TRANSITIVE ADJECTIVES: A CASE OF CATEGORIAL REANALYSIS

This paper is an investigation into the criteria for establishing syntactic categories, and more specifically, into the problem of distinguishing between the categories of Adjective and Preposition. I will argue that in the history of English, at least two adjectives, like and worth, were reanalyzed as prepositions. Two questions come to mind: Why did the categorial reanalysis take place? What were the grammatical consequences of the reanalysis, i.e. what change(s) in the words' use followed as a result? The answers to these questions provide evidence as to the grammatical function of complements of different syntactic categories. They also show how very little of the evidence traditionally used by linguists to establish categories is strictly syntactic in nature.

The problem of distinguishing between the categories of Adjective and Preposition turns out not to be as trivial a problem as it may at first seem. Jackendoff (1973) noted that linguists had not taken prepositions seriously; that oversight has since been remedied in the work of Emanuel, Jackendoff, van Riemsdijk, and Boltin, among others. The adjective, however, remains as the one major category which has not been seriously studied; not because no one takes it seriously as a category (at least for the familiar Indo-European languages), but rather because the internal syntax of adjective phrases has seemed less interesting.1 With the recent development of abstract case theory, however, adjectives have taken on a new importance. We will look at one theoretical claim that has been made (e.g. in Chomsky (1981)), namely that the categories V and P can assign case (and therefore take NP complements), while A and N do not.2 The claim that adjectives cannot assign case figures in the analysis of passive: if all passive participles are adjectives, then their inability to assign case explains why NP movement of the deep object is obligatory in the context of a passive participle.

It is clear that the claim could only be true at the level of abstract case, since it is not universally true that adjectives never assign morphological case. For example, as van Riemsdijk (1983) has amply documented, German has lots of what we might call 'transitive adjectives', i.e. adjectives which take case-marked NP complements. So do Icelandic, Russian, Latin and many other case-marking languages. I use the term 'transitive adjective' advisedly, to
indicate only that the adjective is directly followed by a NP complement; in fact, the diachronic developments reported here suggest that the NP-complements to adjectives are usually not grammatical 'objects' but rather 'oblique objects' (cf. Brenan (1981))).

The categorial reanalysis discussed in this paper suggests that there is something essentially correct about the idea that it is less natural for A and N to take NP-complements than for V and P to do so. The historical evidence suggests that NP-complements to adjectives are 'oblique' objects which can be realized in either of two ways: by prepositional phrases, or, in languages with surface morphological case, by case-marked NPs. The difference between case and a preposition would in this instance be a more surface fact of a language. Once surface case is lost, then oblique NP-complements are typically replaced by PP-complements; e.g., native case is typically replaced by to, genitive case by of. Within the Germanic family, the languages with transitive adjectives, e.g., German, Icelandic, Old English, Old High German, are those with productive case marking. The loss of transitive adjectives in English can be seen as a consequence of the almost complete loss of morphological inflection. Dutch and the Scandinavian languages other than Icelandic have also lost inflection to varying degrees, albeit more recently, and I would argue that they too, seem to be in the process of losing transitive adjectives.2 The same development occurred in the Romance languages. In sum, there is a correlation between having transitive adjectives and having surface morphological case, at least in the unmarked situation.

If this were the only possible change, there would not be much of interest to say. But in English (and some dialects of Dutch), just the right set of conditions existed for another solution to the problem of the surface realizati

tions of oblique complements: namely the reanalysis of the head from A to P. Such a reanalysis took place for at least two words in English. In this paper, I will discuss the synchronic status of these lexical items, like, worth and near, which were all unambiguously adjectives in Old English. These have all been analyzed as prepositions in modern English by at least some grammarians, e.g., Quirk et al. (1972), but some or all of them have been considered adjectives by other linguists, e.g. Brenan (1978, fn. 2) and Lightfoot (1980).

Apart from the categorial reanalysis itself, this change provides evidence bearing on the problem of what criteria the language learner uses to identify syntactic categories. And in turn, there are implications for the synchronic analysis of categories: among the criteria that linguists use to identify syntactic categories, which ones are really categorical and which are essentially semantic or functional? I will begin in Section 1 with the last question, because I can hardly argue for categorial reanalysis without first deciding what counts as evidence; I need to make clear what criteria can be used to decide the synchronic status of these words, and what cannot. In Section 2 I will discuss the categorial status of like, worth and near in modern English, and then in Section 3, briefly document the change for like from A to P.

The diachronic evidence shows that neither the meaning of like, nor those properties which I argue to be essentially functional, changed. However, other properties, strictly categorical properties, did change as a result of the categorial reanalysis. These changes testify to the role of the phrase-structure rules in the identification of syntactic categories.

1. Evidence for Syntactic Categorization

I will begin by looking at three of the diagnostic criteria often used to identify adjectives, namely, strict subcategorization, coordination, and co-occurrence with various degree modifiers.3 The data show clearly that this kind of distributional criteria is actually semantic in nature, and hence it is not surprising that the facts cut across syntactic categories. The simplest statement of such distributional restrictions seems to be in terms of traditional grammatical functions such as 'locative' and 'predicate complement' rather than in terms of phrase structure categories such as AP or PP. (See Peterson (1981a,b), Gamstahl (in prep.) for arguments to the same effect.) As a result, such evidence cannot be used to argue for the syntactic category a given lexical item is assigned to.

1.1. Subcategorization

A classic test for adjectives is the ability to occur as predicate complements to linking verbs such as seem, become, look, act, turn, feel, etc., which do not allow NPs (at least in the relevant sense of the verb). Another characteristic of the adjective position is as objective complement to transitive verbs like consider.

Subcategorization frames have traditionally been stated in terms of syntactic categories, as shown in (1a), on the basis of contrasts like those shown in (1b).

\[(1a) \text{ seems, \textit{[\ldots} AP]} \]

\[(1b) \text{ consider, \textit{[\ldots} NP AP]} \]
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Note that if a particular PP is ambiguous between a locative and a metaphorical reading after the verb be, then only the metaphorical reading is available after seem.

(4) a. The patient finally \[ \text{seem} \] out of the woods.

b. Robin finally \[ \text{seem} \] at home here, after years of living in this country.

c. Lee \[ \text{seem} \] over the hill as a specketer.

d. A brook \[ \text{lie} \] just over the hill.

