Grammaticalization of *Near* from Adjective to Preposition via Head-Movement, Gradability Declination and Structural Reanalysis

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Received October 22, 2013; final version accepted February 21, 2014

In English, there are a couple of words whose categorial status is murky, the most notable of which is *near*. It is sometimes referred to as a preposition (Svenonius (2010)), as a transitive adjective (Maling (1983)), or as an intransitive adjective whose PP complement happens to be filled by an empty P (Kayne (2005)). The first aim of this article is to show that the three analyses are all correct synchronically in that they represent a different stage of grammaticalization on the cline from transitive adjective to intransitive adjective to preposition, on the basis of the newly discovered fact (i) that the semantic gradability of *near* began a sharp declination from the late 19th century, (ii) that its morphological compatibility with the preposition *to* also began a sharp declination from the same period, and (iii) that its collocation with the adverb *right* became possible around the same period, among others. The second aim of this article is to provide a syntactic analysis of the grammaticalization of *near*, with recourse to the insights put forth by Waters (2009) as to the grammaticalization of *inside* from N to Axial Part to P.

KEYWORDS: grammaticalization, categorial ambiguity of *near*, gradability and adjectivehood, transitive adjective vs. preposition, COHA

1. Introduction

There has been a controversy over the categorial status of the word *near* which takes an NP complement directly: Quirk, et al. (1972) and Svenonius (2010) identify it as a preposition, Maling (1983) refers to it as "the only surviving relic of the class of transitive adjectives," and Kayne (2005) alludes to the possibility that it is an intransitive adjective selecting a phonetically empty preposition. In this article, I will claim that the three previous analyses are all correct synchronically, though they represent a different stage of the diachronic and unidirectional reanalysis of *near* from A to P through the decline of gradability. More specifically, I demonstrate, on a corpus study and a statistical analysis of its results, that *near* has been in the process of grammaticalization (or decategorization) on the cline from transitive adjectives to intransitive adjectives to prepositions, through the semantic, morphosyntactic and phonological processes including (i) deletion of its semantic [+gradable] feature, (ii) phonological deletion of the head of its PP complement, (iii) coalescence of it and a locative preposition (Loc) via syntactic head-movement of A to Loc, (iv) reanalysis of the hybrid category A+Loc as Loc, which we classify into functional categories, à la Baker (2003),¹ and (v) deletion of AP and PP, triggered by the principle of economy (Roberts and Roussou (1999)). As a presupposition for this claim to go through, I will also claim that semantic gradability is a sufficient condition for the adjectivehood, abandoning a purely syntactic definition of adjectives that has been adopted in generative linguistics.

This article is organized as below: section 2 summarizes conflicting views in the previous analyses of *near*. Section 3 shows that the Corpus of Historical American English (COHA) tells us how *near* has decreased its semantic gradability in the last two centuries, and how this semantic change correlated with the decrease of the morphological "adjectivehood" of *near*: the loss of the dative preposition *to* following *near*. Section 4 discusses how the so-called "gradable nouns, verbs, and prepositions" can be explained by Kayne’s (2005, 2010) proposals, without assuming that they are gradable. Section 5 proposes a theory of the syntactic reanalysis of A as P, building on Waters’ (2009) claims on the diachronic change from *inside of NP* to *inside NP* and a concurrent categorial reanalysis. Section 6 takes up *next*, which is etymologically related to *near*, and discusses how different it is from *near* in the kind of reanalysis it is undergoing. Section 7 is a conclusion.

2. Conflicting Views in the Previous Analyses

Most dictionaries allow *near* and *next* the following two uses, one with the preposition *to*, as in (1a,b), and the other without, as in (2a,b):

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Everyone will admit that near in (1a) and next in (1b) are no less adjectival (or adverbial) than similar in John is similar to his mother is (or similarly in I'm treating her similarly to the way I treat patients), rather than prepositional.\(^3\) By contrast, there has been a long-standing controversy over the categorial status of near in (2a): are they adjectival or prepositional? First, Quirk, et al. (1972: 301) suggest that near is classified into the realm of prepositions:

(3) ... there are a few words which behave in many ways like prepositions, although they have affinities with verbs or adjectives: except, bar, barring, concerning, considering, following, including, granted, pending, less, like, near, save (archaic), unlike, worth.

However, if we analyze near as a preposition, we cannot explain why it can have the synthetic comparative and superlative forms, as shown below:

(4) a. They moved house to be nearer the school. (LDCE)
   b. It was Robin Hood who lived nearest the forest. (Kayne (2005: 178))

(5) a. John lives on a much lower/*upper floor than Bill. (ibid.:178)
   b. John lives on the lowest/*uppest floor. (ibid.:178)

(5a,b) show that up cannot have synthetic comparative and superlative forms because it is a preposition, while low can, because it is an adjective. The facts in (4) and (5) appear to demonstrate that near is an adjective. If near is an adjective, however, another question arises why near can take an NP directly without a support of any preposition, unlike other adjectives which need either of or to:

(6) a. John is certain *(of) victory./John is proud *(of) his son.
   b. John is similar *(to) his father./This line is parallel *(to) that one.

In order to solve this tension, Maling (1983) claims (7):

(7) ... near passes all the tests for adjectivehood, making it perhaps the only surviving relic of the class of transitive adjectives. (ibid.: 266)

Transitive adjectives are adjectives directly followed by an oblique-case-marked NP-complement. They abounded in Old English, which had a rich system of morphological case, though “[o]nce surface case is lost [in Middle English], then oblique NP-complements are typically replaced by PP-complements; e.g. dative case is typically replaced by to, genitive case by of” (ibid.: 254). This means that transitive adjectives were replaced by intransitive adjectives.\(^4\) Moreover, Maling claims that adjectives can be reanalyzed as preposition, due to the loss of morphological inflection on them. Thus, she claims that worth, like, and unlike, which were etymologically adjectives, have been reanalyzed as prepositions that take an NP complement directly in the present-day English,\(^5\) and that near is “the only surviving relic of the class of transitive adjectives.”\(^6\)

Maling (1983) provides an independent piece of evidence for the adjectival status of near, which comes from its order relative to enough:

(8) a. Robin seems {sensible enough /*enough sensible}.
   b. Robin seems {enough in love /*in enough love}.
   c. Chris looks {enough like you /*like enough you} to be your twin.
   d. Chris didn’t go {near enough /*enough near} (to) the water to get wet.

It is true that adjectives such as sensible must precede enough, whereas PPs such as in love and like you must follow it. Then, the fact that near must precede enough whether it selects to or not will suggest that it is a transitive adjective.

A slightly different view is put forth by Kayne (2005), who claims (9):

(9) ... it seems clear that near is an adjective (in which case, the forms nearer and nearest are not surprising), albeit an irregular one (relative to English) in that it can take a nonprepositional complement (with an unpronounced counterpart of to). (ibid.: 178)
While admitting the possibility that *near* in (1a) is an adjective, he also alludes to the possibility that it is not a transitive adjective but an intransitive adjective which takes a PP complement whose head happens to be phonetically empty.7

Another important divergence between Maling and Kayne is whether they take the possibility of modification by degree modifiers such as *very*, *so*, *too* as evidence for the adjectivehood of the relevant words:

(10) a. He lived very near the forest.  
    b. He lived too [near/*by/*in/*at] the library.

Kayne (2005) argues that, since this modification by a degree modifier is possible only for gradable adjectives, and since prepositions cannot be gradable, the acceptability of (10a,b) suggests that *near* is an adjective. Maling (1983: 261) argues against this standard view, because some of the metaphorical PPs can be modified by such adverbs as below:

(11) They seemed {so/too/?very} {in love / at home / out of shape}.

However, the following data, which Maling judges as marginally possible, can be used to argue that these instances of metaphorical PPs have been in the process of lexicalization to adjectives:8

(12) ??Robin seems {in love / at home / out of shape} enough.

If the metaphorical PPs are changing into lexical adjectives, then it is no surprising that they can also be modified by *so*, *too*, and *very*. Hence, Maling’s argument for the separation of semantic gradability and adjectivehood cannot be maintained, and we can conclude that *near* is adjectival as far as it is gradable (see also section 4 for a more detailed discussion on this issue).

On the other hand, there is also evidence for the assumption that *near* can be prepositional, which is obtained from synchronic data on selectional restriction:

(13) a. Lee became [mad /*out of his mind].  
    b. Robin has become near the edge of bankruptcy.  
    (Maling 1983: 282)

(14) a. John wants Mary honest.  
    (Endo 1990: 35)
    b. He wanted the sailors off the ship by midnight.  
    (ibid.)
    c. Give me that bottle. I don’t want glass near you.  
    (COCA; 2006; FIC)9

First, (13a) shows that the verb *become* can select a small clause AP but not PP, and (13b) shows that *near the N* cannot be selected by *become*. Second, (14a,b) show that the verb *want* can select a small clause PP, but not AP, and (14c) shows that *near you* can be selected by *want*. These facts can be explained if *near the N* is PP.10 Third, Maling (1983: 289; fn.29) points out that the word *near* directly followed by an NP, unlike the unequivocally adjectival *near* and *close* followed by the preposition *to*, can be modified by the adverbial *right*, admitting that this *near* is “a less than perfect adjective”:

(15) a. Put it right near the door!  
    b. Put it right close to the door!  
    c. Put it right near to the door!

In fact, Svenonius (2010: 141) makes the compatibility of *right* with *near* in defending his claim that *near* belongs to the same type of preposition as *beside*, *between*, and so on. More specifically, he suggests that, while the adjectival use of *near* is compatible with the null deictic pronoun which can be anaphorically identified, the prepositional use of *near*, which he classifies into the “bounded Ps,” is incompatible with it, as below:11

(16) a. I was very near (it).  
    b. I was right near *(it).

