

ENGLISH ADVERBIALS OF DEGREE AND EXTENT

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This thesis presents detailed descriptions of the English adverbial of degree (e.g., very, quite, rather, extremely) and the adverbial of extent (e.g., much, some, at all, excessively). These descriptions are the result of surveying the works of many grammarians--traditional, structuralist, and transformational--most of whom include both of these adverbials under the one heading adverbial of degree. Using these separate descriptions as a basis, this paper then compares the two structures, noting similarities and identifying differences. Specifically, the two adverbials are compared in terms of these criteria: form, function, distribution, derivation, and the relationship with other adverbials.

The adverbial of degree, also called intensifier or qualifier, generally appears in frames such as the following:

- (1) The girl is _____ pretty.
- (2) He works _____ slowly.

The adverbial of extent, also called quantifier or qualifier, is restricted to those forms which may occur either in final position following the verb, as in

(3) Does Joe study his math _____?

or in a position preceding the comparative or superlative of an adjective or adverb:

(4) He is _____ { (the) taller.
the tallest. }

(5) Bill works _____ { (the) harder.
the hardest. }

In earlier treatments, adverbials of extent appearing in (3) have been confused with adverbials of manner, and those occurring in (4) and (5) have been erroneously classified as adverbials of degree.

The defining frames (1)-(5) above serve as the basis for the classification of forms as adverbials of degree and extent. However, the lists of these adverbials, which are presented in Chapters II and III, include certain subclasses which, for various reasons, are not treated in detail in this thesis. Among forms excluded are comparative (e.g., better, more, less) and superlative (e.g., best, least, most) forms, which seem clearly to constitute a subclass of degree or extent adverbials. The complexities involved in the transformational explication of such constructions place them well beyond the scope of a thesis. Also excluded from detailed analysis are certain degree adverbials which appear in stereotyped expressions (e.g., icy cold) and those forms of extent which appear only in

regional or social dialects (e.g., a shade taller). Finally, no effort is made to explicate the obvious relationship between extent and so-called predeterminers (e.g., very much of the money). In line with this exclusion the thesis provides no detailed account of units of measure which may appear in both degree (e.g., five feet tall) and extent (e.g., five pounds heavier) positions.

This thesis concludes that although there are many similarities between the adverbial of degree and the adverbial of extent, the differences--those of form, function, distribution, derivation, and the relationship with other adverbials--offer sufficient evidence to justify the recognition of the adverbial of extent as a category distinct from the adverbial of degree.

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CHAPTER I

INTRODUCTION

One of the most miscellaneous of the English part of speech categories is the adverb. Traditional grammars define an adverb on the basis of function as "a word that modifies a verb, adjective, or another adverb" (Gleason, 1965, p. 212). The problem with this definition is the fact that there is no homogeneous group of words which fits the definition; even though some forms may fit the definition, most forms fit only a part of it. Also, there is no common inflectional ending by which to distinguish members of this class. Thus, the traditional adverb is a category made up of forms having very little if anything in common.

In this thesis the term adverbial refers to a category which is strictly a distributional one. Stageberg says the positional class of adverbials is very difficult to describe because there are so many subclasses, and each subclass has its own positions in various sentences (Stageberg, 1965, p. 212). Thus, the forms included here may appear in different positional classes. Moreover, all adverbials are assumed to be optional elements: that is, their omission usually has no effect on the grammaticality of the sentence.

The term adverbial as used here may be either a one-word form, a phrasal form, or a prepositional phrase form:

$$(1) \text{ adverbial} \longrightarrow \left\{ \begin{array}{l} \text{one-word} \\ \text{phrasal} \\ \text{preposition + noun phrase} \end{array} \right\}$$

In other words an adverbial may be a one-word form such as very, a phrasal form such as a little bit, or a prepositional phrase form such as to a degree. The only obligatory criterion is that the form must be the equivalent of an adverb--that is, an adverb can be substituted for it. According to Katz and Postal (1964), however, all adverbials are assumed to be prepositional phrases in their deep structures.

Transformational grammarians as well as traditional and structuralist grammarians generally include in the one category adverbial of degree all the adverbials of degree, amount, and number (Curme, 1947, p. 26). Even though transformational linguists recognize the fact that all adverbs cannot be lumped together indiscriminately, they also admit that many questions concerning adverbials are yet to be answered.