Nor can the ability of such metaphorical PPs to occur as predicate complements be attributed to lexical analysis as complex adjectives, i.e. to category conversion (Quirk et al. (1972), Appendix I). The usual test for lexicalization is the ability to occur prenominally. It is true that many of the metaphorical PPs which can occur in complement positions can also occur prenominally, as attributive modifiers:

(5) a. Out-of-shape professors shouldn't attempt the marathon!

b. Chris made a completely off-the-wall suggestion.

But if we take the ability to occur in prenominal position as both necessary and sufficient evidence of lexicalization, then the question to ask is whether the class of complement PPs exemplified in (2)–(3) is the same set as the class of prenominal modifiers. The answer seems to be that the two classes are distinct, and that neither is a proper subset of the other. Many locational PPs seem not to occur prenominally, even when they have clearly been lexicalized.

(6) a. An off-Broadway show will be appearing on campus.

b. *The show \[ \text{seem} \] off-Broadway.

(7) a. Yaz hit an inside-the-park home run.

b. *The winning home run \[ \text{was} \] inside-the-park.
(8) a. This is an over-the-counter drug.
b. *This drug looks over the counter.

And many of the PPs which can occur predicatively cannot occur prepositionally.

(9) a. *An out-of-student walked into my office.
b. *An out-of-something reporter bounded the President.
c. *Only in-good spirits guests are welcome.
d. *We will not consider your beside-the-point objection.
e. *No out-of-the-running candidates will be given air time.

Individual speakers may vary considerably in their tolerance for such creations, as would be expected of a lexical process. It is clear, however, that lexicalization cannot account for the occurrence of metaphorical PPs in adjectival subcategorization frames.

Thus it appears that subcategorization frames should not be stated solely in terms of syntactic category. One possible alternative is to use grammatical functions, e.g. predicate complement. In Besman (1981), this function is designated 'XCOMP', where XCOMP means a predicate complement of category X.

(10) seem, [—XCOMP],
    consider, [—NP XCOMP].

XCOMP’s can be predicated of either the subject NP, e.g. of seem or the object NP (e.g., of consider), depending on the given verb. Some additional feature will be needed to exclude locative and directional PPs, which also involve predication, as usually understood (see e.g., Williams (1980)). What is needed is something like the semantic class of 'gradable predicators', where gradability cuts across syntactic category.

(11) a. Robin seems [a fool, prime-minister.] (NP)
b. The number three seems [odd, *even.] (AF)
c. Lee [The square root of two] seems irrational. (AF)

Examples for PP are given above in (3). Note that in (11b), odd has only thegradable sense of 'unusual, unexpected', and not the mathematical binary opposition of odd/even. Adjectives are usually gradable, whereas locative and directional PPs are typically not; hence a semantic feature of gradability would correctly exclude them. Note, however, that just as there are nongradable adjectives, so are there (a few) gradable locatives, as illustrated in (12).

(12) a. On a map, Rowley doesn’t look terribly far from Boston.
b. *On a map, Rowley doesn’t look by a river.
c. *On a map, Rowley looks on the wrong side of the tracks.
d. Now that’s train service, Rowley no longer seems so out in the sticks.

I will not pursue further just what property characterizes the set of possible predicate complements to verbs like seem, nor whether the correct characterization is in terms of semantic features and/or grammatical functions. What is clear is that phrase structure categories alone are inadequate. It is obvious that although phrase structure categories may be associated with typical grammatical functions and vice versa, the mapping between them is not one-to-one. The sentences in (2)–(4) above show that in addition to predicate nominals and predicate adjectives, there are also (nonlocative) predicate PPs. Hence the fact that a phrase occurs as predicate complement to seem cannot be used as evidence that its head is an adjective.

1.2. Coordination

Another diagnostic often used to test syntactic category is coordination, based on the assumption that only phrases of the same syntactic category can be conjoined. Many linguists, e.g. Schachter (1977), have argued that category identity is not a sufficient condition: there may be semantic or functional identity in addition to syntactic identity for the coordination to be acceptable.

(13) a. *Pat is in the next room and over the hill.
b. Pat is in love and in the next office.
A few linguists, e.g. Dik (1968) and Peterson (1981a), have argued that category identity is not even a necessary condition: as long as there is semantic and functional identity, coordination is possible even without category identity. This can easily be seen for adverbs, which conjoin freely with PPs of the same function. Thus a manner adverb can conjoin with a manner PP, as in (14).

(14) The surgeon operated slowly and with great care.

In order to preserve the categorial identity condition, a higher syntactic node such as AdvP must be invoked, so that the identity condition can be met at that higher level.

(15)

\[
\text{AdvP} \quad \text{AdvP} \\
\text{Adv} \quad \text{Adv} \\
\text{and} \quad \text{and} \\
\text{PP} \quad \text{PP}
\]

The same is true of predicate complements. It is possible to conjoin an AP with a PP, provided that both are XCOMP\_P, as illustrated in (16).

(16) a. Doctors are always warning us of the dangers of being fast and out of shape.

b. The patient seemed cheerful and in good spirits.

Here too, the category condition cannot be maintained without invoking a new syntactic node or feature for the class of predicate complements.

Thus, like subcategorization, coordination is a test that must be used with extreme caution. As long as the mapping between grammatical function and syntactic category is basically one-to-one, then it is impossible to determine what the correct generalization is. Whether the conditions on subcategorization or coordination are stated in terms of syntactic category, e.g. PP, or grammatical function, e.g. locative, the same predictions are obtained. Crucial evidence comes from those cases where the one-to-one mapping breaks down, as it does in the case of predicate complements and locatives, and in such cases, the evidence shows that the generalizations cannot be stated in terms of syntactic category.

13. Specifiers

Another difference between AP and PP lies in the range of specifiers that they take. The ability to take very as a premodifier has always been used as a test for adjectival status, especially in discussion of passive participles (cf. Wason 1977, 1980). The contrasts in (17) illustrate the fact that adjectives typically take very but not (very) much as a modifier, and that locative PPs take neither.

(17) a. The birds were very \textit{in} the tree.

b. The kids were very \textit{(much) noisy}.

c. *The kids were very \textit{(much)} in the tree.

Various accounts of these facts have been proposed in the literature. Breman (1973) generates very much as a specifier to A, and posits an obligatory rule of much-deletion. Jackendoff (1977) argues that APs take only simple degree words, whereas PPs take quantifier phrases (QPs) as specifiers, which in turn can optionally contain a degree word. Whatever the optimal account of the details may be, here too the facts cut across syntactic category.

The feature \textit{gradable} is very likely necessary for an adequate account of degree modifiers. Generalizing to the entire class of degree words, \textit{so}, \textit{how}, \textit{too}, \textit{very}, note that such specifiers occur freely not only with APs but also with (most) metaphorical PPs, as illustrated in (18).