We have introduced three different views on the word *near* that directly takes an NP: it is (or “can be”) prepositional (Quirk, et al. (1972), Svenonius (2010)); it is a transitive adjective (Maling (1983)); and it can be an intransitive adjective followed by an empty P (Kayne (2005)). In the next section, I will provide results of a corpus study showing that all the three claims are correct synchronically, although diachronically those English speakers who identify *near* as a preposition have been increasing and those who identify it as an intransitive or a transitive adjective have been radically decreasing from the late 19th century.
3. What the Corpus Data Show

The corpus I will use to justify the above-mentioned claims is the Corpus of Historical American English (COHA), which was launched by Mark Davies of Brigham Young University on 2009 and includes as many as 400 million words of text of American English from the years 1810 to 2009. It tells us the frequency (per million) of each word or collocation per decade. Using this corpus, we can see, in Figure 1 below, how the frequency of the collocations of near the, nearer the, nearest the, so near the, very near the, too near the, and near enough have changed during the 200 years, as well as that of the word near itself.12

Figure 1 shows two important points which are related to the exceptionality of the frequency of near the compared to those of the other six collocations which are based on the unambiguously adjectival uses of near:13

(17) a. The frequency per million of the collocation of near the in every decade is at least twelve times higher than that of the other collocations.14

b. While the frequency of the word near or the collocation of near the has not changed largely throughout the years between the 1820s and the 2000s,15 the frequency per million of the other examples show the tendency of monotone decrease from the late 19th century, as a result of which the divide between them has been enlarging.

For the sake of clarity, let us make Figure 2 overleaf, which includes all the information in Figure 1 except for the frequency of the single use of near and the collocation of near the. Figure 2 shows that the transitive adjectival uses of near, as exemplified by nearer the, nearest the, so near the, very near the, and too near the, and also the use of near enough are unexceptionally decreasing from the late 19th century, and the frequency per million of, for example, nearer the, has declined by 87.3% between the 1890s and the 2000s.

With this in mind, let us first discuss (17b). Note that Maling admits that the possibility of near enough, nearer the, and nearest the are reliable (morphosyntactic) diagnostics of adjectivehood, whereas she denies the semantic gradability as a crucial diagnostic of “adjectivehood”. On the other hand, we will assume the semantic gradability as a crucial diagnostic of “adjectivehood”. Which position is empirically justified? Given the fact that the decline of the semantic gradability and that of the morphosyntactic adjectivehood of near correlate with each other, it seems evident that our claim that the semantic gradability is a reliable diagnostic of categorial adjectivehood is justified.
Figure 3 below shows that we can reach the same conclusion from a survey of near to the, nearer to the, nearest to the, so near to the, very near to the, and too near to the:

![Variations of “near to the”](image)

The frequency of these collocations also reaches the peaks in the year 1910 or earlier, and has been decreasing thereafter. Thus, the frequency per million of nearer to the has declined by 93.2% between the 1890s and the 2000s; the frequency of near to the begins to decline as early as the 1820s and has declined by 91.9% in the 2000s. Note that, regardless of the presence or absence of a degree modifier or a comparative/superlative inflection, all the examples in Figure 3 show the adjectival uses of near, because a prepositional use of near should not be able to take a PP complement headed by to.

Figure 4 overleaf shows that the frequency of nearer the and that of near to the change very correlatively. In fact, calculation of the correlation coefficient between the two sets of values from the 1810s to the 2000s shows that there is
a statistically significant correlation between the semantic gradability and morphological adjectivehood of near (p = 0.000010104 < 0.01). In fact, essentially the same level of correlation holds between near to the and so near the (p = 6.594E-09 < 0.01), between near to the and very near the (p = 0.0002845 < 0.01), and between near to the and too near the (p = 0.0014292 < 0.01). All these results would be unexpected if Maling (1983) were correct in claiming that the possibility of modification by very, so, and too is irrelevant to the categorial adjectivehood and semantic gradability of near.

Now, let us discuss the categorial status of the word near of near the. In principle, it may be three-way ambiguous among a transitive adjective (Maling (1983)), an intransitive adjective followed by a phonetically empty counterpart of to (Kayne (2005)) and a preposition (Svenonius (2010)). Crucial to the solution of this problem is, however, the description in (17a) and the former half of (17b), which is repeated as below: (i) the frequency per million of near the in every decade is at least twelve times higher than that of the other collocations, and (ii) it has not changed largely throughout the years between the years 1820 and 2000. If the frequency of near itself were radically declining throughout the 20th century, then it would mean that the word near has been dying out in the mental lexicon of the native speakers of English, so that the declination in the frequency of nearer the, near to the, and so on would not show the decreased gradability of near, and the objective fact would have no theoretical implication for the determination of the categorial status of near. However, the frequency per million of the word near and the collocation near the is just as stated in the former half of (17b). More accurately, Figure 1 shows that the frequency of the word near and the collocation near the has also been decreasing since the 1890s. However, the decline has been very slow and the frequency of near in the 2000s ( = 202.1 per million) has declined just 39.8% compared to that in the 1890s (= 335.7 per million), and the frequency of near the in the 2000s (= 75.25 per million) has declined just 20.6% compared to that in the 1890s (= 94.75 per million) (in fact, there is a statistically significant correlation between the frequency of near and that of near the in each decade from the 1810s to the 2000s: p = 0.001235 < 0.01). These facts stand in a stark contrast with the fact, shown in Figure 2, that the frequency of nearer the and nearer to the, for example, have declined 87.3% and 93.2%, respectively, between the 1890s and the 2000s. Then, we are obliged to argue that the decline in the frequency of the various adjectival uses of near is not attributable (just) to the gradual dying out of the word near or the decline of the collocation of near the. Rather, we must interpret the data in Figures 1 to 3 as indicating that, at least from the late 19th century, near has been losing its adjectivehood and more and more changing to the preposition.¹⁶

Now, let us make the natural assumption that the ratio of the frequency (per million) of near to the to that of its comparative variant nearer to the is in proportion to the ratio of the frequency of the adjectival uses of near the to that of its comparative variant nearer the. First, from the data in Figures 1 and 3, we can calculate the frequency of the adjectival uses of near the (which include both transitive adjectives and intransitive adjectives whose complement PP is headed by a null P) as 6.37 (per million) in 1820s, 5.73 in 1850s, 5.13 in 1890s, 2.63 in 1930s, 2.27 in 1970s, and 1.14 in 2000s, and so on. And if we subtract these figures from the total frequency of near the in each decade, then we can obtain the frequency of the prepositional uses of near the, which is figured as 61.77 (per million) in 1820s, 83.32 in 1850s, 89.62 in 1890s, 76.47 in 1930s, 65.96 in 1970s, and 74.10 in 2000s, and so on, as shown in Figure 5 overleaf:
The prepositional uses of *near the* are, then, 9.69 times as many as its adjectival uses in 1820s, 14.52 in 1850s, 17.48 in 1890s, 29.03 in 1930s, 29.06 in 1970s, and 64.68 in 2000s, and so on, as shown in Figure 6 below:

This seems to show the tendency of the divides being enlarging, if we put aside the figures in 1810s and the 2000s. At the least, it is true that, while the prepositional uses of *near the* was less than 10 times as many as its adjectival uses in the 1820s, it is more than 130 times as many in the 1990s. Hence, it seems safe to conclude that although the prepositional *near* was already predominant in the 1820s, its adjectival uses have been radically declining and replaced by prepositional uses since the late 19th century, in accordance with the unidirectionality of grammaticalization (cf. Haspelmath (1999: 1045)).

Figure 7 overleaf shows that the collocation of *right near*, which was rarely observed before the 1870s (there is only one use in the 1840s), begins to be used frequently after the 1880s and its frequency per decade shows an upsurge between the 1880s and the 1920s. This fact also endorses our claim that the adjectival uses of *near* begin to decrease from the late 19th century and be replaced by the prepositional uses.
Finally, compare Figures 2 and 3, which show the frequency per million of the transitive adjectival uses of near, such as nearer the, and that of the intransitive adjectival uses of near, such as nearer to the, respectively. It turns out that in every decade from the 1820s, the transitive adjectival uses of near are more frequent than the intransitive ones. For example, look at Figure 8 below, which shows the frequency of nearer the and nearer to the.

From this and the result just obtained in the previous paragraph, we obtain the conclusion in (18a,b):

(18) a. Throughout the years between the 1820s to the 2000s, the instances of near as prepositions are more frequent than those of near as transitive adjectives, which are more frequent than those of near as intransitive adjectives.
   
   b. The adjectival uses of near begins to decrease and be radically replaced by the prepositional use in the late 19th century.

The conclusion in (18a) is in conflict with Maling’s (1983) identification of near as a transitive adjective which has not
yet been reanalyzed as preposition. We have already falsified her conception in view of the fact that decreasing semantic gradability of near has been correlative with the decreasing morphological adjectivehood of near.\textsuperscript{19}

4. Semantic Gradability and “Adjectivetheood”

In the previous section, we have assumed that two sufficient conditions for the categorial “adjectivetheood” are (i) semantic gradability, indicated by the fact that a word can be modified by so, very, and too, and (ii) morphological properties such that the word can have the comparative or superlative inflection, (e.g., bigger, biggest) and/or that the preposition to or of is necessary for the word to assign Case to its complement (e.g., similar to it, sure of it), and argued that the word near has been losing its adjectivehood and changing its categorial status into preposition. I argued that the semantic and morphological properties correlate with each other because an adjective is the only category which is semantically gradable and decategorization of near from A to P should therefore deprive gradability of it as well, while it will give near the ability to Case-mark its complement NP without any support by the preposition to.

Although the decline of the morphological adjectivehood of near may be a strong piece of evidence for our claim, it may be controversial whether the decline of semantic gradability can be supporting evidence for it, since there appear to be several reasons to consider that adjectives are not the only gradable category. First, recall our claim, against Maling (1983), that metaphorical PPs such as in love can be modified (somewhat marginally) by the degree adverbs because they have undergone lexicalization to adjectives. This claim may be justified. However, Maling (1983) provides another criterion which distinguishes adjectives from prepositions: adjectives and some nouns including man and fool precede enough, while prepositions including like and non-metaphorical PPs such as of a man follow it, as in (22) and (23):

(22) a. I was [fool / foolish] enough to think so.
   b. He was [man / manly] enough to try it. (cf. Maling (1983: 264))
(23) a. Chris looks enough like you to be your twin.\textsuperscript{20} (ibid.: 266)
   b. He was enough of a man to try it.

