:

- (1)a. imprison NP, encode NP, enlist NP, enchain NP,
entomb NP, embalm NP, encircle NP, entrain NP,
entrench NP, encompass NP, enthrone NP, etc.
b. endanger NP, empower NP, enrage NP, enact NP
c. encourage NP to VP, entitle NP to VP, enable NP
to VP
d. enlighten NP, enliven NP
e. embitter NP, enrich NP, ensure NP

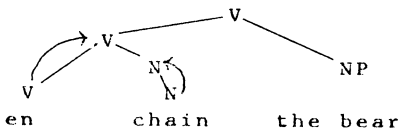
These verbs have merited attention in a wide range of recent morphological studies (Lieber 1980, Williams 1981, Selkirk 1982, Moortgat 1981, Namiki 1982, Strong-Jensen 1982) due to an apparent exceptional property which they typify. It is widely acknowledged in morphology that the category-changing element in words is usually found in a suffixal position. Williams 1981 puts this observation into a principled form as the Righthand Head Rule:

- (2) **The Righthand Head Rule** (Williams 1981):

In morphology, we define the head of a morphologically complex word to be the righthand member of that word.

The Lefthand Head Analysis of the en-prefixed verbs acknowledges that the verbs violate (2). The category-changing element in the en-prefixed verbs is the prefix, a lefthand element. So it is proposed that the prefix en- is the head of word. Since the word is a verb its head must carry a verbal feature. Lieber 1980 associates these verbs with the following structure, where the arrows indicate feature percolation:

- (3)



The Lefthand Head Analysis of the en-prefixed verbs poses two immediate problems. First, it should extend to the verbs in (4), since on the surface imprison seems

like overcloud:

(4) overcloud NP, outfox NP, uproot NP, underman NP, inflame NP

But such an extension leads to the undesirable conclusion that over, out, under and in in (4) are English verbs. Secondly, it leads to a contradiction in categorizing the suffix -en. In verbs like widen in (5) -en is on the right, hence by (2) a head of word.

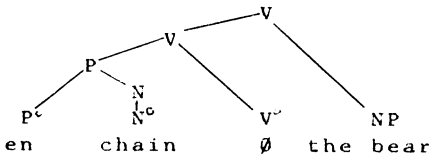
(5) widen NP, threaten NP, blacken NP

But if in (3) the prefix en- is the head of word, it is difficult to find a position - and a category - for the suffix in these verbs which are prefixed and suffixed by en at the same time:

(6) enlighten NP, enliven NP

In what follows, I argue against the Lefthand Head Analysis of the en-prefixed verbs, and against the structure in (3). Instead, I propose a Zero-Head Analysis with a structure as in (7):

(7)



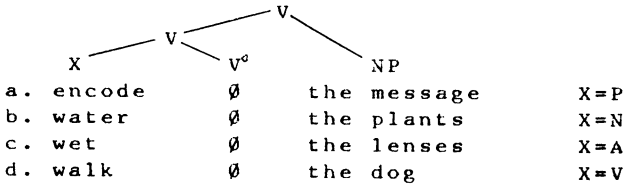
Notation: X^0 =head; X=nonmax, nonhead;
 X^{max} =maximal projection

In (7) the suffix is a head. In English, this position may be realized either as \emptyset , or as -en. Thus my analysis encompasses all the verbs in (1), the suffixed verbs in (5) and (6) as well as other zero-derived verbs such as those in (8):

(8) to walk \emptyset a dog, to water \emptyset the plants, to wet \emptyset the lenses

(7) and (8) provide evidence that the prehead position may be filled by a full range of lexical categories: P, A, N, and V, and that the structure in (7) is a particular instantiation of a more general structure in (9):

(9)



In (7) and (9a) the X is realized as a nonmaximal prepositional phrase. The prefix en- heads this phrase and forms a constituent with the following adjective or noun, which is a complement of P. The prefix en- is therefore a member of the category P[1]. In particular it is a positional allomorph of the English transitive preposition in. Below in (10) I give a list of properties which en- shares with in:

(10)