(18) a. They seemed \textit{(so) foolish}.

b. *They seemed \textit{(too) in} love.

c. *They seemed \textit{(too) at} home.

d. *They seemed \textit{(very) out of} shape.

e. *How at home the boats made us feel!

f. *How the emotions got me that day?

g. Just how out of his mind do you think he is?
Observe that although metaphorical PPs take such adjective specifiers, locative and directional PPs do not, as illustrated by the ungrammaticality of the examples in (19).

(19) a. *How at the railroad crossing they live!
   b. *How to town they went!

This is presumably due to the fact that most locatives are not gradable. It cannot be a restriction against their taking any kind of modifier, however, since certain specifiers such as right are good:

(20) a. They live right at the railroad crossing.
   b. They went right to town.

On the other hand, unlike adjectives, metaphorical PPs also allow much, as shown in (21).13

(21) a. How much out of shape.
   b. So much at home.
   c. Too much in love.
   d. Very much down in the dumps.

This is exactly what one would expect of PPs in Jackendoff’s framework. The generalization seems to be that metaphorical PPs can take either the specifier suited to their syntactic category, or the specifiers suited to their grammatical function as predicate complements.15

1.4. Enough-shift

Another difference between the specifiers of A and P lies in the position of enough, “the most syntactically exceptional word in the specifier system” (Jackendoff 1977, p. 150). Berman (1973) pointed out that enough obligatorily follows adjectives, adverbs and quantifiers, and optionally follows nouns; she proposed a local transformation, Enough-shift, to move enough around the head. But suppose the head is a preposition.16 The examples below illustrate the behavior of enough when it modifies a gradable, metaphorical PP.

(22)a. Robin seems [exactly sensible,]
   sensable enough.
   b. Robin seems enough
   in love,
   at home.
   over the hill.
   out of shape.
   c. *Robin seems
   in enough love.
   at enough home.
   over enough the hill.
   out enough of shape/out of enough shape.
   d.77 Robin seems
   in love enough.
   at home enough.
   over the hill enough.
   out of shape enough.19

Clearly the rule of Enough-shift blocks if the head is a preposition. Here at last we have a criterion that seems to be purely syntactic; in English, enough follows adjectives, but precedes prepositions.

This curious fact about enough, namely, that it follows adjectives but precedes prepositions, may reflect a more general prohibition in English, as sketched below in (23).

(23)

It is a well known fact about English that adverbs can occur between a verb and a PP-complement, but not between a verb and its object.

(24)a. *Kim spoke quickly the words.
   b. Kim spoke quickly to the children.
Perhaps the behavior of *enough* reflects not the category of the head, but rather the nature of the complement. That is, it can be positioned between an adjective and a PP-complement, but not between an adjective and a NP-complement. This fact cannot be attributed to an adjacency constraint on case assignment, since adjectives are assumed not to be case-assigners.

As the German data discussed by van Riemsdijk (1983) illustrates, in languages where complements precede the head, the specifier may intervene between an NP-complement and the head. But in languages in which the head of the phrase precedes its complements, (23) may well reflect a universal prohibition. German provides no relevant evidence, since NP-complements can never follow an adjectival head. But facts like the English ones obtain in both Russian (M. Halle, personal communication) and Norwegian. The Norwegian adjective *rett* ('right') behaves just like English *near* with respect to the placement of *not* 'enough'.

(23) a. Han er redd for aller.
He is afraid of whoever.

b. Han er redd nok for aller.
He is afraid enough of whoever.

Thus it seems that the idiosyncratic behavior of *enough* is not really category-specific, as it first appeared to be. The exceptionality of *enough* lies in the fact that while other adjectives, *enough* always follows the head of the phrase, unless prohibited from doing so by (23), in which case it will be forced to precede (or follow) the entire phrase. Note that *enough* must follow one kind of predicate nominal as well as adjectives.

(26) a. He isn't near enough to assume responsibility.

b. Lee isn't fool enough to do such a thing.

c. *Lee isn't enough fool to do such a thing.

If this is the correction generalization, then a clear prediction is made: *enough* should be able to follow even prepositions in two cases: if the preposition takes a PP-complement, as in (27) and if the preposition is used intransitively, i.e. with no complement, as in (28) (see Jackendoff (1973)). This prediction seems to be largely borne out.

(27) a. Lee isn't down enough in the dumps yet to seek professional help.
b. *Lee isn't enough down in the dumps yet to seek help.
c. The cat wouldn't go up enough into the tree.
d. *This theory is still up enough in the air.*

(28) a. The cat wouldn't go *up enough.

b. Lee isn't down enough to seek professional help.
c. It doesn't stick up enough for me to reach it.

Thus the conclusion is that *enough* follows the head of the phrase it modifies unless prohibited from doing so by (23). The original statement that *enough* precedes prepositions is clearly wrong, since, as we have just seen, it can follow a preposition which does not take a NP-complement. However we can still use the *enough-test* to distinguish between adjectives and prepositions. Although *enough* may precede or follow prepositions, depending on the nature of its complement, it may never precede an adjective.

(29) a. Nothing is *enough good.

b. Nothing is *enough close.
c. Nothing is *enough near (the beach).

to the beach.

This turns out to be an extremely useful test.

1.5. Other Syntactic Tests

The results of the preceding sections clearly leave us with an impoverished set of criteria for identifying categories. Subcategorization, coordination, and degree modifier tests were all shown to cut across syntactic categories. Only the position of *enough* relative to the head of a phrase turned out to be unable to distinguishing adjective from preposition. Other, strictly, categorical facts seem to be various morphological tests, such as the ability to take a
synthetic comparative and superlative, the ability to take an in-suffix, which attaches to adjectives only (D. Siegel (1973)), and the ability to occur in prenominal position.\textsuperscript{33, 34}

(30) a. Lee is even more out of shape (\textsuperscript{34} out of shape (\textsuperscript{34} more out of shape) \textsuperscript{34} than I thought. \\
b. \textsuperscript{34} Americans tend to be un-shape. \\
c. \textsuperscript{34} Fat felt un-at-home. \\
d. \textsuperscript{34} The two in-love senior citizens walked hand-in-hand down memory lane.

Note that the synthetic comparatives in (30a) are impossible despite the fact that these lexical items exist independently as adjectives, as in \textit{the outer wall, the inner sanctum} (cf. Note 6).