For this criterion that distinguishes adjectives from prepositions to stand, however, it appears we need to assume that what Maling identifies as nouns and non-metaphorical PPs remain gradable, to the extent that they are compatible with enough. In fact, Bolinger (1972) argues that there are the classes of nouns and verbs which he identifies as “gradable nouns” and “gradable verbs”. On the other hand, we have shown in Figure 1 that the frequency of near enough has been declining from the late 19th century, and we would like to explain this fact in the same way as the decline in the frequency of very near, so near, and too near. Then, the least minimum we have to do in order to maintain our claim that the loss of semantic gradability causes an adjective to be reanalyzed as a preposition is to deny the possibility that the so-called “gradable nouns”, “gradable verbs”, and gradable non-metaphorical PPs such as worth reading, like her sister, and of a man are directly modified by degree adverbs including enough, so, very, and too.

What seem to be nouns in (22) could be zero-derived adjectives, just as key, requisite, and mainstream. More serious is the well-formedness of examples in (23), which appear to show that PPs can be gradable. In fact, COHA shows that some PPs can immediately follow enough, as shown in (24):

(24) a. Ebony’s mother won’t talk about him except to say that he loves Ebony but isn’t enough of a man to know how to show it. (COHA; 2002; FIC)
   b. He was also enough of a dreamer to conjure images out of the shades of folklore and superstition for the masses to enjoy. (COHA; 2004; FIC)

Moreover, a different kind of nouns than those illustrated in (22) can immediately precede and apparently be modified by enough, as in (25) below:

(25) a. Rosie’s face is evidence enough of what’s going on. (COHA; 1993; FIC)
   b. They were both certain that a man pulling a knife while in police custody was reason enough for them to have drawn their weapons and shouted a warning. (COHA; 1999; FIC)

We need to explain these data without assuming that the prepositions and nouns themselves are gradable.

Let us first consider “gradable nouns”. My basic claim about them is that, since enough modifies the amount of the referent denoted by them, they are modified by an unpronounced adjective which is semantically gradable. Thus, in (25), we assume that the relevant N accompanies a phonetically empty adjective GOOD, which is modified by enough.\textsuperscript{21}

Next, consider the non-metaphorical Ps in (23a). Here, we will postulate an empty adjective MUCH between enough and like. Similarly, in (24), we will postulate an empty noun SCALE or SIZE between enough and of, in the spirit of Kayne (2005: 214), in addition to the empty adjective GOOD or LARGE.\textsuperscript{22}
Given the empty nouns and adjectives, the structures of (23a), (24a), and (25b), for example, will be schematized as in (26a), (26b), and (26c), respectively:

(26) a. looks [MUCH enough [like you]]
   b. but isn’t [LARGE enough [SCALE/SIZE of a man]]
   c. reason [(WHICH IS) GOOD enough] for them to have …

As for the compatibility of the empty MUCH and enough, despite the fact that enough much money and much enough money are both unacceptable, see Kayne (2010:78). As an independent piece of evidence for the compatibility of the empty GOOD and reason or the compatibility of the empty LARGE and the empty SCALE, COCA provides us with some data having the sequence of good enough reason, as in (27a), and large enough scale, as in (27b), which are the overt counterparts of the empty GOOD and the empty LARGE/SCALE in (26a,b), respectively:

(27) a. Being in love is good enough reason to marry. (COCA; 1993; USA Today)
   b. When it happens on a large enough scale, the star turns on and the nearby darkness is dispelled. (COCA; 1992; MAG)

If the adverb enough, which appears to be modifying an overt noun or PP, actually modifies an empty adjective such as GOOD, MUCH, LARGE and so on, then we can deny that there are gradable nouns or gradable prepositions.

As an independent piece of evidence for the empty MUCH, in addition to what Kayne (2005, 2010) provides, we can point out that the prepositional like can be combined not only with very much, but also with very without much, or with much without very:

(28) a. You look so very much like her. (COHA; 2001; FIC)
   b. She’s very like her, isn’t she? (COHA; 1997; FIC)
   c. This skiing move is much like ice-skating: (COHA; 2000; MAG)

It is important to note here that the possibility of a word being modified by (very) much does not prove the semantic gradability of the word, because a typical gradable adjective such as noisy cannot be modified by (very) much, even though they can be modified by very (cf. Bresnan (1973)). In this respect, adjectives differ from prepositions:

(29) a1. The kids were very (much) noisy. (Maling (1983: 261))
   a2.* The kids were much noisy.
   b1. We went to a few other places after that, but those had really been summer haunts, and weren’t much worth seeing with snow cover. (COHA; 1997; FIC)
   b2. It’s very much worth it. (Maling (1983: 269))
   c. Long ago, we were much like you: aggressive, hungry, violent. (COCA; 1999; FIC)

For these reasons, I will claim that, although neither a preposition nor PP is gradable by itself, the gradability of PPs can be determined compositionally, by merging the relevant P or PP with much, which is inherently gradable, and that once a PP can be made gradable by the added much, the latter can be further modified by very. Note also that much can be replaced by the empty MUCH if it is merged with a preposition:

(30) a. We won’t solve it tonight but it was very worth discussing. (COCA; 2004; SPOK)
   b. She is very (much) like you.

If this claim is on the right track, we can reject the possibility that there are gradable non-metaphorical PPs.

Next, let us discuss the so-called “gradable verbs,” which include hesitate, miss, complain, blame, and verbs formed by the prefixation of mis-, mal-, over-, or under-, such as misjudge, malfunction, overrate, underestimate, etc. I claim that they can be analyzed analogously. Note first that the “gradable verbs” behave like the non-gradable PPs in that they can be modified by (very) much, though they differ from non-gradable PPs in that much cannot be replaced by the empty MUCH if they modify the “gradable verbs”:

(31) a. Do you blame me very much? (COCA; 2001; FIC)
   b. He very much misjudged the situation. (Yasui, et al. (1976: 117))
   c1. I don’t much like it. / I love you (very) much.25
   c2. I love you very *(much). / I very *(much) love you.

To summarize what we have illustrated so far, we have the following table:

<table>
<thead>
<tr>
<th>(23a)</th>
<th>(24a)</th>
<th>(25b)</th>
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<tbody>
<tr>
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\[28\]

\[29\]

\[30\]

\[31\]
Although the prepositions must be distinguished from verbs in whether they can cooccur with the empty MUCH,\textsuperscript{27} they behave in the same way in other respects, and should be distinguished from gradable adjectives since the latter cannot be modified by much. The merger of much with PP or VP makes the latter a gradable predicate, which we can take to be a kind of coercion (a similar statement also applies to non-gradable APs; see below).

Coercion is a cover term for the various phenomena in which addition of certain kinds of modifier to the main predicate changes the semantic status of the main predicate. As an illustration, let us look at the aspectual coercion in (33) and (34):

(33) a. The children pushed the cart in three minutes. (atelic)
   b. The children pushed the cart \textit{to the wall} in three minutes. (telic) \hspace{1cm} (Travis (2010: 246))

(34) a. The lighthouse flashed. (semelfactive)
   b. The lighthouse flashed \textit{until dawn}. (repetitive)

In (33a), since the VP push the cart is atelic, it is incompatible with the time-frame adverbial in \textit{three minutes}. However, when it is combined with the PP that denotes the endpoint of the motion of pushing, as in (33b), the larger VP turns into a telic predicate, and modification by the time-frame adverb becomes possible. In (34a), the event of the lighthouse’s flashing must be semelfactive. However, the combination of the VP with the durative adverbial PP \textit{until dawn} as in (34b) enables the entire VP to denote a repetition of the lighthouse’s flashing for several hours.

A similar phenomenon is observed in terms of the “gradability” of VP or AP. First, since the verb drain is atelic and non-gradable, it cannot be modified by the adverb quite, as in (35a). However, when it is combined with the particle up/off, the entire VP becomes telic and “gradable”, and its modification by quite becomes possible, as in (35b):

(35) a. They quite drained the water.
   b. They quite drained off the water. \hspace{1cm} (Bolinger (1972: 223))

Similarly, since the small clause complement to the verb seem must be a gradable predicate, (36a) where the predicate is choral is ruled out; however, when the inherently non-gradable adjective is modified by the adverb almost, the entire AP becomes gradable as a whole, and (36b) is well-formed:

(36) a. The music seems choral.
   b. The music seems \textit{almost} choral. \hspace{1cm} (Yasui et al. (1976: 119))

As such, it is not uncommon to see an inherently non-gradable predicate altered into a gradable one by the addition of certain elements with an adverbial function, such as adverbs, particles or PPs, to it. If we look at the table in (32) from this perspective, it is reasonable to claim that claim that much has essentially the same function: the so-called “gradable verbs” are not gradable by themselves, but can be made gradable by its merger with the adverb much. In other words, we can assume that much behaves as a functor which takes a non-gradable predicate and outputs a gradable one, and that very is a mere modifier of much.

If this assumption is on the right track, we predict that even an inherently non-gradable adjective can be altered to a gradable one by the addition of much. This prediction is indeed borne out by the COHA data which show that the adjective alive, which is the antonym of dead and hence is non-gradable, has been far more frequently modifiable by very much and much than by very since it began to be used with the gradable meaning of ‘alert and active’ in the 1880s.

Look at the following table:

<table>
<thead>
<tr>
<th></th>
<th>1850s</th>
<th>1880s</th>
<th>1910s</th>
<th>1940s</th>
<th>1970s</th>
<th>2000s</th>
</tr>
</thead>
<tbody>
<tr>
<td>\textit{much} alive</td>
<td>1</td>
<td>12</td>
<td>24</td>
<td>25</td>
<td>21</td>
<td>19</td>
</tr>
<tr>
<td>\textit{very much} alive</td>
<td>0</td>
<td>5</td>
<td>17</td>
<td>19</td>
<td>21</td>
<td>19</td>
</tr>
<tr>
<td>\textit{very} alive</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>\textit{be} alive\textsuperscript{28}</td>
<td>165</td>
<td>301</td>
<td>387</td>
<td>474</td>
<td>508</td>
<td>693</td>
</tr>
</tbody>
</table>

We can interpret this contrast between (very) much alive and very alive in such a way that alive has been a non-gradable adjective and it can be used as a gradable adjective only when it is combined with much; very alive has been almost
unavailable, since the empty MUCH is incompatible with a non-gradable adjective, just as it is incompatible with a non-gradable verb. Hence, our claim that a non-gradable predicate can be combined with much to become a gradable one will be justified.