This thesis presents a detailed description of the adverbial of degree and the adverbial of extent. The adverbial of degree, which may also be called an intensifier or a qualifier, usually occurs in a position preceding an

adjective or adverb and serves to intensify the adjective or adverb that it precedes. Forms such as very, quite, rather, extremely, and awfully are representative of this subcategory. The adverbial of extent, which may also be called a quantifier or qualifier, includes such forms as much, some, at all, excessively, and other forms which answer the questions "how much?" and "to what extent?." In order to be classified as an adverbial of extent a form must fit into at least one of the following positions: in final position following the verb, in a position preceding the comparative or superlative forms of adjectives and adverbs, or in the pre-article position in nounal units. By using the separate descriptions as a basis for comparison, the thesis will justify the existence of the adverbial of extent as a category separate from the adverbial of degree.

There are some forms which are excluded from consideration in this thesis even though they have the same distribution as the included forms. For example, units of measure occupy the same positions as degree adverbials, but they are not included here:

- (2) She is five feet tall.
- (3) Each is about four feet long.
- (4) I found him three-fourths drunk.

Nor are units of measure included with extent:

(5) He arrived three hours later.

(6) John is five inches taller.

Also excluded from this thesis are forms such as both, many, (a) few, fewer, fewest, a good many, and cardinal numerals which may occur in the adverbial of extent pre-article position. These forms are excluded because they appear only with count nouns whereas the adverbial of extent forms have a restricted occurrence with mass nouns only.

Although comparative and superlative forms appear in the lists of forms for both degree and extent, this thesis makes no serious effort to provide a detailed analysis of these constructions because they are so complex as to place that subject well beyond the scope of the present work. (See, e.g., Hale, 1970, and works cited there.) In general, comparative and superlative modifiers are referred to in this thesis only because they may occur in certain of the adverbials of degree and extent positions.

The lists for both of these adverbials consist of some forms which are not discussed in this thesis: forms which appear only in stereotyped expressions and extent forms which are acceptable only in certain regional and social dialects. Such forms, which are by no means exhaustive and would themselves serve as an extremely

interesting topic for study, are included here merely because they may occur in typical degree and extent positions.

The descriptions presented in this thesis are the result of surveying the works of many grammarians -- traditional, structuralist, and transformational. Foremost among these are the traditional grammarians Jespersen and Curme, the structuralist grammarians Francis and Stageberg, and the transformational linguists Chomsky, Lees, Lakoff, Ross, Katz, Postal, Rosenbaum and Jacobs. Since most grammarians do not recognize the adverbial of extent as a separate adverbial category, much of the description that follows is based on analogies with what has been written about other adverbials.

The central aim of this thesis is to provide a detailed description of the adverbial of degree and the adverbial of extent which captures their similarities and which reveals their structural differences: a description which may, with ease, be integrated into a complete generative grammar of English.

CHAPTER II

ADVERBIAL OF DEGREE

Among the many oddities in traditional school grammars of English occurs the well-known "definition" of the adverb as a word that modifies a verb, an adjective, or another adverb (e.g., Gleason, 1965, p. 129). The oddness of this characterization, of course, lies in the fact that, while the term adverb implies a close association with the verb, the class of forms which performs the latter two functions, (i.e., modifying adjectives and adverbs) practically never modifies verbs. This fact has led modern grammarians to divorce the adverb of degree from the traditional class and assign to it such names as intensifier or qualifier.

Still, there is something to be said for the older term. Not only is it better known than the new ones, but also research by transformational-generative grammarians in the past ten years has shown that adverbs of degree exhibit strong structural similarities to other adverbs, similarities so subtle and abstract that they were only vaguely noticed by traditionalists and never seen at all by structuralists. For those reasons, this class of adverbs is referred to by the more traditional name adverbial of

degree, occasionally reduced simply to DEG. This chapter presents a general description of the adverbial of degree, a discussion of the use of very as a diagnostic test for identifying members of the class, and accounts of derived forms, WH forms, and distribution, including a section on co-occurrence with adverbs in other classes.

General Description

The list of forms of the adverbial of degree given in (1) represents a conflation of such lists presented in the works of many grammarians. Foremost among these sources are the works of the traditional grammarians Jespersen (1914-1954) and Curme (1935) and of the structuralists Francis (1958) and Stageberg (1965). The list is intended to be representative rather than exhaustive. It is divided into six syntactically-significant groups, each of which is discussed separately in turn.