2. SYNCHRONIC STATUS OF \textsc{like}, \textsc{worth}, \textsc{near}

In this section we will show that \textsc{like} and \textsc{worth} are best analyzed as prepositions, whereas near passes all the tests for adjectiveness, making it perhaps the only surviving relic of the class of transitive adjectives.\textsuperscript{36} (Of course, the NP-complement of \textsc{near} also alternates with a PP-complement, as in \textit{near to NP}, just as one would expect of an adjectival head.) In the next section, I will discuss each of these words in more detail.

2.1. \textsc{Like}

It is generally agreed that \textsc{like} is a preposition in Modern English. Note the position of \textit{enough} relative to \textsc{like} and related words, namely, \textit{likely} and \textit{alike}.

(31) a. That's a(n) \textit{enough likely} \textit{likely enough} story. \\
b. Chris looks \textit{enough like you } \textit{lilke enough you } \textit{like you enough}\textsuperscript{33} to be your twin.

\textsc{Transitive Adjectives}

\textsc{Transitive Adjectives}

(32) a. They look \textit{enough alike} \textit{alike enough} to be twins. \\
b. How much are they \textit{\textsuperscript{34} old?} \textit{alike?}

\textit{Enough must follow the clearly adjectival \textsc{likely}, just as we would expect. On the other hand, it must precede like, again as expected if \textsc{like} is in a proposition rather than an adjectical. As illustrated in (31a), enough can either precede or follow the adjective \textsc{alike}, which is exceptional in taking degree phrases, as noted by Jackendoff (1977, p. 155), and illustrated by the contrast in (31d).

There do exist a few marginal adjectival uses of \textsc{like} in prenominal position, as illustrated in (32).

(32) a. The like-subject constraint was proposed by Perlmutter. \\
b. \textsc{You'd better} have boots, raincoats, and the like.

It seems to me that the phrase \textit{the like} is best analyzed as a \textsc{NP} with null head, and that \textsc{like} is in the position of an adjective. But such prenominal uses of \textsc{like} are clearly not productive.\textsuperscript{36} Thus it is impossible to say:

(33) *Lee bought a new car and I bought \textit{\textbf{\textsuperscript{a} the}} \textit{like}.

Since prenominal use of \textsc{like} is nonproductive, the existence of the phrase \textit{and the like} would be very weak justification for a synchronic assignment to the category \textsc{A}.

\textit{Nor is there any support for adjective-ness from the morphology. Neither like nor unlike have synthetic comparatives. Despite the fact that the negative prefix \textsc{un}-attaches only to adjectives, and that unlike clearly means 'not like', this would also be very weak justification. The relationship between the two words is not that of a synchronically productive word formation rule. See Section 3 below.}

As we have argued above in Section 3.1., the fact that \textsc{like} can be used as prepositive complement to verbs like seem does not mean that it is being used as an adjective in such cases. Observe that even when \textsc{like} is being used as a predicate complement, as in (34), it behaves like a \textsc{PP} syntactically, the same applies to unlike.
(34) Toby seems very much enough like his grandfather.

In other words, it is unnecessary to assign dual categorization to like, one as P and one as A. Rather, we can give a single assignment as P.

2.2. Worth

As counterintuitive as it may at first appear, worth is best analyzed as a preposition. It certainly passes the diagnostic tests for preposition as well as like does, even better in fact, since there is no unworth with a presumably adjectival base. This probably reflects the fact that unworth, when it did exist, was always restricted to clearly adjectival uses, namely attributive and intensificative, which have been replaced by unworthy. I conclude that analyzing worth as a P is more a problem for the linguist's conscious mind than for his unconscious.

The enough-test gives somewhat odd results for worth, which seems to be only marginally gradable, but the relative judgments are clear, as indicated in (35).

(35) a. Sailing is great fun, but owning your own boat isn’t
   { enough worth the trouble } for me to want to buy one.
   { ?? worth the trouble enough } for me to want to buy one.

b. Owning your own boat isn’t sufficiently worth the trouble.

We find exactly the same pattern of judgments in (35) as we found for metaphorical PPs in (22) above. If worth were analyzed as an adjective, and if enough-shift is obligatory, then it would be difficult to explain why the phrase [enough worth NP] is acceptable. Except for able, no other adjective phrase allows this possibility. The existence of [worth enough] is not counter-evidence: it is clear that in this phrase, enough is not a degree word modifying worth, but is instead the object complement of worth. Consider the contrasts in (36).

(36) a. *old worth enough.

b. How much are they old worth?

c. What are they old worth?

The ungrammaticality of (36b) with old is due to a violation of the Left-Branch Condition; the grammatical examples with worth in (36b, c) are simply instances of preposition-stranding, after wh-movement of the object. Thus despite the superficial similarity, the phrases in (36a) are quite different syntactically.

If worth was an adjective, then the only remotely plausible analysis would be to claim that the NP-complement were an inserted measure phrase; i.e., that the NP be base-generated as preadjectival position, parallel to six feet tall and one year old, but that worth was idiosyncratic in requiring insertion. Such an analysis would run into several problems. First, unlike other adjectives taking measure phrases, worth would require an obligatory measure phrase, as shown by the ungrammaticality of (37a). Second, lots of non-measure phrases occur, including definite NPs, as illustrated in (37b).

(37) a. *Lee is worth.

   the time and trouble.
   a second look.

b. It’s worth it.
   half a dozen of those other ones.
   all the rest of them put together.
   every penny.

c. It’s very much worth it.

d. It seems five times more worth it now than it did last year.

Third, the degree phrase and the NP-complement can occur, as illustrated in (37c, d).

Thus it seems reasonable to conclude that worth is a perfectly well-behaved preposition in modern English.
2.3. Near

If *worth* is usually misanalyzed as an adjective, *near* on the other hand is usually misclassified as a preposition. The reason is obviously because it takes an NP-complement, and because it can be used with verbs such as put that strictly subcategorize for locatives, or verbs such as motional go which subcategorize for directionals. 28

(38) a. Kim put the lamp near the bed.
   b. Don't go near the water!

Close examination, however, shows that *near* is best analyzed as an adjective. Contrast the behavior of *near* with that of *like* discussed above in Section 2.1., indicating that *near* is not a preposition, despite the fact that it takes a NP-complement. Note further that the mediating preposition *to*, normally optional, becomes obligatory when the phrase is modified by *enough*. Even when *near* is used locatively, it behaves syntactically like an adjective. 29 It takes a synthetic comparative and superlative, and *enough* follows the head rather than preceding it, as it would if *near* were a preposition.

(39) a. Kim put the lamp nearer (to) the bed.
   b. Don't go near to the water!