The same conclusion can be obtained from an investigation of the uses of different. Since the adjective different is originally the antonym of identical, it is non-gradable, and A is different from B was the only use of different until the early 20th century, as shown in Figure 9 below. However, its gradable use such as A is different than B begins to increase from the early 20th century:29

Figure 10 shows that the frequency of different than is increasing in a very correlative way to that of much different: In fact, the correlation coefficient between the two sets of values from 1810 to 2009 shows a statistically significant correlation between the increasing tendency of different than and that of much different (p = 1.0918E-08 < 0.01). In other words, the more frequently the adjective different comes to be used as a gradable adjective, the more frequently its modification by much has been available. This fact strongly supports our claim that the adverb much behaves as the functor which takes a non-gradable predicate and outputs a gradable one:

"different from" and "different than"

"different than" and "much different"
A further support for our claim comes from the fact that, in the interrogative sentences, how much, which modifies a VP, can be fronted to the sentence-initial position, leaving the VP in situ, whereas the how that modifies an AP cannot be fronted to the sentence-initial position, leaving the AP in situ:

(38) a. How much do you miss him?  
   b.* How are you happy?  

This contrast between VP and AP can receive a natural explanation if we assume that a word with the semantic [+gradable] feature and the interrogative adverb that modifies the feature cannot be separated either syntactically or semantically. Since very/how and much in very much/how much are the modifier and the modified, respectively, they cannot be separated. Similarly, very/how cannot be separated from the modifying adjective, since adjectives are gradable themselves and no empty MUCH is available here. On the other hand, the combinatory form very/how much can be separated from VP, since VP is non-gradable in itself.

Finally, let us make a brief comment about two remaining issues. The first is concerning the syntactic distinction between gradable and non-gradable adjectives. In the proposed system, any predicative non-gradable category (i.e., verbs, non-gradable adjectives, and prepositions) can make a gradable predicate through its combination with much or its empty counterpart, and we predict that any category which can be modified by much can also be modified by more and most, because they are the comparative and superlative forms of much, respectively. Thus, much different will have the structure in (39a), and more different and most different will have the structure in (39b):

(39) a. [AP(+gradable) much [AP(+gradable) different]]  
   b. [AP(+gradable) more/most [AP(+gradable) different]]

On the other hand, an adjective which is inherently gradable, such as noisy, can be modified by more or most as far as it has two or more morae, although it cannot be modified by much (cf. (29a)). If we were to provide a structure like (39d) to more/most noisy, there would be no reason why much noisy cannot be ruled in, with a structure like (39c):

(39) c.* [AP(+gradable) much [AP(+gradable) noisy]]  
   d. [AP(+gradable) more/most [AP(+gradable) noisy]]  
   e. [DegP more/most [AP(+gradable) noisy]]  

(cf. Abney (1987))

It may be the case that the comparative and superlative forms of a gradable adjective have a different structure to that of a non-gradable adjective, as in (39e), where Deg is a functional category that selects AP as its complement. However, even if there is good reason to structurally distinguish between more/most different and more/most noisy, we need to conclude that the possibility of modification of an adjective by more and/or most cannot prove its semantic gradability, since even a non-gradable adjective can be modified by more and most with the structure in (39b). On the other hand, if an adjective with two or more morae cannot be modified by more or most, we need to seek for a different semantic reason than the gradability. Anyway, since near in the present-day English cannot be modified by more/most for the phonological reason, the fact does not have any impact on our claims in this section.\(^{30}\)

Another question that might be posed by a careful reader is whether (very) much near is acceptable in the present-day English. Note that the other reanalyzed prepositions like and worth permit modification by very much/very MUCH (cf. (29b), (30b)). Then, if near has been in the process of reanalysis as preposition, we predict that it can also be modified by very much. However, neither COHA nor COCA gives us an example of very much near, which might pose a problem for our analysis. However, the same corpora show that there are some examples of pretty much near, too much near and so much near, although they are far smaller in number than the corresponding examples based on like or worth, such as very like her, much worth it, much worth listening to, and so on:

(40) Mr-MAGNAN: Yeah. I had come from a very successful career where I was pretty much near the top of the heap and had command and control of lots of people and money, and I was the one that did the criticizing, and all of a sudden I was back at the bottom of the ladder at 49. It was a tough change.  
(COCA; 20031012; CBS Morning)

If near has lost its [+gradable] feature totally for some speakers, it is expected that much can modify the word in order to make it a gradable predicate again.\(^{31}\)

All these considerations will lead us to the conclusion that there is no intrinsically gradable prepositions, gradable nouns, or gradable verbs, and that semantic gradability can be localized to the adjectives (and the limited classes of adverbs).\(^{32}\) This in turn entails that, if a word which was originally gradable is losing the gradability, then it is undergoing grammaticalization from an adjective (or adverb) to an adposition (i.e., preposition or postposition).
5. A Theory of the Diachronic Syntactic Change of Near

Now that we have established the correlation between the semantic gradability and the categorial adjectivality and the fact that near has been decreasing its gradability from the late 19th century, the next task for us is to propose a morphosyntactic mechanism that triggers the decategorization or reanalysis.

On this issue, I propose that two more processes are requisite for the reanalysis from A to P: one is the coalescence of two or more lexical elements, and the other is the non-application of insertion of a phonetically overt but semantically vacuous preposition that could apply in the absence of coalescence, both of which are not unusual diachronically, as in the derivation of instead (of) from in (the) stead of. Let us first illustrate how the derivation of complex prepositions such as inside (of) and in front of has been analyzed in the literature.

Svenonius (2006) and Waters (2009) discuss cases like (41a,b), whose partial structures are distinguished as in (42a,b), respectively:

\[(41) \ a. \ There \ was \ a \ kangaroo \ in \ the \ smashed-up \ front \ of \ the \ car. \]
\[b. \ There \ was \ a \ kangaroo \ in \ smashed-up \ front \ of \ the \ car.\]

\[(42) \ a. \ [\text{LocP} (\text{in}) \ [\text{DP} (= \text{the}) \ [\text{NP} \ (\text{of}) \ [\text{KP} \ (\text{in}) \ [\text{DP}]])]]
\[b. \ [\text{LocP} \ (\text{in}) \ [\text{AxialPartP} \ \text{AxialPart} (= \text{side}) \ [\text{KP} \ (\text{of}) \ [\text{DP}])]\]

(Svenonius (2006: 50), Waters (2009: 290))

Svenonius (2006) claims that, in (41a), where there is a definite article, front is a noun which can be modified by an adjective, though in (41b), where the definite article is lost, the N is reanalyzed as the functional head AxialPart, which can no longer be modified by AP. Other instances of AxialPart are top and side, among many others (cf., inside, on top of). Exploiting Svenonius’s ideas, Waters (2009: 293) proposes to distinguish the structures of (43a,b) as in (44a,b), respectively:

\[(43) \ a. \ Mary \ is \ inside \ of \ the \ house. \]
\[b. \ Mary \ is \ inside \ \phi \ the \ house. \]

\[(44) \ a. \ [\text{LocP} \ (\text{in}) \ [\text{AxialPartP} \ \text{AxialPartP} (= \text{side}) \ [\text{KP} \ (\text{of}) \ [\text{DP}])]\]
\[b. \ [\text{LocP} \ (\text{inside}) \ [\text{AxialPartP} \ \text{AxialPartP} (= \phi) \ [\text{KP} \ (\text{of}) \ [\text{DP}])]\]

The gist of Waters’ claim is that the coalescence of in and side is analyzed as a combination of three operations: (i) (syntactic) reanalysis of the occupants of two separate (functional) heads (here, Loc and AxialPart) as a single word which occupies the higher head, (ii) elimination of the phonetic content from the lower head, and (iii) a non-application of ‘of-insertion’ in KP. Thus, inside (of), on top of, without, aboard, above could be other instances of Loc + AxialPart.

Now, let us propose that the reanalysis of near starts from its stage as a transitive, as in (45a), and then experiences its two stages as an intransitive, (45b) to (45c), which is quite parallel to (44a) and (44b), and then reaches its final stage as a preposition, as in (45d):\(^{33}\)

\[(45) \ a. \ [\text{LocP} \ (\text{near}) \ [\text{AP} \ \text{the \ house} [\text{A} (= \text{near}) \ [\text{DP} \ (\text{the \ station})]]]]
\[b. \ [\text{LocP} \ (\text{no}) \ [\text{AP} \ (\text{near}) \ [\text{PP} \ \text{the \ house} [\text{P} (= \text{to}) \ [\text{DP} \ (\text{the \ station})]]]]
\[c. \ [\text{LocP} \ (\text{near}) \ [\text{AxialPartP \ AxialPartP (\text{near}) \ [\text{PP} \ \text{the \ house} [\text{P} (= \text{of}) \ [\text{DP} \ (\text{the \ station})]]]]
\[d. \ [\text{LocP} \ (\text{near}) \ [\text{AxialPartP \ AxialPartP (\text{no}) \ [\text{PP} \ \text{the \ house} [\text{P} (= \text{of}) \ [\text{DP} \ (\text{the \ station})]]]]

In (45a), near is a transitive adjective and hence, it can take a DP complement directly, while in (45b-c) it is an intransitive (ergative) adjective, which does not take an external argument but takes only an internal argument as PP, which functions as a small clause whose subject is the Theme argument and whose predicate is a Locative argument.\(^{35}\)

The transition from (45a) to (45b) can be viewed as valency reduction, which also took place in the historical development of the intransitive (raising) verbs look, feel, threaten and promise from their transitive counterparts.\(^{36}\)

Note also that in (45b), the head of AP is phonetically overt and the P head is obligatorily realized as to, for the same reasons as both AxialPart and K in (44a) are.

In (45a,b), near as A remains in situ and the Loc head is phonetically empty.\(^{37}\) By contrast, in (45c), A undergoes head-movement to Loc, leaving a trace in AP. At this stage, the Loc head is phonetically realized by near. In fact, it can co-occur with another semantically compatible preposition such as from, to, at, or over, as in (46):

\[(46) \ a. \ But \ whether \ people \ should \ be \ permitted \ to \ move \ some \ kilometers \ from \ nearer \ the \ Mediterranean \ to \ nearer \ the \ Jordan \ would \ seem \ to \ be \ a \ matter \ of \ human \ rights. \quad \text{(COHA; 1977; New York Times)}
\[b. \ The \ bad \ news \ is \ that \ it \ has \ begun \ to \ climb \ again \ at \ near \ the \ pre-1980s \ rate. \quad \text{(COCA; 1992; USA Today)}\]
c. Once I thought I recognized Fred, too, over near the river-bank; but of Will or of Gloria I saw nothing.