A. It can always be pronounced /iN/, and often has been spelled "in" (Marchand 1969, OED).

B. It is unstressed.

C. It doesn't undergo Lateral Deletion:
enlighten/*ellighten; enrage/*errage;
*inluminate/illuminate

D. It doesn't undergo Stress Shifting Nominalization:

$in\acute{s}ert_V \rightarrow \acute{i}n\acute{s}ert_N$; $im\acute{p}ort_V \rightarrow \acute{i}m\acute{p}ort_N$;

$en\acute{c}ode_V \rightarrow *en\acute{c}ode_N$; $en\acute{s}lave_V \rightarrow *en\acute{s}lave_N$

E. It is directional.

F. It assigns Goal when governed by a causative V.

G. French and Spanish have both the preposition en and a prefix en-. Polish, Russian have neither.

In the Zero-Head Analysis of the en-prefixed verbs it is not a coincidence that to imprison the priests means "to put the priests in prison" and that to embitter Mary means "to make Mary bitter." The preposition in under a causative verb is directional and assigns Goal. And so does the prefix.

The contrasts in (10C-D) suggest that the prefix en- is not a level 1 prefix of the Level Morphology and Lexical Morphology (Siegel 1972, Allen 1978, Kiparsky 1982, 1983, Pesetsky 1985). If it were at level 1, it should undergo both Lateral Deletion and Stress Shifting Nominalization, since level 1 is the domain where such rules apply. The fact that the prefix doesn't trigger stress changes itself gives more evidence that it is not at level 1. But at the same time some other criteria justify its classification as a level 1 prefix. First,

it takes non-words:

(11) enchant, encumber, endorse, engage

Second, it is never outside of any other prefix, in fact it occurs inside dis-:

(12) disembark, disembody

The prefix dis- itself takes non-words:

(13) disinter, disguise, disdain

It also occasionally allows the Stress Shifting Nominalization: my likes and dis¹likes or triggers the shift itself: locate/dis¹locate. The criteria which Level Morphology uses for classification of English affixes into levels lead to a contradiction in the case of the prefix en-, and possibly indicate the necessity of a feature Latinate, if the prefix is to remain level 1.

I use the notion "prefix" or "the prefix en-" only for convenience in discussion. Neither term is a category in this system (cf. Walinska 1982, 1983b, 1984). I claim that the element en- in the prefixal position of the words in (1) is a P which shares a lexical entry with the P in, as shown below[2][3]:

(14) in, P, ___ NP; {danger, title, bitter, able, rich...}

It is argued in Jackendoff 1977 and Emonds 1985 that P's take a full range of lexical categories. The preposition in subcategorizes for NP, as well as for a list of Roots which are N or A. In Walinska 1983b and in work in progress I argue that the Universal Grammar contains a very important principle which assures that Roots preserve their categorial identity not only syntactically (this is secured by the projection principle of Chomsky 1981) but also paradigmatically, i.e. a Root may not be listed in the Lexicon twice, with different category labels.

(15) **Root Identity:** If a Root R belongs to a lexical category C^1 , it may not belong to a category C^k , where $k \neq 1$.

This principle among other things allows the Root names in (14) to act as category labels.

In (7) the V^0 position realized as \emptyset or en is crucially not a head of word but a head of VP^{m1x} ,

therefore a verb itself. As a verbal head, it is unique, it has a uniform argument structure and a uniform theta grid. On the grounds of its uniqueness as a head we exclude the following agglutinations of stems and affixes, where the two final elements are heads of X^{\max} :

- (16) *enchain \emptyset en; *beaut ify en; *throw en;
*moral iz ify

The head V° subcategorizes a projection of N and a projection of P or A, typically of causatives:

- (17) V° , _____ N $\left\{ \begin{array}{l} P \\ A \end{array} \right\}$

The subcategorization frame in (17) gives additional evidence that the prefix en-, which heads an argument of V, is a P. The theta grid of V° is given in (18), and the details of theta role assignment [4] in (19):

- (18) V° , ___ AGENT, THEME, $\left\{ \begin{array}{l} \text{GOAL} \\ \text{PREDICATE} \end{array} \right\}$

- (19)a. im prison \emptyset him b. em bitter \emptyset the actor
P GOAL V THEME P PRED. V THEME

In (19a) the zero V° assigns THEME directly to the object NP. It assigns GOAL indirectly, through the direct theta-role assigner P. (cf. Emonds 1985, ch.1 on the notion direct assignment of theta roles). [5] Similarly in (19b), where the preposition is a copula P, very much like the copulas as and into discussed in detail in Emonds 1982.