(40) a. Kim put the lamp near enough to the bed to read.
   b. Chris didn't go near enough to the water to get wet.

Moreover, there exist attributive prenominal uses of *near*:

(41) a. the near shore.
   b. a near miss.
   c. Take the nearest one to you.
   d. They remained near strangers after (nearly) twenty years of marriage.

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If one wanted to claim that all locative phrases are syntactically PPs in English, one could assign the structure in (42), which would automatically solve the problems just noted by analyzing *near* as an adjective specifier.

(42) PP
   \[ SPEC \]
   \[ AP \]
   \[ to \]
   \[ NP \]

Near

While this structure is even plausible for some verbs, where *near* is only optionally present, as in (43a), this isn't usually the case, as shown in (43b).

(43) a. Lee pulled the child near (to) her.
    b. Lee put the toy box near the door.

The crucial difference in (43b) is clearly whether the PP is locative or directional. That contribution to meaning is associated only with HEADS of phrases, not with modifiers. Therefore *near* must be the head in (43b), and instead of the phrase structure in (42), we must be dealing with a locative AP.

This conclusion should not be all surprising. *Close to* and *far from* are exactly parallel to *near to*, and *close to* and *far from* are clearly adjectives.

(44) a. Lee pulled the child close to her.
    b. Lee put the toy box far from the door.

The fact that these phrases are locatives accounts for their use with verbs like *put*, while the fact that they are syntactically APs accounts for the existence of the synthetic comparatives and the position of *enough* with respect to the head.
2.4. Summary

The following table summarizes the results of this section and the criteria that I have been able to discover between A and P. Entries are given for the typical A or P, since for almost every case there are exceptional cases with two or more, or even no such cases. In order to illustrate the results, criteria have been defined for all entries for A are: V, and all entries for P the same as for A. In the case of P, only locative or directional adjectives have been considered as typical P's in respect to tests that I have argued to be semantically or functionally based.

(45) Diagnostic Criteria for A versus P

<table>
<thead>
<tr>
<th>Criteria</th>
<th>A</th>
<th>P</th>
<th>Like word near</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) semantic or functional</td>
<td>+</td>
<td>+</td>
<td>*</td>
</tr>
<tr>
<td>occurs as pred. comp. to noun, etc.</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>degree modification by only</td>
<td>+</td>
<td>-</td>
<td>*</td>
</tr>
<tr>
<td>degree modification by locative or directional</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>(b) nonmorphological</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>has syntactic comparative</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>can be base for negative prefix</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>can inflect and agree (NA for modern Eng.)</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>(c) strictly categorical</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>prepositional position in NP</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>occurs &quot;intransitively&quot;</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>occurs with premodifier enough</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>degree modifiers without much</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>can be &quot;stranded&quot; (NA for mod. Eng.)</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Criteria can be divided into two distinct types: morphological and distributional. Morphological evidence can come from either inflectional or derivational morphology. Distributional evidence, as I have argued here, can also be divided into two types: that which has a semantic or functional basis, and that which appears to be more strictly syntactic. We will now proceed to a more general consideration of the various diagnostic criteria.

Evidence from derivational morphology is notoriously unreliable as evidence for category assignment. Often the processes are not fully productive, and speakers do not make synchronic connections between diachronically related forms. Thus the nonexistence of "summer does not show that new

is not an adjective, and the existence of unlike shows only that like was not yet a preposition at the time the word was created, and says nothing about its synchronic status. Evidence from comparatives is unfortunately also nonfunctional, since not all adjectives are possible. It is therefore a synthetically productive, comparative, and its conjunction with a nonselective construction, then it seems reasonable to conclude that it is an adjective rather than, say, a preposition; but lack of a synthetic comparative shows nothing. If two words bear a productive synthetic relation, then morphological evidence counts; if they have a syntactically nonproductive relation, then the morphological evidence shows nothing. Obviously it can be hard to tell in a particular instance whether the relation is productive, since there is always the possibility of a relic. Relics characteristically lack the full range of uses of a productively related form. A typical example is that of elder, historically the comparative of old, but elder cannot be used everyplace that older can, and in fact is most typically a noun, as in the elders of the church. By comparison the relation between near and nearer is clearly productive.

Inflectional morphology clearly serves to identify syntactic categories unambiguously, but it is obviously not applicable as a diagnostic for adjectives in modern English. In languages where adjectives reflect for case, number and/or gender, prepositions are characteristically invariant. Thus inflectional evidence is insufficient to distinguish between the two categories. This is true even in languages like Spanish and Norwegian, which although they have cases, still have productive number and gender agreement on adjectives. However, since modern English has completely lost all adjectival inflection, adjectives and prepositions alike are morphologically invariant. Hence the language learner (and the linguist) must rely on more syntactic evidence. It is in this fact that modern adjectives are given a revised A set possible.

As noted above, nonmorphological criteria can be divided into two types: the essential semantic or functional distributional criteria, and the more strictly syntactic criteria. One of the major points of Jackendoff's (1972) is that many apparently syntactic constraints follow from semantic constraints, so that once a language learner has assimilated the meaning of the word or construction, the observed syntactic distribution will follow automatically. Where supposedly syntactic criteria turn out to have a semantic basis, we should not be surprised to find exceptions to a generalization which is expressed in terms of syntactic categories. This is precisely what we have seen for the strict subclassification and specifier systems of predicate complements in English. The kind of modifiability that a phrase may have a semantic explanation, but the position that these modifiers take relative to the head of the phrase
is a strictly syntactic, language-specific fact. For example, the fact that enough can be a modifier tells us nothing about the syntactic category of the phrase it modifies, but its position relative to the head of the phrase does.

Let me emphasize that I do not wish to claim that all syntactic generalizations can or should be reduced to semantics; to do so would unnecessarily complicate the grammar. Syntactic categories and phrase structure rules are still needed to capture generalizations about the internal structure of phrases. A good example comes from numerals. Numerals are sometimes considered to be just a special subclass of adjectives, since some of the ways in which they behave differently from typical adjectives seem to have plausible semantic explanations, e.g., the fact that they do not take degree modifiers, and the fact that there can be at most one of them per NP. But not all restrictions on numerals have semantic accounts. For example, the fact that they must be the first of any sequence of adjectives in English cannot be made to follow from the semantics in any obvious way. This suggests that we need to have a special phrase-structure position for numerals, as distinct from adjectives. Therefore it would come as no surprise that in some languages, e.g., French, numerals precede the head noun whereas normal attributive adjectives follow.