(1920; FIC)

On the other hand, both A and P in (45c) must be phonetically empty for the same reasons as both AxialPart and K in (44b) are. Note also that near in (45c) can remain gradable, because it can be interpreted in its original position where a trace is left (cf. Simpson and Wu (2001)). As a result, nearer the school and nearest the forest in (4) are ruled in. In fact, we can claim that near in (45c) cannot be interpreted at Loc if it keeps the [+gradable] feature, because every Loc has a semantic feature of [-gradable] and the existence of the two conflicting features at the same head position will lead to unintelligibility at LF.

If near loses its [+gradable] feature, its interpretation at Loc becomes possible. Once this possibility emerges, however, there remains no longer any need for near to keep its trace in AP, and hence, it will be reanalyzed as Loc, as in (45d). The derivation from (45c) to (45d) involves the deletion of AP and PP and the subsequent structural simplification forced by the principle of economy, à la Roberts and Roussou (1999), who analyze the grammaticalization from main verbs to auxiliaries as a reanalysis of a biclausal structure in (47a) as a mono-clausal structure in (47b), by the deletion the matrix VP and the embedded TP:

\[
\begin{align*}
(47) & \quad \text{a. } [\text{TP V(mote)}]+T [\text{VP V} [\text{TP ... spoken }]] \\
& \quad \text{b. } [\text{TP T (must)}] [\text{VP V (speak) }]
\end{align*}
\]

Now, recall our observation in (18a) that, throughout the period between the 1830s to 2000s, the frequencies of nearer the, nearest the, so near the, very near the, and too near the are consistently higher than those of nearer to the, nearest to the, so near to the, very near to the, and too near to the, respectively. In section 3, we interpreted this fact as showing that transitive adjectival uses of near are higher in frequency than intransitive ones. However, given the derivation from (45a) to (45c), we can speculate that (18a) holds because among the three structures of adjectival near, two have the sequence of near the, whereas just one has the sequence of near to the. Hence, if we make the simplest assumption that the three structures are mutually interchangeable among the speakers who have the adjectival near in their mental lexicons, then it is predicted that two-thirds of all the adjectival uses are without to, while one-third of them are followed by to: the former is twice as many as the latter. Although the actual ratio in every decade is not so clear-cut as this prediction says, there is a tendency more or less compatible with this prediction, which suggests that the three different stages of the grammaticalization of near have been coexisting since the 1820s.

As another indirect support for the proposed syntactic steps of the reanalysis of near from A to P, Figure 11 below shows the following two points: (i) the frequency of inside/outside/alongside of the reaches the peak and begins to decrease from the late 19th century or early 20th century, which is nearly coextensive with the period at which the gradability of near begins to decrease; (ii) the frequency of inside/outside/alongside the has been gradually increasing from the beginning of the 19th century. This fact stands in harmony with the fact that the ratio of near the in its prepositional use among all its instances has been gradually increasing from the beginning of the 19th century, as shown in Figure 6.
This fact may suggest that a parametric change has happened in the early 19th century, which made it possible for the Loc head to attract its complement (whether AxialPart or A) via overt head-movement (Chomsky (2001), Roberts (2010)) and that another parametric change has happened in the late 19th century, which triggered reanalysis of near from the complex of Loc+A to a pure category of Loc and reanalysis of inside/outside/alongside from the complex of Loc+AxialPart to a pure category of Loc.39 The simultaneity in the diachronic morphological changes of inside/outside/alongside and near from A/AxialPart to P, via the loss of of and to, respectively, strongly suggests that the parametric change on the attracting prepositions in, out, along and φ may be based on a single parameter.

As for the reanalysis from the complex of Loc+A to Loc, the loss of the [+gradable] feature on A must be another prerequisite. A further piece of evidence for this to have taken place in the late 19th century comes from the fact that the coalescence of near and by to form a new adjective nearby also begins to take place in the early 20th century, as shown in Figure 12 below. I claim that the morphosyntactic amalgamation of near by as nearby to create a new adjective was made possible because the loss of the [+gradable] feature on near made possible the head-movement of P to A and deletion of the trace of the P.

An independent piece of evidence for this view comes from the fact that we can observe in the COHA a few instances of nearer by up until the 1930s, as in (48), though there is no instance of more nearby in which more modifies nearby or a single word nearerby, throughout the period between 1810 and 2009:

(48) A moment later there is another shot, from nearer by, and the frozen people dissolve into motion and dart into the doorways for cover. (COHA; 1936; The Atlantic Monthly)

This fact can be simply explained if we assume that, once near and by undergo coalescence via syntactic head-movement, near can no longer retain the [+gradable] feature, because otherwise featural conflict between the two words in terms of gradability would lead to unintelligibility at LF. On the basis of these facts, it seems safe to conclude that the loss of the semantic [+gradable] feature of near is a necessary condition for it to be reanalyzed as P and that it began to take place in the mental lexicon of the native speakers of English, in the late 19th century or earlier.

What is yet to be clarified in the derivation in (45a-c) is the syntactic and semantic status of the empty Loc head postulated in the initial stage. To consider this issue, let us first note that, in a static predicate in English, a locative PP that modifies it must be headed by an overt locative preposition, as in (49a).40 By contrast, in a dynamic predicate denoting directional motion, the locative preposition that is combined with the Path-denoting preposition to can be phonetically unrealized, as in (49b). Hale and Keyser (2002) provide to (49b) an abstract structure like (50), where PP1 is directional or path-denoting expression which is headed by to, while PP2 is a locative expression that designates the final point in a path of motion and is headed by a phonetically empty P corresponding to in or at:

   b. Tom went [into the park / to the park].

(50) [VP Tom [V′ went [pp1 to [pp2 P (= φ) [DP the park]]]]]
Second, note that English differs from Spanish in that a motion verb does not incorporate a preposition but a manner verb, a fact which Talmy (1985) characterizes as a difference in the lexicalization pattern between ‘satellite-framed languages’ and ‘verb-framed languages’:

(51) a. The bottle floated out of the cave.
    (= The bottle went out of the cave floating.)

b. La botella salió de la cueva flotando.
    the bottle went+out of the cave floating.

Mateu and Rigau (2002) argue that (51a) can be structured as in (52), where go must be phonetically empty if a manner verb is adjoined to it (see also McIntyre (2004) and Zubizarreta and Oh (2007) for a similar claim):

(52) \[ VP \begin{align*} V2 & (\text{float}) \ V2 (\text{go}) \ PP \ [\text{the bottle}] \ [\text{out of the cave}] \end{align*} \]

With this in mind, consider the fact that, in combination with certain locative prepositions, the directional preposition to can be omitted without losing a directed motion meaning, as in (53a) (Zubizarreta and Oh (2007), Svenonius (2006), Waters (2009: 289)). If we combine Mateu and Rigau’s (2002) analysis of the satellite-framed languages and Hale and Keyser’s (2002) analysis of a complex PP, we can provide to (53a) the syntactic structure in (53b), where P is a phonetically empty directional preposition corresponding to to:

(53) a. The rabbit jumped inside the cage. (\(\nearrow\) as a directional meaning)

b. \[ VP \begin{align*} \text{Tom} & \ V \ 0 \ [\text{v jumped go}] \ PP1 \ P \ (\nearrow/C30) \ PP2 \ \text{inside} \ [\text{the cage}] \end{align*} \]

What is common to (50) and (53b) is that, in an English sentence which expresses both the directional and locative meanings, two prepositions can cooccur, though one of them can sometimes be phonetically unrealized.

Third, note that under the localistic theory (Anderson (1971)), change-of-state constructions are analyzed in a parallel way to change-of-location constructions. Given this, we can claim that adjectival complements in the change-of-state construction such as (54a) should be embedded under a path-denoting category as well, as in (54b), where P is a phonetically empty path-denoting preposition (cf. Jackendoff (1990), Zubizarreta and Oh (2007: 17)):

(54) a. The milk went sour.

b. \[ VP \begin{align*} \text{The milk} & \ V \ 0 \ [\text{went}] \ PP \ P \ (\text{path}) \ AP \ (\nearrow/C30) \ AP \ \text{sour} \end{align*} \]

This claim implies two points: (i) the directional or path-denoting preposition can be phonetically null, and (ii) the directional preposition can directly select AP.

With these in mind, let us return to the structure in (45a), where Loc.select AP, whose head is near. Now that either the directional or locative preposition in a complex PP can coocver, though one of them can sometimes be phonetically unrealized.

Indeed, the Loc head can be phonetically realized as either to or at, as in (46a) and (46b), respectively. Also important is the assumption that a preposition can select AP as in (54b). For these reasons, we conclude that the Loc head that selects AP in (45a) can be filled by a covert preposition, which is either directional or locative depending on the context, and that when the head-complement relation between Loc and near turns into a head-to-head adjunction structure through the syntactically driven head-movement and the loss of semantic gradability, near is ready to be reanalyzed as a preposition.

6. A Note on the Diachronic Syntactic Change of Next

Before concluding this article, let us consider the diachronic change in the uses of next. Figure 13 below shows that the frequency of next the reached the peak in the 1890s, from which it has been decreasing, whereas the frequency of
next to the had been relatively low between the 1810s and 1920s, though it began to increase radically from the 1920s. At first sight, this fact might show that the prepositional uses of next begins to be replaced by its intransitive adjectival uses in the period.

If we accepted this suggestion, however, we would be led to the conclusion that next has been in the process of degrammaticalization from P to A, which is in conflict with both the well-attested undirectionality of grammaticalization from A to P, as exemplified by near, worth, like, unlike, round, opposite, plus, minus, less, and so on, and the well-attested direction of coalescence and reanalysis from P+A to P, as exemplified by around, along, above, before, below, and so on. Hence, we do not want to accept the suggestion.46

Instead, I will propose that next has remained adjectival from the Old English to the present-day English, though it has been in the process of valency reduction from transitive adjectives to intransitive adjectives (cf. (45a,b)).47

An independent support for this proposal comes from the fact that next is etymologically related to nehsta, which is the superlative form of neah ‘near’, and that it was used in the same meaning as nearest, even in the beginning of the 17th century.48

(56) To mourn a mischief that is past and gone Is the next way to draw mischief on.