The final argument for the head status of V° in (7) is its position in X^{\max} . I assume that the position of heads of X^{\max} is given in English by the Head Placement Principle of Emonds:

- (20) **Head Placement Principle** (Emonds 1985, ch.1):
All and only maximal categories follow the head of X . ENGLISH.

By this principle, taking the direction of the government in English to be from left to right (Stowell 1983), all phrases on the governed side of X^{\max} are maximal, and all phrases on the governing side of X^{\max} are non-maximal. The structure in (7) is in accord with the HPP.

On the assumption that the HPP applies in d-structure, taken in Walinska 1983a, the structure in (7) is a d-structure, and is identical with its

coindexed with an empty category in PP position, another argument may not occur in that position, by the Theta Criterion of Chomsky 1981, which disallows an assignment of the same theta role to two arguments. The same principle excludes cooccurrence of two directional prepositional prefixes in (24). Level Morphology is unable to explain the complementary distributions in (23) because no level orderings are violated there.

So far arguments were given that @ of rule (21) is a P, and a Goal argument. The purpose of the next section is to assure that @ must be an argument, in principle.

Argument domain as a domain of local rules

Lobeck (1984) proposes that local rules in the sense of Emonds are restricted to elements within the argument domain of a head:

(25) Argument domain (Lobeck 1984)

X is in the domain of Y iff X gets a theta role from Y.

Since I claim that the rule (21) is local, it is important to see if her proposal stops the rule from overgenerating in a useful way.

Lobeck uses the notion "argument domain" to explain contrasts involving "leaner to," as in extraposed clauses and purpose clauses: to may lean even when it is outside the government domain of a head, iff it heads an argument of that head. There is strong evidence that the notion "argument domain" also plays a part in delimiting the domain of zero derivation. Even though the preposition in occurs as a head of PP adjuncts, of prepositional subjects, of non-argument locations, of adjectival adjuncts, and of complements of embedded Vs, which are shown respectively in (26-30), in may never be adjoined to the zero head from this position, as is shown in the starred (39) sentences.

- (26)a. He often managed to get his folks in (a) rage.
 b. He often managed to enrage_i his folks e_i.
 c. He often managed to make good music, when in (a) rage.
 d. *He often managed to enrage_i good music, e_i.

- (27)a. In prison may not be a good place to complain.
 b. *It_i may not imprison_i a good place to complain.

- (28)a. Back in the cell, he was put in chains.
 b. Back in the cell, he was enchain_ied e_i.

- c. The prisoner had his dinner in chains.
- d. *The prisoner enchain_ied his dinner e_i.

- (29)a. She made the actor bitter.
- b. She embitter_ied the actor e_i.
- c. She made the actor, bitter.
- d. *She embitter_ied the actor, e_i.

- (30)a. She let him turn her into a slave.
- b. She let him enslav_ie her e_i.
- c. *She enslav_ie d him turn her e_i.

While Lobeck argues for the notion "argument domain" based on sentences where an argument is outside the government domain, in (27-29) we find non-arguments which are in the structural domain of government, but because they are not assigned a theta role, they fall outside the argument domain, and therefore the rule (21) gives ungrammatical results. In (27) the dummy nonagreemental be does not assign a theta role to the subject. In (28c) the location PP is not an argument of have dinner, while it is an argument of put in (28a). In (29a) the role of object predicate is assigned by the verb. But the adjectival adjunct in (29c) does not receive a theta role from the verb.

The move towards a non-structural definition of the argument domain, which underlies Lobeck's study as well as the theoretical proposals of Travis 1984, is particularly useful in distinguishing the intrinsic vs. nonintrinsic locations, such as those in (28), where there are no independent reasons for structural differentiation of PPs in (28a) and (28c).

The independently needed notion of the argument domain allows for the simple statement of the rule (21) as move @, local.