An even better example is the category Determiner, which could, in fact, be defined as the 'first position' in the NP. Consider the so-called possessive adjectives in Romance languages. Possessives are Determiners in French, just as they are in English, but not in Italian.

(46) a. son livre/ *le son livre (French)
    his book/ *the his book
b. il e seu libro (Italian)
    the his book

It is hard to imagine what a semantic explanation of this fact would be.

To sum up, we expect semantically-based facts to be universal, and strictly syntactic facts such as relative position to be language-specific. Phrase structure rules seem to be the appropriate place to state such syntactic facts.

3. DIACHRONIC CHANGES

In the previous section, I have argued for a distinction between those category tests with a semantic or functional basis and those which reflect strictly syntactic generalizations. Further support for the distinction as drawn in the table of diagnostic criteria in (45) comes from the historical data. If we look at the syntactic changes that like and worth have and have not undergone as a result of the category reanalysis from adjective to preposition, it seems clear that the phrase-structure rules, or the generalizations they express, play an important role in the identification of syntactic categories. In (47)–(49), examples of like at various stages in the history of English are given, at points when it still behaved syntactically like an adjective with respect to (productive) prepositional use, synthetic comparison, etc. Typically, adjectival uses of like in Old English, (Chaucerian) Middle English and (Shakespearean) Early New English are given; the fact that these sentences would be ungrammatical in modern English shows that the category change has had some syntactic consequences. For each time period, the (a)-examples contain synthetic comparatives, the (b)-examples illustrate an introitative predicative use, and the (c)-examples illustrate the prepositional attributive use. Any further examples provide other syntactic evidence relevant to category identification.

(47) Old English

a. Se Íchomn waes þrependum mete gélíc. Æ beorn the body was [co] sleeping men more-like than [co] deadmen.
   dead [men]
The body was more like a sleeping man than a dead man.

b. Þær was se weostan gélíc
   Not-was the fruit alike
   The fruit was not alike.

c. Éalle man hárfón [gélíc雌 fruman]
   All men had a like beginning.

As illustrated in (47a), OE gélíc takes dativ complements which typically precede the head.

In ME, we find complements to like expressed either as a NP, or as a PP introduced by to. For the most part, the complements can precede the preposition only if it is a pronoun. Note the existence of [like thieveto]
illustrated in (48d); however we never find *[thereike], which we would
It is obvious that a categorial analysis has since taken place. I have not
yet had time to try to pinpoint just when this took place, or to determine
whether the changes in use took place rather quickly, or only gradually
over the intervening centuries. What is clear, however, is that just the right
conditions existed in English for the reanalysis of the head from A to P. The
necessary conditions are given in (50).

50. (i) loss of all adjectival inflection which could identify a lexical item
in A;

(ii) parallelism between AP and PP in the position of the complement
relative to the head.

The categorial reanalysis reflects the fact that prepositions characteristically
take NP-complements, while adjectives do not. At a point in time when
virtually all adjectival complements are PPs and not NPs, the following two
phrase structure rules are motivated.

51.1. a. AP → P NP
    b. A² → A (PP)

There will, however, be no rule (51c) introducing transitive adjectives.

51.2. a. *AP → A (NP)

In the postverbal position of predicate complements, either a PP or an AP is
allowed. But given the sequence in (52), the phrase structure rules in (51)
provide a unique answer to the questions of what syntactic category X
belongs to: anything that is obviously not a noun can only be a preposition.

52. V[X NP]P

A similar reanalysis occurred in some dialects of Dutch. In both German
and Dutch, adjectival complements typically occur to the left of the head, as
illustrated in (53a). An exception in Dutch, however, is lijk 'like'.

53.1. a. [NP word]

    a. *worth NP
    b. *[lijk NP]

    like NP
Since there is no adjectival inflection in predicative position in Dutch, the exceptional order in (53b) establishes the necessary parallelism with PP, and makes the categorial reanalysis possible. Since preposition-standing is impossible in Dutch, the following contrast is found.

(54) a. *Wat is hij lijkt (P)?
   What is he like?

b. Wat is hij gewend? (A)
   What is he used?  

Once like and worth were identified as prepositions rather than adjectives in English, then all their clearly adjectival uses, as defined by the phrase-structure rules in (55), were forced out and replaced by related forms.49

(55) a. AP → A (PP) intraspecific

b. NP → (Del) (AP) N nonominal

Like was replaced by likely and alike in its two intransitive uses, and worth was replaced by worthy both intraspecifically and nominally.

On the other hand, neither the meaning of like nor its uses in predicate complements and adverbs have changed in the least. The examples in (56) below illustrate the various predicative and adverbial uses of like in Shakespeare's work.50 Similar examples could have been given from old English and Middle English. These examples show that the adjectival like had the same predicate complement and adverbial uses as the proposition like has today.49

(56) a. Predicate complement

Yet he looks like a king!
How like a favouring publican he looks!
How like Eve's apple doth thy beauty grow!

b. Manner adverbial

Common people swarm like summer flies.
Few in millions can speak like us.
Though thou canst swim like a duck...

4. CONCLUSION

In this paper I have argued for the categorial reanalysis of two transitive adjectives in the history of English; in so doing, I have had to examine the various criteria used to identify syntactic categories. Both synchronic and diachronic evidence shows that certain criteria are actually not category-specific; in particular, it was shown in Section 1 that subcategorization, coordination and cooccurrence with certain degree modifiers cut across syntactic categories, thus undermining the traditional arguments that these phenomena are based on phrase structure categories. This result is important for our understanding of the nature of these fundamental grammatical phenomena, and their representation in grammatical theory. The distinction between functionally or semantically based criteria and truly categorial or structural criteria not only helps to explain the grammatical consequences of the categorial reanalysis but also helps to clarify the overall structure of the grammar.

A number of linguists (e.g. Hesy (1979), Chomsky (1981)) have recently suggested that the basic component of the grammar, i.e. the phrase structure rules, can be virtually eliminated since the information they provide about subcategorization is already implicitly given in the lexicon. Commenting on the possible interpretation of the otherwise unnecessary phrase-structure rules as redundancy rules relating subcategorization frames of lexical items, Chomsky notes that "apart from order, the role of the categorial component serves no function as a redundancy rule" (1981, p. 32). As he observes, the existence of a phrase-structure rule stating optional expansions of some syntactic category does not eliminate the need to provide subcategorization information for each lexical item belonging to that category. It does not, however, follow, as Chomsky suggests, that the categorial component does no work. The role of the phrase-structure rules qua 'redundancy rules' is nonetheless a significant one in the assignment of lexical items to syntactic
categories, as shown by the categorial reanalysis reported here. However redundant the phrase-structure rules seem to be, we need them to account for the cases of categorial reanalysis discussed in Section 3.