(OTH. I. iii. 204-5) (Araki and Ukaji (1984: 483))

In fact, Figure 14 overleaf shows that there is a statistically significant correlation between the frequency of next the and that of nearest the in each decade from the 1810s to 2000s (p = 0.00014 < 0.01).
From these two pieces of evidence, we conclude that the diachronic change in the uses of next is not in conflict with either the unidirectionality of grammaticalization or our theory of the grammaticalization of near.

7. Concluding Remarks

The standard generative syntactic definition of lexical categories hates to include a semantic notion in it, and Maling (1983) argues that even a categorial change from adjectives to prepositions that occurred to words like like, unlike, and worth was triggered by the decline of morphological inflection on adjectives rather than a semantic change. Another claim by Maling is that the behavior of near is highly exceptional and it has remained to be a transitive adjective, even in the present-day English.

In opposition to these purely morphosyntactic views on categories and categorial change, in this article, I have claimed that the definition of ‘adjectivehood’ and ‘adpositionhood’ should partially include the semantic notion of gradability in that the former can be gradable, whereas the latter can never be, and that two of the necessary conditions for the reanalysis of adjectives as prepositions are (i) the bi-relational nature of the original adjectives and (ii) the loss of semantic gradability (in case the original adjectives are gradable). On the basis of this semantic notion, I have argued that at least from the late 19th century (possibly earlier than this), near has begun to decrease its semantic gradability and morphological adjectivehood, as illustrated by the collocation of near to and the comparative or superlative inflections being declined in a correlative way, and has been in the process of reanalysis as P. As additional pieces of evidence for this claim, I illustrated that the collocation of right near has surged in frequency between the late 19th and the early 20th centuries. I also argued that this conclusion is compatible with the fact that near allows both the comparative and superlative forms, because its reanalysis from A to P has not yet been complete, even in the present-day English. As a way around an apparent counterexample to our claims, I have argued that enough and/or very are compatible with PPs headed by like and worth because a non-gradable prepositions can be modified by the adverb much or its phonetically empty counterpart MUCH, which plays the role of coercing a non-gradable predicate into a gradable one. I showed that this function of much/MUCH is shared by certain adverbs, PPs, or particles that induce the coercion of the main predicate from the atelic and/or non-gradable one to the telic and/or gradable one. Given this function of much/MUCH, we no longer have to assume that there are some gradable verbs, nouns, or PPs, and hence we can identify the semantic gradability as a sufficient condition for the adjectivehood of a word, which leads to a simplification of grammar.

A second aim of this paper was to elucidate a set of morphosyntactic processes that are supposed to take place behind the gradual categorial change. Specifically, exploiting the hypotheses adopted in Waters (2009) and Roberts and Roussou (1999), I claimed that the reanalysis of near from A to P involves the following five processes: (i) the deletion of its semantic [+gradable] feature, (ii) the phonetic erosion of the head of its PP complement, (iii) the head-movement of the adjectival near to an invisible Loc head, (iv) the structural simplification by compressing the three-layered structure [Loc [A [P DP]]] into the one-layered structure [Loc/A DP], and (v) the reanalysis of the hybrid category Loc+A as Loc. Evidence for the processes (i) and (iii) was brought from the fact that the reanalysis of inside of the as inside the and the reanalysis of near by as nearby began to take place in the same period as the decline of the gradability of near (i.e. the late 19th or early 20th century).
Finally, I have argued that no instance of next has been prepositional in the history of English, but rather that it has been in the process of grammaticalization from transitive adjective to intransitive adjective during the 20th century.

If the proposals made in this article are all correct, they have a number of interesting implications for the minimalist program of linguistic theory. First, given the claim that near is undergoing decategorization to P, it must be highly likely that P is a functional category, since decategorization is generally a diachronic change from a lexical category to a functional category. This claim supports Baker’s (2003) claim that there are only three types of lexical categories: N, V, and A.

Second, I claimed that a definition of lexical categories must include semantic notions as well as morphosyntactic ones. This claim is also in affinity with Baker (2003), who abandons a purely morphosyntactic definition of lexical categories, since he defines the noun as a category which “has a referential index” (where ‘referential’ is a semantic notion), the verb as a category which “has a specifier”, and the adjective as a lexical category which is neither a noun nor a verb. However, my proposals differ from Baker’s in that we provide a more semantic definition of adjectives (in English) than his. In fact, from his definition of the verb and the adjective, it seems to follow that what Cinque (1990) calls “unergative adjective” and what Maling (1983) calls “transitive adjective” would have to be excluded from the class of ‘adjective’. But this consequence is not sustainable.

Third, if our proposed derivation of the reanalysis from A to P is correct, it will support Roberts and Roussou’s (1999, 2003) theory of decategorization by syntactic head-movement and structural simplification forced by the principle of economy, as well as Svenonius’s (2006, 2010) distinction between the lexical category of N and the functional category of Axial Part.51

Fourth, given our suggestion that the prepositional near is derived by the head-movement of A to Loc/Path and that the loss of the gradable feature on A is a necessary condition for the reanalysis of the two-membered chain (Loc+A, tA) created by head-movement as a single-membered chain (Loc(+A), it follows that at least some head-movement must be syntactic rather than phonological, against Chomsky (2001), as head-movement in the PF component after spell-out should be irrelevant to the semantic feature of gradability (cf. Ogawa (2007), Roberts (2010)).

Fifth, given the fact that the delexicalized prepositions based on (Path+)Loc+A (such as near/around) and the complex prepositions based on Path+Loc+AxPart (such as from outside, from across) and Path+Loc+A (such as from around) have begun to emerge in around the same period, as noted in note 33, then the next task will be to pursue the following two issues: (i) what is the common formal feature between A and AxialPart that enables them to be attracted by Loc? (cf. Takamine (2006)); (ii) why did the parameters on the functional heads Loc and Path change their values simultaneously and correlatively in this period, so that it began to attract the head of its complement?52 Although we have no answer to these questions, it is clear that solution of these issues needs to presuppose (iii) the semantic typology of various adpositions (cf. Svenonius (2010)), (iv) elucidation of the syntactic interaction between the Path-denoting prepositions from/to and the (prefixal) locative prepositions including a/in/out (cf. also Collins (2007) for the complex nature of the apparently simplex prepositions from and to), and (v) explanation of the relation between the phonological overtness and the semantico-syntactic complexity of adpositions, all of which are definitely the issues to be pursued under Cinque and Rizzi’s (2010) cartographic approach to the spatial PP which I will leave open for future research.

Acknowledgments

This is a substantially revised and extended version of the paper read at the 143rd National Conference of the Linguistic Society of Japan held at Osaka University on November 2011. I would like to thank Toshihiko Asaka, Yoko Iyeiri, Akira Kikuchi, Kosuke Kishi, Hideki Kishimoto, Masaru Nakamura, Hiroyuki Nawata, Fumikazu Niinuma, Kunio Nishiyama, Etsuroh Shima, Koichi Takezawa, the audience at the conference, and three anonymous reviewers for useful comments on earlier versions of this article. This work is partially supported by a Grant-in-Aid for Scientific Research from Japan Society for the Promotion of Science (JSPS) (No. 24520526). Of course, all remaining errors are my own.

Notes

1. Froud (2001: 12) provides evidence from agrammatic aphasia, showing that (all) prepositions pattern with functional-heads, not lexical categories, when language is focally damaged. See also Grimshaw (1991), who considers prepositions essentially functional because they are an extended projection of N. On the other hand, Roberts and Roussou (2003: 227, 222) suggest that a distinction can be made between ‘functional’ preposition (such as for) and ‘non-functional’ preposition (such as through), and that prepositions are considered to be completely grammaticalized when they have lost all spatial content. See also Cinque (2010: 11) and Williams (2010).

2. I cited (2b) from Readers English-Japanese Dictionary, a prestigious English-Japanese dictionary published from Kenkyusya, Japan. However, one anonymous reviewer of a journal judged this sentence as ungrammatical, and the other reviewer of the same journal judged it as only idiomatic. This may be true among the contemporary native speakers of English, whether British or American. I will leave this matter open here, because nothing in what follows...
hinges on this judgment about next.

3. Svenonius (2010) is exceptional in claiming that next to is a complex preposition. On the other hand, I will argue in section 6 that the next that cooccurs with to is an intransitive adjective, while the next that directly takes an NP is a transitive adjective.

4. Cinque (1990) divides intransitive (i.e. monadic) adjectives into ‘unergative adjectives’ and ‘ergative adjectives’ and Bennis (2004) further divides ‘ergative adjectives’ into simple and complex ergative adjectives. We will not adopt these subclassifications here, because we are only interested in the distinction between transitive adjectives, which assign dative or genitive case without any host of a preposition, and intransitive adjectives, which do not.

5. In Shakespeare’s A Midsummer Night’s Dream, both like and near had both an intransitive adjectival use and a prepositional use, so that they could be optionally followed by the preposition to. Compare (ia,b) and (iia,b):

(i)  
   a. Hang off, thou cat, thou burr! vile thing, let loose,  
      Or I will shake thee from me like a serpent!  
      Now, fair Hippolyta, our nuptial hour  
      Draws on apace; four happy days bring in  
      Another moon: but, O, methinks, how slow  
      This old moon wanes! she lingers my desires,  
      Like to a step-dame or a dowager  
      Long withering out a young man revenue.  
      (ACT III, SCENE II.)
   b. Pyramus draws near the wall: silence!  
   (ACT I, SCENE I.)

(ii)  
   a. My mistress with a monster is in love.  
   b. She is just a nurse, at home enough here to disrupt the doctor’s interrogation and not care.  
   (COCA; 2004; FIC)

See also Maling (1983: 275-276), who illustrates the comparative uses of like in OE, ME and ENE, arguing that the loss of inflection on a category triggered categorial change. On the other hand, Hiroyuki Nawata (p.c.) suggested to me that, in the course of grammaticalization, we can see a number of cases in which an inflected form of a category undergoes reanalysis as another category, such as given or concerning, which are now identified as prepositions. Given this fact, it remains unclear why inflected forms of the adjective like, i.e. liker and likest, did not grammaticalize to preposition by themselves. The same question also applies to the present-day nearer and nearest. Although it may be easy to make a distinction between adjectival and verbal inflections, in terms of, for example, its contribution to semantic gradability, I will leave a theoretical solution of this question for future research.