Zero-derivation as a derived insertion

In my analysis of zero-derivation of examples like imprison I hypothesize that the local transformation (21) falls together with other types of insertion in lexical head positions. Many properties of this rule will therefore follow as properties of insertion. First of all, the fact that the rule (21) is a transformation will no longer be surprising: in Chomsky (1965) the definition of an insertion rule has the features of a local transformation (cf. Chomsky 1965, ch.2, note 18).

Take again the d-structure to which the rule (21) optionally applies:

subcategorization is marked as idiosyncratic. The Dictionary in the sense of Halle (1972) has access to non-linguistic, pragmatic information and to the subparameters of English. Any kind of lexicalization is taken care of by the Dictionary.[9]

If (21) is the first word formation rule to apply, and if such local rules adjoin material to the head node of a lexical projection the prediction will be that no lexical material will ever interfere between the zero-head and the P-phrase. Cooccurrence of zero-derivation with compounding (33), the Native Reanalysis (34), and various other prefixation processes confirms this prediction:

- (33)a. child enslaving
- b. *enslave childing
- (34)a. overshadowed her partner
- b. *shadowovered her partner
- (35)a. misencoded the message
- b. *enmiscoded the message
- (36)a. reenacted the law
- b. *enreacted the law
- (37)a. overendangers the survival of the whale
- b. *enoverdangers the survival of the whale
- (38)a. disembodied the soul
- b. *endisbodied the soul

B. If Root insertion provides the material for the arguments of zero-heads, we will also predict why the reduced argument is always a fullfledged Root, and never a stem. In this system, the words below will never be derived by (21)[10]:

- (39) enchant NP, encumber NP, endorse NP, engage NP
- (40) irrigate NP, illuminate NP

C. If the P constituent is moved from a syntactic position, more precisely from a position on the governed side of VP, it is explained why the head - complement order of the elements within the P phrase is from the left to right, i.e. the unmarked order of English (cf. Stowell 1983). If the operation which generates the en-prefixed verbs were an operation on lexical entries, it would be difficult to explain why the en-X string is a phrasal projection at all, and why this projection follows the unmarked order of phrases on the governed side. Surely we don't want the Lexicon to be burdened with providing the order of constituents (cf. Travis 1984).[11]

D. Perhaps the strongest argument that (20) is indeed a derived insertion may be found in the fact that

- (47)a. able to study
 b. enable_id her e_i to study
- (48)a. have courage to say no
 b. encourage_id me e_i to say no
- (49)a. give you title to make the decision
 b. entitle_id you e_i to make the decision
- (50)a. a tomb in the pyramid
 b. entomb_ied the Pharaoh e_i in the pyramid

The combination of the HPP and the Case Filter allows that rule (21) to leave behind any maximal category except for NPs in the position where they cannot get Case. The complements left behind in (47-50) are VPs and PPs and do not require Case.

(51) exemplifies the predications made by the Case Filter:

- (51)a. *
-
- b.
-
- c.
-

In (51a) the verb is transitive. The P reanalyzes from a position which is not adjacent to the verb. The NP will therefore lack a case assigner and the structure will be rendered ungrammatical. But in (51b) a movement of an intransitive P from a position nonadjacent to V should be fine. (52) below shows that structures such as (51b) are possible in English:

- (52)a. They up_iped my salary e_i.
 b. They down_ied their weapons e_i.
 c. They back_ied their car e_i.

The structure (51a) is represented below as (53a-b), and as predicted it is ungrammatical:

- (53)a. *They in_ined him e_i the prison.
 b. *They in_ined him e_i prison
 c. They imprison_ied him e_i.

But (53b) is not ruled out by the Case Filter, because the Case Filter refers only to maximal, i.e. specified NPs.[13] The sentence is ruled out by the HPP, which disallows nonmaximal categories on the governed side of a phrase. Therefore, (53c), i.e. movement of a nonmaximal N projection along with the P head, is the only possibility in the grammar of English.

The structures (53a-b) are not ungrammatical because reanalysis of P is not an option of the

parameter. The reanalyzing structure in (51c) is illustrated in (54) with the prefix over.

- (54)a. The house $over_i$ looks e_i the bay.
 b. The cliff $over_i$ hangs e_i the shore.
 c. He $over_i$ sees e_i my work.