But we can draw an even stronger conclusion. The redundancy between phrase structure rules and strict subcategorization frames can be eliminated in two different ways: we could eliminate the phrase structure rules altogether, as Chomsky and Halle suggest, or alternatively, we could eliminate from the strict subcategorization frames (i.e., the lexical entries) precisely that information that the phrase structure rules express. That is, we could eliminate the redundancy by getting rid of the base component of the grammar, but retain it by changing the nature of the lexical entries. One solution is to eliminate linear order and categorial information from subcategorization frames, and instead subcategorize only for functional and semantic categories. In fact, this is the view of subcategorization in Lexical-Functional Grammar (Bresnan 1982), (in press) and implicitly in Relational Grammar (Perlmutter ed.) to appear). In LFG, it is assumed that lexical items subcategorize for grammatical functions, not constituent structure categories. Grammatical functions are then mapped onto the particular phrase-structure rules and inflectional morphology of each language. This mapping can change independently of lexical subcategorization frames, which can be relatively invariant across languages and through time.

Within this a theory of grammar, the syntactic effects of the categorial reanalysis of like (Section 3) are exactly as expected. Phrase-structure rules are needed to explain the categorial reanalysis that took place in the history of English: what made this particular reanalysis possible is that the phrase-structure expansion of PP closely resembled the structures in which these adjectives appeared. When the English case-infections were lost, the object function had to be encoded in phrase structure configuration rather than in case. But these adjectives now appear in the phrase structure configurations of X NP, with an object complement, violating the unmarked universal that adjectives and nouns do not take direct objects. Thus, the phrase structure rules play an explanatory role in the historical changes discussed in Section 3. Strict subcategorization frames expressed in terms of syntactic category do not; in fact, the arguments of Section 1 undermine the evidence traditionally used for subcategorization by category.

Thus the categorial reanalysis of certain adjectives supports a theory of subcategorization based on grammatical functions rather than phrase structure categories, and also demonstrates the importance of the base component. If the role of phrase structure rules is to account for language-particular structural facts, as argued at the end of Section 2, then they can plausibly be thought of as independent of lexical structure. The structural aspects of traditional subcategorization frames can be factored out of the lexical entry, and represented explicitly in the grammar as the form of phrase structure rules.

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NOTES

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1. See, however, Bowers (1972), Henricks (1979), Nasic (1980), Bresnan (1974), Kay (1976). (1978) takes the view that some negative phrases as phrase-structure rules generate no post-nuclear complements to adjectives. Apparent exceptions are generated by a local rule adjoining an N or PP within V-bar as in eight sister to A.

2. This is unclear to see whether this analysis is compatible with the categorial reanalysis discussed here. However, it seems to be the case that there are independent reasons for the fact that complex APs cannot occur prenominally in English, a fact which is a major motivation for his position (cf. Note 2: 21: below).

3. Pietrarsa (1980) study of Swedish adjectives shows that the diagnostic picture is more complicated in ways that I have not had time to investigate. Of particular relevance is the extent of influence from German.

4. For example, we have the classic cases (1977) concerning the distinction between reduplication and reflexive pronouns. Although his diagnoses do distinguish adjectives from verbs, this paper shows that only some of them are actually motivated for anti-alexandrian, in the sense of distinguishing adjectives from prepositions. The main purpose of this section is to sort out these diagnoses which are not context-specific.

5. One may point to see, e.g., Halle (1980), where the case of voices like 'easy to speak' is a base-generated (lexically derived) complex adjective.

6. As an example, see e.g., Grimshaw (1976) and others (I 980), who has explored several of the relevant examples, the phenomenon of category conversion raises nontrivial questions about the internal structure and morphophonology of lexically realized phrases which I will ignore here. Note however, that although converted words normally fall into the category they become (Quirk et al., Appendix II, e.g. They are he's been's), converted adjectives do not take syntactic component of sentences, even when they are common with.

(1) That's the in' thing to do.

(2) * That's the 'instead' thing to do.
7 In fact, of the examples in (9), (6a) is the best.
8 The obvious problem is to determine where the boundary between syntax and meaning lies. In this paper I am assuming that a syntactic category is one defined by the phrase-structure rules. At least then whether the phrase-structure rules should be allowed to include features such as [gradable] or [presupposition].
9 See Chomsky (1958b) for further discussion. Dick Cartter gives several personal communication that some verbs which take prepositional complements seem to impose categorial restrictions at all. For example, the verb become takes RP and AP complements but does not appear to allow any of the metaphorical PPs, illustrated in the nine similar pairs below.

(i) *Lee become mad.
(ii) *Lee became out of his mind.

Since these seem to be non-identically equivalent predications, the categorial difference must account for the difference in acceptability. Further reflection shows that the difference must be semantic in nature, rather than categorial, since as Joan Bresnen points out (personal communication), (ii) is impossible even though locative is an adverb that stems roughly synonymous with mad.

(iii) *Lee became locative.

Moreover, if the conclusions drawn in Section 2 about the syncretistic nature of like, worth, and are correct, then there are certain PPs that occur with become, as well as certain APs that do not.

(b) Robin became more and more like her brother.
(c) Robin has become a success.

Thus, it seems that become takes events nominalized XComps of any category, although the necessity degree of gradability is obviously more restricted than for specifiers (see Section 1.3.5) so for complements to most other linking verbs. Note that those contrast between (b) and (c) provides further evidence against the lexical convention analysis of prepositional PPs: if they are specialized complements, it would be impossible to distinguish between examples like (b) and (c). The only PPs which can be used as complements to become are those which can also occur permissively (c.f. (2)).

(iii) Over the years, the climate became out of shape.

10 I have no explanation for why very seems more felicitous than the other degree words with many such PPs. Such examples are often heard, and of them, especially those which have been converted to adjectives, sound perfect to me, e.g. very out of shape. Also crucial is the fact that the explanations how in love they seem become felicitous better than the question how in love are they?

11 So do predicate nominals:

(i) *It's very much a fool.
(ii) *It's very much the perfect gentleman.

12 The only systematic exception is that if the PP contains an adverb, e.g. in good spirit or in good shape as opposed to just as shape, then no specifier seems to be possible:

(iii) *How (much) in good spirit did you find the patient?
(iv) *How much in good shape should you be to run a marathon?