6. As shown in Platzack (1982) and Riemsdijk (1983), the present-day German, Dutch, Swedish and Russian have a much more enlarged list of transitive adjectives.

7. See also Lakoff and Peters (1969).

8. See Brinton (2011) for an important distinction between grammaticalization and lexicalization. Note also that most dictionaries give various examples of phrasal compounds such as at-home, out-of-date, in-print, on-season. In fact, COCA gives us a few examples in which a metaphorical PP immediately precedes enough, as in (i):

(i)  
   a. and he said he thought I was pretty enough, he was in love enough, I was a good person...  
   (COCA; 2004; FIC)
   b. She is just a nurse, at home enough here to disrupt the doctor’s interrogation and not care.  
   (COCA; 2004; FIC)

9. COCA is an abbreviation for the Corpus of Contemporary American English, which is also administrated by Mark Davies and accommodates 450 million words of American English from the year 1990 to 2012.

10. Maling (1983) and Endo (1990) suggest a semantic account for the ill-formedness of (13a,b) and (14a,b), respectively.

11. What Svenonius calls the “bounded Ps,” which also include besides, between, next to, among, and against, are incompatible with the phonetically empty deictic pronoun. By contrast, what he classifies into the “projective Ps,” which include behind, in front of, inside, above, and below, are compatible with the null deictic pronoun (ibid.: 136-137):

(i)  
   a. As the group approached the final summit, Espen stayed behind (them).
   b. As the group approached the final summit, Espen stayed among (them).

12. An anonymous reviewer suggested to me that the alleged evidence from the particular choice of degree adverb (e.g. very, so, etc.) may not be so strong as I would like to argue, since Ito and Tagliamonte (2003) have demonstrated that the choice of these degree adverbs vary over time. In fact, COHA shows that the frequency of the collocations of, for example, very large and so large has been decreasing over the past 150 years, and this fact is independent of the question of whether the gradability of an adjective which it modifies has been decreasing, since large has been a gradable adjective throughout the history of English. However, we can still argue that the gradable uses of near have been decreasing from the beginning of the 19th century on the ground that they have been less and less frequently modified by very and so. This argument is tenable, simply because the gradient of decrease in the frequency of very near (the) and so near (the) is far more larger than that of very large and so large. Readers can confirm this fact easily.
13. The numbers in the highest line of Figure 1 and other figures, i.e. 1, 2, 3, ..., 20, refer to the period of time per decade that begins from 1810s to 2000s. The numbers are used instead of the actual historical dates, just for space limitation in the Figures.

14. Hereafter, I will take up the collocation of near (or next) followed by the definite article the, just because I think the is the most unmarked head of a noun phrase (i.e. DP), except for the empty D-head that arguably co-occurs with a proper name. In fact, nothing in our argument hinges on the choice of the here, and replacement of the by the indefinite article a, a pronoun, or a quantifier will show us similar tendencies, although the data available in COHA will then be much smaller in number than near the, and statistical significance may sometimes be unattested.

15. Note that the frequency per million of near the in Figure 1 includes those of so near the, very near the, too near the, and so on. However, given the very small numbers of the latter three items, most of which are lower than 1 per million, we can assume that whether we subtract these figures from the entirely robust figure of near the does not affect the entire argument.

16. This does not mean that the “adjectivalhood” (as well as “preposition-hood”) is a relative property or that in the mind/brain of every native speaker of English, near is moving along the cline of grammaticalization from A to P toward P. Hence, such a statement should be avoided that there is no way to define one grammatical category as something distinguished from other categories. Rather, I take it that the size of the population who identifies near as adjectives rather than preposition has been becoming smaller and smaller.

17. The irregularly large figure of the 1810s in Figure 6 may be partially due to the exceptionally small number of the population of COHA in the period: the population of the 1810s numbers just 1.18 million and there are many instances of collocation which can be observed in COHA after the 1820s but not in the 1810s (see Figure 1); by contrast, if you average the numbers of the 19 populations per decade between the 1820s and the 2000s, you will get 21.28 million, and even if you average the numbers of the 9 populations per decade between the 1820s and the 1900s, you will get 16.87 million. For these reasons, we may have to refrain from claiming anything only from whatever COHA data is in the 1810s. I have no idea why the figure of the 2000s in Figure 6 decreases conspicuously, compared with that of the 1990s.

18. Figure 6 shows that already in the 1820s the prepositional uses of near were at least 10 times as many as its adjectival uses. On the other hand, it is important to note that Figure 7 does NOT show that there was no use of prepositional near before 1840s. Although the presence of the collocation of right near can be a sufficient condition for the existence of a prepositional use of near, it is not a necessary condition thereof. There may be another factor which prevented upsurge in the use of right near before the 1890s. Similarly, we assume that a rapid decrease in the use of right near between the 1830s and 1850s does not show any change in the categorial status of near, since it begins to increase again in the 1860s.

19. What remain to be explained are the acceptability of near enough (to) NP and the alleged unacceptability of enough near (to) NP, which Maling uses as evidence for her proposal. As for the former, the data in Figure 1 shows that the frequency of near enough has also been monotonically decreasing from the late 19th century, a fact supporting our claim. As for the latter, we cannot say anything confident from the COHA data because there are only three examples including the collocation of enough near in it, but we can sporadically find, through a Google search on September 12, 2013, an example of the supposedly prepositional uses of near like (i), which is part of the evaluation of a certain hotel by a traveler, although I am not sure whether it was written by a native speaker of English:

   (i) Hotel was enough near the city and harbour. Staff was very friendly [sic] and nice to children and we appreciated that alot. [http://www.sardagne.com/hotel/santa-teresa-di-gallura/ 83-meta_reviews.html]

20. An anonymous reviewer wonders why a similar modification of a PP headed by worth in the same way as (23a) is ungrammatical:

   (29a) *This car is enough worth $1,000.

21. Crediting the original idea to Jackendoff (1977), Kayne (2005: 150) suggests that the following sentences contain unpronounced MANY or MUCH:

   (30a) John owns enough houses / property.

   Moreover, Kayne (2005: 194) postulates the empty adjective GOOD in a few books, in order to capture the parallelism between a good many books and a few books, and to account for the fact that in some varieties of English (though not his), a good few books is possible. We agree with these ideas. But see note 22.

22. Kayne (2005: 214) postulates the empty noun SIZE in order to explain the following question-answer pair:

   (29b) A: What size car are you renting this week?

   B: A small SIZE car.

23. Our view about the empty MUCH is partially different from Kayne’s (2010: 78) suggestion, as in (i):

   (i) MUCH is legitimate only if it comes to precede the degree word.

   We are claiming that all the prepositions are non-gradable, though the prepositional like and worth are compatible with the empty MUCH, because of the acceptability of (30a,b).

24. Although an anonymous reviewer suggests that (29b2) is ungrammatical without the degree modifier very, we can see sporadically cases of the prepositional worth modified by much without very, as in (29b1). On the other hand, (30a),
taken from COCA, shows that some native speakers allow replacement of much by MUCH in this case.

25. An anonymous reviewer reports that I love you much is ungrammatical. In fact, on 11/9/2013, a search result of [love] [p] very much on COCA gave us 320 examples, whereas that of [love] [p+] much gave us 12 examples. We will leave a theoretical interpretation of these facts for future research.

26. We assume that the empty MUCH is incompatible with the gradable adjective, departing from Bresnan (1973), who postulates the rule of “Much Deletion,” and from Kayne (2010), who posits the MUCH modifying the gradable adjective, which happens to be phonetically empty when it moves to the specifier of a phase head. At the same time, we assume that the empty MUCH is compatible with the non-gradable adjective, such as alike, different; see below for discussion.

27. We need to assume that this difference between adpositions and verbs is morphologically oriented, rather than semantic.

28. The notation of “[be]” covers all the inflected and non-inflected forms of the verb be, such as is, are, was, were, (has/ have) been, is being, and so on.

29. We will assume, unlike Bresnan (1973: 278; ff.4), that the different is not intrinsically comparative, because no comparative form of an adjective is compatible with very (e.g. very taller, very more beautiful), while very different than is sufficiently observable in COCA.

30. Araki and Ukaji (1984:483) point out that near in the 17th century could have the comparative form of more near:

(i) I was very late more near her than I think she wished me: (All’s W. I. iii. 110)

31. We have nothing to say about the contrast between the total lack of very much near during the last two centuries and the large number of the examples of very much like (between 0.85 and 5.93 per million in a decade) and very near (between 0.98 and 10.14 per million in a decade). We will leave the issue for future research.

32. We continue to assume that semantic gradability is not a necessary condition for a word to be adjective, since there are non-gradable adjectives such as dead, identical, married, blind, deaf, among many others. See Sapir (1949), Bolinger (1972), Quirk, et al. (1985: 1136), Yasui, et al. (1976), Araki and Yasui (1992: 642-645), and Kennedy (1999) for more data and discussions on the gradability of adjectives, nouns, and verbs.

33. It is not uncommon for a preposition to be etymologically derived from the combination of Loc and A (or adv), Other examples include below (derived from be ‘by’ and low), above (derived from a ‘on’ and bufan ‘over’), before (derived from be ‘by’ and foran ‘forth’), and around (derived from a ‘on’ and round). We suppose that the derivation in (45b-d) is common to these examples. Incidentally, Svenonius (2006: 74) claims that, among the prepositions, adjectives or adverbs historically derived from the combination of a ‘on’ and AxPart, AxPart was recruited from various categories such as N, A, V, illustrating Loc+N such as asshore, afield, atop, afoot, Loc+V such as asleep, afloat, Loc+A such as the now-defunct allow. Given this suggestion, it could be argued that near was reanalyzed from A to AxPart before it turns into P. However, we do not adopt this view because most instances of the functional category AxPart is etymologically related to N and there is no conceptual or empirical reason to claim that any instance of A/Adv must be reanalyzed as AxPart before it is merged with Loc. In fact, given Jackendoff’s (1996) original definition of AxPart, which “behaves grammatically like parts of the object, but unlike standard parts such as a handle or leg, they have no distinctive shape. Rather they are regions of the objects (or its boundary) determined by their relation to the object’s axes” (ibid.: 14), there would be logically no AxParts derived from A or V. Hence, in the text, we are assuming that neither A nor V has been reanalyzed as AxPart and that not only AxPart but also A can be directly selected by Loc.