The Native Reanalysis also occurs with the prepositional prefixes be- and under-. It is studied in detail in a chapter of my dissertation in progress. Basically, it is proposed there that the phrase such as to overlook the bay is related to the phrase to look over the bay. Crucially, it is not the verb, but the prefix, which selects the object NP, which thematically is a Location, not a Theme. These verbs occur in English only with intransitive verbs, exactly what (51) predicts.

- (55)a. throw the ball over the fence
 b. * $over_i$ throw the ball e_i the fence
 (56)a. grow cucumbers over the hill
 b. * $over_i$ grow cucumbers e_i the hill

Even though a verb may select a preposition over, as the (a) sentences of (55-56) show, the preposition may not be moved from this position, because the result of this analysis would be an ungrammatical structure (51a), instantiated in the (b) sentences of (55-56). (57-58) below give evidence that English doesn't allow P doubling as its case strategy:

- (57)a. The house overlooks (*over) the hill.
 b. The cliff overhangs (*over) the shore.
 (58)a. *to overgrow cucumbers (over) the hill
 b. *to overthrow the ball (over) the fence

As far as the projection of phrases on the ungoverned side of the phrase, the combination of the Case Filter and the HPP again makes correct predictions, and not only for the en-prefixed verbs, but also for other morphological structures of English. If case is assigned under government (Chomsky 1981, Stowell 1981), and if case government is from left to right in English (cf. Koopman 1984 for the notion "direction of case and theta role assignment") then maximal NPs left of the head will not get case. So only nonmaximal NPs may be found to the left of the head in all lexical projections in English.

Keyser and Roeper 1984 stipulate that word formation rules operate on minimal projections, while syntactic frame rules operate on maximal projections. This restriction on rule types explains in their theory

the following contrasts:

- (59)a. the driver of that green car
 b. *that green car driver
 (60)a. He drives that \emptyset .
 b. *a that \emptyset driver.

But if case is assigned under government, the maximal NPs on the governing side are ungoverned, and will not get case.

That it is Case Theory which is involved in these morphological structures is also evidenced by the contrasts below, where the case-marked pronoun of the reflexive phrase is ungrammatical on the governing side:

- (61)a. { The cell's self-destruction
 b. { The cell's destruction of itself } has not
 c. { *The cell's itself destruction } yet been
 explained.
 (62)a. { John's self-admiration
 b. { John's admiration of himself } is unlimited.
 c. { *John's himself admiration }

But again the Case Filter must be supplemented by the HPP to make predictions about maximal phrases other than NPs. Thus, Case Theory alone will not exclude maximal PPs left of the head:

- (63)a. My window { looks right over } the neighbor's
 b. { *rightoverlooks } backyard.
 (64)a. They put the guy straight in prison.
 b. *They straightimprisoned him.

The ungrammatical (b) sentences are excluded by the HPP filter.

If the Case Filter and the HPP are operative principles in the grammar of English, Keyser's and Roeper's stipulation about properties of word formation rules is not necessary. In the modular approach to phrase structure advocated for in Stowell 1981, Koopman 1984, and Travis 1984, Case Filter and a principle of X' syntax such as the HPP parameter provide a logical extension of the Phrase Structure model of morphology developed in Selkirk 1982.

Some apparent counterexamples

One of the predictions of this analysis is that Goal arguments will never be found with the en-prefixed verbs. But consider the verbs in (63):

(65) imprint, implant, import

These verbs do occur with Goal arguments:

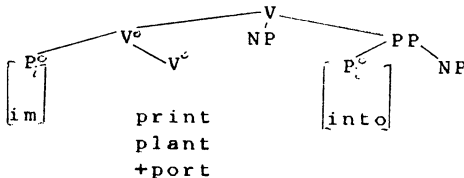
- (66)a. 1374. Ymagynacions of sensible things enpreynted into sowles...
 b. 1578. The optic sinew is implanted into the middle of the eye.