13 Neither Bratman (1973) nor Jackson (1977) included prepositions in their accounts of the syntax of such.
14 The judgments indicated here are mine; for at least some speakers, the examples in (22b) are acceptable. This might follow from their being converted adjectives, with enough following the entire complex word.
15 Because of the word order constraint requiring that the finite verb be in second position (cf. Making and Zemach (1981)), in Norwegian it is possible for adverbs to occur between the finite verb and its NP-complement, but they cannot occur between a nonfinite verb and a NP-complement. One can easily imagine a raising-type analysis of the "Verb-second" word order constraint which would account for this fact about adverb placement in Norwegian, in conjunction with the prohibition stated in (23). Nonfinite verbs form a single constituent with their complements. If finite verbs, the other hand, are "split" into a separate Aux node, they would not form a single constituent with their complements, and hence (23) would not be relevant.
16 Last Helen informs me that there are less adjectives in Norwegian which can take direct NP-complements: red ("red", "like red", noun, "near red", and red 'worth'. They inflect like adjectives s.o. have a following NP-complement, in which case they are invariant, and do not exhibit agreement with the subject. It is interesting that of them, only red and near have synthetic comparatives.

17 Examples like these are discussed in Breman (1973), where it is proposed that enough might require a full specifier. Frank Heath (personal communication) points out examples like (ii) below, which have interesting implications for an intonation analysis of complements to ( splitted) nouns.

(i) There was destruction enough of small town during the war.

18 Obviously relevant in the question of whether the first P in such phrases is the head, or just a specifier, see Section 2.3. below, and also Wahlberg (1977) for discussion. It isn't clear how to tell for metaphoric PPs.

19 Note however that out of does not behave as predicted:

(i) *He isn't yet enough of a shape.
(ii) *The cat wouldn't come out enough of the bag.
(iii) *The cat wouldn't come out enough from the bag.
One might wish to argue that out of shape has been lexicalized as an adjective, and hence cannot be split up, especially since (ii) seems at least marginally better. But the same pattern holds of out of the picture which cannot occur prepositionally:

(26a) * He doesn’t turn out enough of it to be institutionalized. He doesn’t turn out enough of it to be institutionalized.

(26b) * He seems out of the mind to be dressed crazy. He seems out of the mind to be dressed crazily.

Perhaps out of has simply been lexicalized as a complex preposition taking a NP-complement.

Other complex PPs with of behave similarly.

(4a) He was being just off enough of the main street for it to be quiet.

(4b) He was being just off enough of the main street for it to be quiet.

In this case, the optimal of seems to be ignored for the purposes of the construe in (26).

26. Although only adjectives may occur in prepositional phrases, they may themselves be lexicalized as complex adjectives with internal structure, e.g. that of PP. Thus I consider the examples of prepositional PPs given earlier to be adjectives nonetheless, and hence prepositional possesses a good criteria for distinguishing categories.

27. R. Oehme (personal communication) suggested that one could make sense of an adjective with a N as the head of a NP, as in ‘colorless’.”

Williams (1972) has argued that English has a ‘Head-Final Constraint’, which requires that pronominal phrasal modifiers of N must be head-final. Maling (1970) proposed essentially the same constraint, although in a bidirectional form, requiring that the head of an adjective constraint accounts for the failure of PPs to occur prepositionally. It does not account for the difference between near and like, nor does it explain why in modern English, the head does not suffice for typical adjectives:

(28a) * I’ve never seen a man like him.

(28b) * I’ve never seen a man more like him.

28. R. Oehme (personal communication) suggests that also may be another meriting typological adjectives; note that it occurs prepositionally in such phrases as in due course and that its NP-complement also alternates with a PP-complement, as in due to. Not (28c) I have not had time to consider these and other possible exceptions, if any, to consider these serious counterexamples. See Maling (1972b).

**TRANSITIVE ADJECTIVES**

This last example is possibly a VP modifier, as in no way enough or in so much enough. Contrast the pattern in (31a) with complex adjective phrases such as yellow enough with age.

Unlike many other languages, English usually requires prepositional rather than null heads in examples like (33) below, but general, null heads are allowed only with specific interpretations, as in (34), or with adverbials, as in (35) (see Quirk et al. (1975)).

(31a) Only the very rich live in Manhattan.

(31b) We eat only the very finest food.

32. Note the degree modifiers very and the syntactic composition; in inflectional languages, the adjective would be marked for gender, number, and case. Since gender is not, and the generic reading is unavailable for examples like (33); the null-head analysis of the phrase is impossible, and the sentence is out. Only the fixed expression and the like survive.

Since on a nonnegative reading such phrases a wood cannot be an adjective, the only available analysis is that it is a noun; this seems to have occurred in examples like (32), as shown by the plural endings.

(33) Did you ever see the like of him?

(34) Did you see the other?

Do come in, in my dressing, deserted.

The earliest citation of the plural like in the OED is 1787. Note that there must be a category distinction between the common case like in (33) and the adjective in nonupposed NPs as in (32), which never take plural endings. There is no semantic explanation for the fact. Even adjectives, which might be argued to have a unique reference and hence fail to pluralize, allow plural prepositional heads:

(35a) We choose the biggest ones.

29. The fact that our first intuitions about whoat and near turn out to be wrong shows how misguided the attempt to provide notional definitions of categories is.

30. It’s not what it makes of the fact that this does not peak pipe (nor does like). As Emmon Bach pointed out to me, worth is also unusual in being a rough-graded that takes genitive rather than infinitival complements:

(36a) This matter is well worth looking into.

(36b) This problem is worth your having a look into.

This peculiarity seems to be independent of the categorial assignment of the head. Winer (1963), vol II, Section 1028) cites both worth and put as adjectives taking the complements with non-subject gaps, although he notes that the categorial status of the head is in certain cases unclear.

31. There is also a noun worth, as illustrated below:

(37a) At least you got your money’s worth.

(37b) Don’t underestimate the worth of descriptive syntax.
transitive adjectives

Adverbs. An either an adjective or an adverb, it can take a NP-complement. The exact nature of the relation between adjective and adverb is an interesting problem for future research, but I know of no independent motivation for claiming that their complements are attached at different levels.

Note that contrary to the claim that adverbs do not constitute an independent class of words (Backdoff, 1977, p. 78), adverbs can and do take X-bar complement in some languages. For example, like 'like' has the same three uses illustrated in Adverbs. An either an adjective or an adverb, it can take a NP-complement. The exact nature of the relation between adjective and adverb is an interesting problem for future research, but I know of no independent motivation for claiming that their complements are attached at different levels.