34. We assume that, in (45a), near, as a transitive adjective, can directly assign a case to its complement DP, whereas near in (45b-c), as an intransitive adjective, cannot assign any case, which is a role committed to the overt or covert preposition. Another difference between (45a) and (45b-c) is that near has a specifier in (45a), whereas near in (45b-c) does not. If the presence or absence of an external argument and the (im)possibility of case assignment to its internal argument is supposed to be correlated, it reminds us of Burzio’s generalization. Although this may be a right statement, I will not commit myself to a thorough justification of this possibility, partly because of the reasons noted in note 1, and partly because it remains unclear whether the NP that occupies [Spec, A] is qualified as the external argument of A or not, given the fact that it is thematically interpreted as Theme rather than Agent or Experiencer. However, it is important to note that near in (45a) is a dyadic predicate, whereas that in (45b-c) is a monadic predicate. A full discussion of this issue will have to be left for future research. I thank Kunio Nishiyama for bringing this issue to me.

35. See Randall (2010) for the same claim about the apparently dyadic unaccusative verb go, based on the following contrast between go and a dyadic transitive verb such as water:

(i) a. The watering of tulips flat is prohibited by the Dutch authorities. (cf. ibid.: 154)
   b. The going of children to school is mandated by state law. (ibid.: 232)

36. Cardinalletti and Giusti (2001) argue that the verb go that occurs in the double verb construction is a semi-lexical verb, which has undergone valency reduction from a dyadic verb to a monadic one, as a result of which it becomes unable to license a Goal argument which the lexical verb could license:

(i) I go all the way there to eat./*I go eat all the way there. (ibid.: 378-379)

We are claiming that a similar kind of dyadic-to-monadic reduction in its valency has been taking place in the
derivation from (45a) to (45b).

37. There are other instances of deictical preposition which were arguably derived by merging a phonetically empty Loc and an overt A, such as opposite, due, round, out, over, down, like, unlike, worth, thwart. Among them, note the diachronic change from round to around or that from thwart to athwart, which can be analyzed as replacement of a covert Loc by an overt Loc.

38. In other words, we are assuming that the simultaneous phonetic realization of both Loc and P intervened by AP is prohibited, and that from near, to near, at near, and over near in (46) form a complex preposition in Loc. In fact, COHA gives us some examples of from near(er) the, to near(er) the, and at near the, as in (46), though there is no illustration of from near(er) the to or to near(er) to the, at near(er) the. This fact stands in contrast with the fact that Loc and K intervened by AxialPartP can be filled at the same time, as in (42b). We suppose that the simultaneous phonetic realization of both Loc and P is semantically filtered out (because of redundancy or conflict), whereas that of both Loc and K is possible because K is semantically vacuous.

39. Possibly related to this is the fact which COHA shows that complex prepositions based on Path+Loc+AxialPart (e.g. from outside the, from across the, atop the), Path+Loc+A (e.g. from around the), Loc+A (e.g. around the), and the dejectival preposition (e.g. past the) begin to increase from the mid-19th or mid-20th century. See also Takamine (2006) for a discussion about a certain morphological similarity between AxialPart and A in Japanese: the fact that ma-prefixation is only possible to A (as in mak-kura ‘really dark’) and AxialPart (as in ma-ushiro ‘right behind’), but not to other lexical categories such as N, V, P.

40. This seems to be an almost-exceptionless generalization about English, and to my knowledge, the only exception is inhabit, as in (i), where a locative preposition that should occur immediately before the direct object, this area, is phonetically unrealized:

(i) In 1966, William Denevan, a geographer and researcher of aboriginal civilizations, speculated that as many as five hundred thousand Indians may have inhabited this area before its discovery by Spanish explorers.

(COHA; 1992; MAG)

However, inhabit in (i) has arguably incorporated the locative preposition that was originally selecting the direct object.

41. As evidence for this proposal, Zubizarreta and Oh (2007: 138, 140) illustrate Goldberg’s (1995) observation that a preposed locative cannot keep a directional meaning, and suggest this is because the phonetically empty directional P is subject to the same syntactic condition that ‘governs’ the empty head of a CP:

(i) a. He ran inside the room, quickly as lightning. (locative/directional)
   b. Inside the room he ran, quickly as lightning. (locative/*directional)
(ii) a. John does not believe [that/\ Bill is guilty.
   b. [That/\ Bill is guilty], John does not believe.

42. Svenonius (2010) illustrates the fact that the prepositions which he classifies into the “projective Ps” (in which inside and above, among others, contained) can marginally co-occur with the path-denoting to, and suggests that the directional path-denoting meaning in (i) is due to a null path element with the appropriate value of overt to:

(i) The boat drifted (?to) inside the cave. (ibid.: 130)

Moreover, he suggests that the prepositions which he classifies into the “bounded Ps” (in which near and beside are included) may form Paths with null to (ibid.: 149). This claim is essentially identical to mine, though my claim differs from his in that the word near that is selected by a Path-denoting empty P is categorically adjectival. See also Collins (2007) for the possibility of null locative and directional Ps in go (*to) home and stay (at) home in English, and see Terzi (2010) and references therein for the corresponding facts in Greek and several dialects of Italian.

43. Note also the familiar expressions such as far from clear, get back to normal.

44. Compare the adjectival and prepositional instances of round:

(i) a. The Earth is round.
   b. The Earth moves round the Sun.

In (ia), round is a monadic predicate, whereas in (ib), it is a dyadic and birelational predicate. Worth and like, which Maling (1983) argues to have been reanalyzed from A to P, are also birelational predicates.

45. Zubizarreta and Oh (2007: 17-18) discuss the possibility of analyzing (54a) as in (54b) and reject it, noting that there is no evidence for an abstract path-denoting category here. However, (53b) shows that a path-denoting P can be phonetically empty in English. Moreover, if we assume that the empty Loc selecting near is the null counterpart of path-denoting preposition to or from, then the fact given in (46a) can be qualified as such evidence. See also Svenonius (2010: 144-151) for a thorough discussion about various path-denoting Ps.

46. See Ramat (1992), Norde (2010) and references therein for degrammaticalization.

47. Among the number of transitive verbs which have been in the process of intransitivization, an intransitive (unaccusative) use of feel as in (i), which was more or less 1 per million until the end of the 19th century, has been raised up monotoniously to more than 11 per million in the 2000s. Although next and feel are not related either categorically or semantically, the fact that the valency reduction is taking place in the same period might expunge the potential skepticism toward our claim about next.

(i) Now I know how it feels to be loved back. (COHA; 2001; FIC)

48. Note that, in ME, near was the comparative of neah ‘near’, though it has lost its comparative use in the early 17th
century and the comparative form has been replaced by nearer. Arguably, this change could have triggered the loss of the gradability feature on near. See Araki and Ukaji (1984) for relevant data.

49. It is important to note that we are not aiming at a comprehensive and universal definition of the category of adjectives (and adpositions), since it is impossible to make a universal definition of a category, due to the lack of universal morphosyntactic test which distinguishes one category from another.

In this connection, if Marantz (1997) is correct in claiming that there are no lexical categories such as verbs, nouns, or adjectives and that all the so-called lexical categories are syntactically derived by merging a root with the categorizing functional head, then all we have to do is replace A in (45a-b) by the light adjective plus the root. In that case, we may assume further that the adjectivizing functional head (which is ϕ in most cases in English) has a [+gradable] feature, with the root unspecified thereof. In this framework, adposition can be clearly distinguished from adjective in that the former is a single functional category, whereas the latter is a combination of the root combined with the adjectivizing functional head. See also note 50 for another way to characterize syntactic categories.

50. Throughout this article, I have built my argument on the assumption that A and P are separable categories independent of each other. There is, however, an alternative approach as proposed by Chomsky (1965), in which syntactic categories are regarded as epiphenomena without any theoretical significance. Under this approach, syntactic rules do not refer to syntactic categories but rather to (sets of) syntactic features, just like phonological rules are formulated in terms of phonetic features rather than specific segments. In the case of near, it might be possible to analyze its hybrid behaviors with two syntactic features, [+Degree] and [+Direct Argument] (or [+Case assigner]). Given this, we would no longer have to ask which expression belongs to which syntactic category, A or P, in order to account for each behavior. Instead, all we need would be some kind of matching device or scale that determines the compatibility of two features, [+Degree] and [+Direct Argument]. Or we might be able to make recourse to the idea of “neutralized (or underspecified) categories,” which lack full specification of the features and hence could be the source of the hybrid status. Although I have not pursued this possibility here, it is worth considering as an alternative. I thank Koichi Takezawa for pointing out this possibility to me.

51. A similar classification of nouns is made by Kishimoto (2000), who distinguishes lexical nouns and light nouns, and by Collins (2007), who distinguishes lexical nouns, bare nouns, and light nouns. Kishimoto’s “light nouns” are Ns that head-move to the functional head Num (as exemplified by the thing of something interesting). Collins’ “bare nouns” are exemplified by the home of at home, and his “light nouns” are locative light nouns that move to the Spec of the selecting PP whose head is empty AT/TO (as exemplified by the home of stay home or go home). Collins also extends his “light noun” analysis to the particles such as in and on and the complex Ps such as inside and on top, where in and on are claimed to be modifiers of the light nouns PLACE or side/top. We do not adopt his analysis of inside and on top, since we take the light nouns of the thing/place type to be definitely distinguished from what Svenonius (2006, 2010) identifies as Axial Part, both syntactically and semantically.

52. In fact, there remains a non-trivial issue which I have to leave open for future research, which is about whether the gradual categorial change triggered by grammaticalization can be reduced to parametric change in the generative syntax, since the latter is usually assumed to take place instantaneously in the mind of a language-learner. However, I am tentatively assuming that the two theoretical frameworks are not a priori incompatible, for the following reason: even if each parametric change in a single language learner may be instantaneous, the temporal points at which those who will be native speakers of a language are born differs from each other, the birth rate of countries whose first language is English can also change year by year, and there may also be a number of sociological factors that can influence the acquisition of a mother tongue by a child, so that the process of grammaticalization as a whole looks like a gradual change. See Lightfoot (1979) and Newmeyer (1998: chapter 5) for relevant discussion.

REFERENCES