Should the string im print be analyzed as P-N? In the sentence from Chaucer, the meaning is not that of putting the imaginations in print, but rather pressing them into souls. That the stems of the verbs in (66) are verbal is further confirmed in their conjunction with a causative, impossible with the en-prefixed verbs:

- (67)a. 1605. ...which God hath put and implanted in all creature.
 b. *They put and imprisoned him.

We have thus two syntactic tests that the verbs in (65) differ from those in (1). They represent a P doubling structure given below, where a head P^c is adjoined left to a verb Root (or stem):

(68) The Latinate Subparameter of English:



But if this structure is at all available in English, it is not available in English syntax, because the Native English parameter does not allow P doubling, as was shown with the reanalysis of over (see (57-58)). Doubling is a structure characteristic of the Latinate subparameter of English, and therefore, if the verbs in (65) are given any structure at all, it happens in the Latinate part of the Dictionary. There is nothing in principle wrong with the structure in (68). As a matter of fact, even though it happens to be part of the English Dictionary, it is not at all a marked structure universally. It is one of the aspect forming structures in Polish and other Slavic languages. [14]

The verbs in (65) offer yet another contrast with the en-prefixed verbs - they allow the Stress Shifting Nominalization, impossible with the en-prefixed verbs,

cf. (69) vs. (70-71):

(69) [[¹im[²print]_v∅]_N [[¹im[²plant]_v∅]_N
[[¹im[²port]_v∅]_N

(70) *[[¹im[²prison]_p∅]_v∅]_N *[[¹en[²act]_p∅]_v∅]_N
*[[¹en[²rich]_p∅]_v∅]_N

(71) *[[¹en[²light]_pen]_v∅]_N

The Latinate Zero Nominalization attaches to unsuffixed verbal roots, so (69) is fine. But in (70-71) there is a functioning verbal suffix, therefore the structure for Zero Nominalization is not met. It is argued in Walinska 1982 that while zero suffixes may attach to morphologically complex structures, they may never follow category determining suffixes. In effect, they may only follow Roots. This constraint may be thought of as a universal. The contrast in (69-71) provide additional evidence that there is a zero-suffix in (70).

In conclusion, English speakers may well form their representations of the contrasts between the English parameter and its Latinate subparameter on the basis of syntactic, not merely phonological evidence.

Conclusion

In this study I have argued for an analysis of the en-prefixed verbs which involves a substantial amount of theoretical abstraction. I propose that "move @" may apply in syntax even in cases where @ is not a maximal projection of a category. Our insistence on application of some nonproductive local rules in syntax claims that the rules not only may follow syntactic constraints, but must do so. I do not a priori model the notion of syntactic rule on the wh-movement of English, and I principally do not expect full productivity of rules which make crucial reference to lexical heads.

Considering the Roots involved in the syntactic derivation of the en-prefixed verbs, there remains no doubt that the derivation is native. Historical evidence confirms that the rule was once fully productive in its domain.[15] In present-day English, it is restricted to several dozen verbs, and the number shrinks, giving way to fully productive movement of N.

The analysis given here, in which the prefix is a positional allomorph of the directional preposition in,

predicts this steady loss of the syntactic importance of "move @", local, @=P. The directional usage of in in present-day English is considerably restricted in comparison to previous stages. Moreover, the prefixal allomorph in is burdened with a device which makes the learning of the rule considerably more difficult: as I proposed in (14), the allomorph subcategorizes not only for a category, but also for a list of Roots. Such a list restriction appears also with the -en realization of the verbal head position (cf. Malkiel 1978). In contrast to these two phonologically expressed affixes, the English verbal head phonologically realized as zero does not carry a list of Roots. Therefore the unsuffixed alternative is taken for more and more Roots (trap NP vs. entrap NP).

That the native prefix en-, as opposed to the Latinate prefix in in inflammable, irrigate, and illuminated, functions as a directional preposition may be also evidenced by the fact that only the latter may be semantically confused with the negative in. Many dictionaries discuss inflammable as a tricky word, because it should mean "not flammable" but in fact means quite the opposite. But an enacted law is never confused with an inactive law, and when someone was imprisoned for five years the speakers know he was in, not out. The native participles enacted or imprisoned are never analyzed as [en[acted]], or [im[prisoned]], while inflammable is.