- | | | |
|--------|----------|----------------|
| (1) a. | all | a (little) bit |
| | any | (a) little |
| | how | at all |
| | however | |
| | indeed | by no means |
| | no | |
| | pretty | awfully |
| | quite | exceedingly |
| | rather | extremely |
| | so | fairly |
| | somewhat | really |
| | that | surprisingly |
| | this | terribly |
| | too | utterly |
| | very | . . . |

- | | | |
|----|----------------------|------------------------|
| b. | awful | right |
| | damn(ed) | some |
| | darn(ed) | stark |
| | dead | wonderful |
| | mighty | |
| | plenty | kind of |
| | powerful | sort of |
| | real | |
| c. | enough | to a degree |
| d. | what (a) | |
| e. | <u>boiling</u> hot | <u>full</u> well |
| | <u>bright</u> red | <u>great</u> big |
| | <u>cold</u> sober | <u>hopping</u> mad |
| | <u>crazy</u> drunk | <u>icy</u> cold |
| | <u>deathly</u> pale | <u>just</u> right |
| | <u>fighting</u> mad | <u>much</u> alike |
| | <u>freezing</u> cold | <u>precious</u> little |
| f. | (the) least | more |
| | less | (the) most |

Group (1a) contains those forms which usually appear as prepositive modifiers of adjectives and adverbs in sentence frames such as the following:

(2) The girl is _____ pretty.

(3) He works _____ slowly.

Although the forms in group (1b) occur in the same positions as the forms in group (1a), their acceptance is limited to certain regional and social dialects. The two forms in (1c) usually occur in postpositive position in frames such as the following:

(4) Now she seems happy _____.

The one form in (1d) is listed separately because it occurs in DEG only in the pre-article position in frames such as

(5) What beautiful eyes she has!

Forms from each of the first four groups are dealt with later in the chapter.

Group (1e), which is by no means an exhaustive list, is made up of verbal and adjectival forms which occur only in stereotyped expressions. These forms receive no further consideration in this thesis and are presented here merely because they may fill DEG positions.

The reader will immediately recognize (1f) as consisting of comparative and superlative forms. Though many grammarians including Stageberg (1965, p. 228) and Francis (1958, p. 278) recognize these as DEG and lump them together with such forms as very and quite, the peculiar properties of these forms justify their separate listing here. This thesis makes no serious effort to provide a detailed analysis of the comparative construction which is so complex (e.g., see Hale (1970, pp. 30-55)) as to place that subject well beyond the scope of the present work. In general, comparative and superlative modifiers are referred to in this thesis only in so far as they themselves may be modified by the adverbial of extent.

The forms in DEG are subject to certain restrictions concerning modification. First, DEG modifies only the positive form of an adjective or adverb, not the comparative or superlative forms, as very old, not *very older, *very oldest. Secondly, DEG generally does not modify adjectives which do not compare. An exception to this, however, is alone when used as it is in the following sentence:

(6) She is more alone than ever.

Also, little, when it is used as an adjective concerned with size, is rarely compared, yet it accepts DEG:

(7) He is too little to paddle the canoe.

The following sentences exemplify further restrictions on DEG. In the sentence

(8) Bill is an extremely young salesman.

DEG precedes the adjective which it modifies. Sentence (9), however, is not grammatically acceptable because DEG may not modify a noun used as an adjunct of another noun.

(9) *Bill is an extremely car salesman.¹

¹An asterisk is always placed before a string which is considered to be syntactically or semantically deviant. Some dialects, however, may accept certain of the starred structures in this paper.

Finally, although DEG may occur in the same phrase with a numeral, it may not occur immediately before one:

(10) They are the two extremely young salesmen.

(11) *They are the extremely two young salesmen.

Very as Diagnostic Word

By far the most commonly used word of this subcategory of adverbials is the word very. Very, which originated with the Latin verus and came into English from the Old French verai, originally meant, and still to some extent is an adjective meaning "true." However, from the fifteenth century it has been used extensively as in the phrase very great, where formerly much was used (Jespersen, 1949, VII, p. 398). Jespersen (1914, II, p. 367) says that in the fifteenth century very began to be used generally as a subjunct before all kinds of adjectives and adverbs and now is the favorite intensifier (DEG). A DEG form originates in instances in which the first adjective tends to become a subjunct to the second, as in pretty large. At first the word in subjunct position can only be used as such before an adjective of related significance; but if it is used extensively in such combinations, it is by and by felt to signify nothing else but intensification, independently of the meaning of the following adjective, and it may then be used before all kinds of adjectives.

Long (1962, p. 53)² calls very a "syntactically exceptional" word. It is used as an adjective in the very top and as an adverb in it is very nice. Furthermore, in informal remarks made during the Third Texas Conference, Chomsky commented,

. . . we don't know whether failure of a form such as very to occur before a given form is a critical difference in structure, or is simply the result of some kind of hypercorrectness. There are some forms, however, that are clearer than others. For instance, 'very BROKEN' sounds strange to me (Hill, ed., 1962, p. 78).³

Still, very serves an important use as a partial test for an adjective. A word before which very cannot be used is by definition not an adjective although the presence of very does not prove that the following word is an adjective, since very also occurs before adverbials and nouns. Chomsky (1957, p. 73) says that the simplest way to account for very is to put into the phrase-structure grammar the rule

(12) ADJ \longrightarrow (very) + ADJ

Roberts (1968, p. 34) refers to (12) as the "very rule" which also is used to distinguish adjectives from noun

²Although the book was not published until 1962, the paper was presented in 1958.