In effect of this analysis of the en-prefixed verbs the class of English prepositions was augmented with one more member - a nonproductive prefixal alternant of the transitive preposition in, i.e. the prefix en-. While the occurrence of this prefix is lexically restricted, there exists overwhelming evidence that neither semantic lexicalization nor limited productivity is necessarily correlated with violations of syntactic principles. An inclusion of morphological structures to the syntactic theory provides a greater insight into the former, and the latter.

Acknowledgements

A version of this paper was presented at the 1985 meeting of the Northwest Linguistic Club, at the University of Washington. I would like to thank the participants for insightful comments. Dawn Bates, Ellen Kaisse, Lori Kenton, and Anne Lobeck were extremely helpful at different stages of this work. I would like to especially thank my graduate advisor Joseph Emonds who offered many insights and patiently participated in all the stages and forms of this study. Finally, I

would like to thank George Lakoff for encouragement.

Notes

1. The argumentation that the prefix en- is a member of the category P, which is central to this paper, goes hand-in-hand with Emonds' 1972 argumentation that particles are (intransitive) prepositions. Essentially, Emonds argues that "particle" is not a grammatical category, but "preposition" is. The claim here, and in Walinska (1982) is that prefix is not an X-bar category, but a preposition is. The etymology of the terms "prefix" and "particle" is quite indicative of a theoretical shortcoming.
2. This elegant solution to the messy problem is due to J. Emonds (pc).
3. Very much like in the be/by alternation, where be- takes side, cause, low, while by takes Nmax.
4. Parts of words were treated as arguments to abstract causative and inchoative operators in Lakoff (1965, 1970). One central idea here is thus nothing new, though there exist major formal differences between Lakoff's original proposal and the one developed here and my work in progress. This is to be expected taking into account the development of the X-bar theory, the theory of semantic roles, abstract case, local rules, etc. Of importance for the proposal in this paper is acknowledgement of syntactically simple monomorphemic causatives. Thus the zero-head position in this theory encompasses two operators used by Lakoff - the causative and the inchoative. There is strong syntactic and psychological evidence for existence of such syntactically monomorphemic, but semantically complex operators. cf. Emonds 1985, Clark 1978.
5. In Emonds 1985, ch.1 "direct assignment of a theta role" is to a sister.
6. The extremely interesting question of whether there is a trace left in the en-prefixed structures and what are its properties goes beyond the limits of this paper. It will be discussed in my dissertation.
7. Kiparsky 1983 uses a similar test of productivity of zero-derivation with instrumentals. The data in (22-24) again confirm that en- is not a level 1 prefix.
8. This matching may be understood as the ability of a

lexical Root to select semantically the arguments under the complex symbol.

9. The Dictionary will list enjoy NP with its sense of "have NP." It will provide the split selection and subcategorization for insure, ensure, and assure, etc.

10. This system thus makes it possible to synchronically separate some borrowings, which entered the English system through the Dictionary, from derivable structures. This may be achieved only if the lexical material to be moved is inserted into syntactic argument positions - such positions are never headed by non-words.

11. The unavailability of phrasal projections in the Lexicon will furthermore exclude the derivation of en-verbs by the Lexical Redundancy Rule proposed for conversion by Lieber 1980.

12. The non-iterativity of zero-derivation may be explained in another way, if the position adjacent to zero-head is an operator position, sort of lexical Comp. I take this view in my dissertation.

13. Pesetsky's 1982 study of genitive/accusative alternation in Russian clearly shows that assignment of case is dependent on the properties of the spec(N).

14. Following Anderson (1982), one might say that the Slavic aspectual structures are formed in the syntax because they are syntactically relevant, thus inflectional. In my view the notion of syntactic relevancy is much broader than the one discussed by Anderson and encompasses many traditionally derivational and not fully productive structures. The syntactic execution of derivational structures is possible because my theory excludes the category-changing rule as a possible or necessary rule of grammar. cf. Walinska 1984.

15. Strong-Jensen (1982) argues that en- is semi-productive in present-day English, quoting such neologisms from Marchand as: embus (1915), envision (1921), emplane (1923). She adds entrain (1982). She also argues that en- is a level 2 affix of the basis of its failure to undergo Lateral Deletion.

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