³Ibid.

phrases, not just from nouns. The word very may occur before nouns in sentences such as

(13) It was the very book.

but not before noun phrases in sentences such as

(14) *It was very the book.

Because DEG does not modify verbs the very rule is most useful in showing the distinction between adjectival and verbal forms. Sentences (15) and (16) are superficially similar, but very insertion shows clearly that interesting is an adjective and coming is a verb:

(15) He is interesting.

(16) He is coming.

(17) He is very interesting.

(18) *He is very coming.

Gleason (1965, p. 130) points out that in another context, however, interesting can be a participle and very cannot be added:

(19) He is interesting a client in some insurance.

(20) *He is very interesting a client in some insurance.

Jespersen (1954, V, p. 417) notes that many participles are in every respect adjectives, taking adverbs like very:

a highly interesting book, a more astonishing woman,
a very charming woman.

At first glance there appears to be no formal distinction between adjectives ending in -ed or -ing and the inflections of verbs for the past and present participles. However, upon close examination one sees that true participles fit only the first adjective position⁴ and may not occur in the second because they cannot follow very, the running horse, *the horse is very running (Francis, 1958, p. 269).

As a DEG modifier very has some exceptional uses. We have already mentioned that intensifiers do not modify the superlative degree of adjectives or adverbs. Very may, however, occur in sentences such as the following:

(21) He is the very best player on the team.

Very may also occur alone with the adjective understood as

(22) He made me sick, but not very (Jespersen, 1949, VII, p. 399).

Poutsma (1926, p. 671) points out that very often is placed (or repeated) after its head-word when special emphasis is intended:

(23) That was a very foolish thing to do — very.

⁴Francis (1958, p. 268) defines an adjective as being any word which will simultaneously fill both slots in the testing frame: The _____ man seems very _____. The first position is traditionally called attributive, the second, predicative, or simply predicate.

Semantically, words such as absent, dead, unique, universal, perfect would seem to reject the use of very. Yet, Francis (1958, p. 269) says that if one substitutes quite, the forms are acceptable. Nevertheless, it is not at all uncommon to hear an expression such as a very unique table. Even though most people accept very concerned and very elated, many find it hard to accept very disinterested, very unqualified, very deformed. Some feel that very is not semantically compatible with these forms, while other people feel that the word is a participle, not an adjective, and should take very much not very. Roberts feels that the very test is simple and conclusive. If one says He was very surprised, then surprised is an adjective. Roberts continues, "The problem is that we don't all object to the same items. For this reason, any list of prescriptions would merely record the prescriber's personal antipathies" (Roberts, 1969, p. 217-218).

Derived Forms

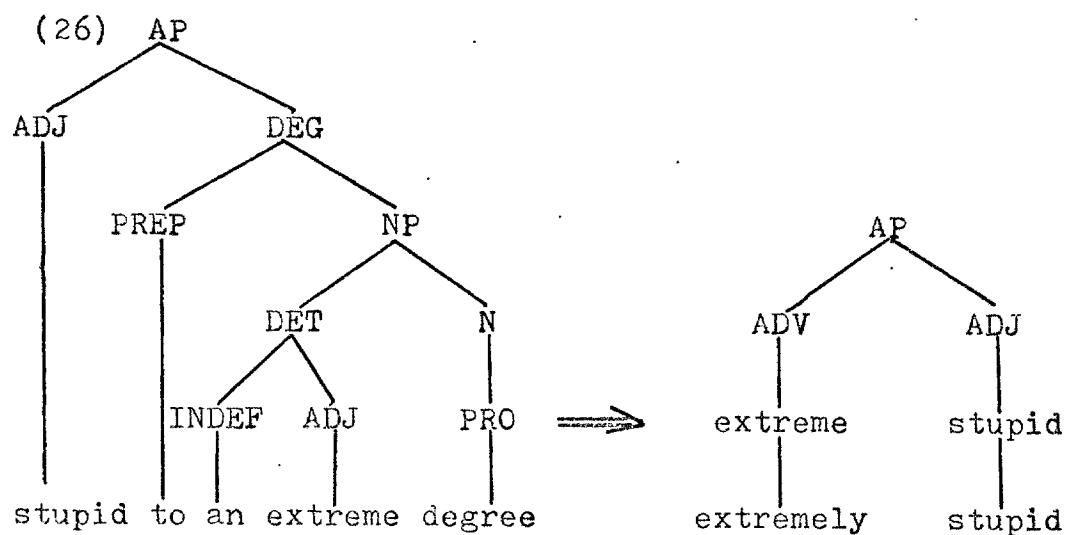
Stageberg (1965) and Francis (1958), who refer to DEG as qualifiers, exclude from their category the derived forms: that is, the -ly forms such as fairly and extremely. Even though Francis (1958, p. 279) admits that it is impossible to draw the line between these qualifiers and the -ly forms, he does exclude the -ly forms on the ground that they are marked as adverbs by the suffix and can appear in positions regularly occupied by adverbs:

(24) He played fairly.

(25) *He played very.

Both he and Stageberg limit their class of qualifiers, which is strictly a positional class, to those forms which occur only in the position preceding an adjective or adverb.

There is strong evidence that adverbials of the form ADJ + -ly are derived from those of the form to + DET + ADJ + degree. Katz and Postal (1964, p. 99) say that extremely, which is permuted around a preceding adjective to yield extremely stupid, is derived from the underlying structure stupid to an extreme degree. By applying certain transformational rules the preposition, article, and noun are dropped and the suffix -ly is added to the adjective. The trees in (26) exemplify this process:



Even though Thomas (1965, p. 170) feels that there is much more work to be done by the transformational linguists, he seems to agree with Katz and Postal that degree adverbials are derived from a PRO-form: to some degree. The two sub-types of this PRO form are the single-word adverbials of degree and the prepositional phrases indicating degree. The adjectives in these prepositional phrases must apparently be abstract adjectives. An abstract adjective is defined as an adjective which may occur with an "abstract noun" head in the form the + "abstract noun" + is + adjective. Thus, one might derive degree adverbials such as extremely as follows:

- (27) Bill is (deg) tall.
- (28) Bill is (to some degree) tall.
- (29) Bill is to some degree (+S) tall.
- (30) Bill is to a degree (which is extreme) tall.
- (31) Bill is to an extreme degree tall.

A transformation deletes the words to an . . . degree and replaces them with the adverbial morpheme -ly, to give (32):

- (32) Bill is extremely tall.

Thomas feels that the comparative and superlative degrees may be introduced into the grammar by (33):

- (33) $DEG \longrightarrow \left\{ \begin{array}{l} POS \\ COMP + S \\ SUPER \end{array} \right\}$

For reasons given in Chapter I, however, this thesis restricts itself to a description of what Thomas characterizes as POS, omitting further reference to the structures COMP and SUPER.

WH Forms

In the sentence

(34) How did it happen?

how asks about the manner; but when it is a contained modifier of pronouns, adjectives, and adverbs, the marker how serves as part of a structure to inquire into number, quantity, price, duration, frequency, and matters of many other kinds. Its meaning is roughly that of to what degree?. In generative grammars questions are derived by applying transformations to the phrase-markers that underlie the corresponding declaratives. How is associated with the WH form of the indefinite determiner preceding the PRO-form occurrence of degree in a quantity adverbial. Katz and Postal (1964, p. 99) say that "non-manner adverbial how questions are also most adequately described as cases of 'questioned' determiner." In sentence (35) they assume that the 'questioned' constituents are reduced versions of preposition and noun phrase structures roughly of the form at how quick a rate.

(35) How quickly did he fall?

(36) At how quick a rate did he fall?

In sentence (36) the preposition has been moved to the far left by a separate rule after the NP is moved to the far left by a transformational rule. This procedure is illustrated by the following formula (Katz and Postal, 1964, p. 105):

$$(37) \begin{array}{cccc} \# & X & NP & Y \\ 1 & 2 & 3 & 4 \end{array} \longrightarrow 1, 3, 2, 4, \text{ where } 3 \text{ dominates } \underline{WH}$$

In addition to interrogative sentences the WH shift transformation may also apply in exclamations. Even though how is usually an interrogative form, the word-order in the exclamation construction generally shows that the sentence is not to be taken as a question. In sentences (38) and (39), which are derived from sentences (40) and (41), DEG how modifies the adjective or adverb that it precedes:

- (38) How tall Bill is!
 (39) How beautifully she dances!
 (40) Bill is so tall.
 (41) She dances so beautifully.

Still another WH element occurs in the exclamatory construction, an NP whose indefinite determiner is preceded by the predeterminer what. As noted earlier in the chapter, this is the only DEG position in which what may occur. Sentence (42) derives from sentence (43):

(42) What beautiful hair you have!

(43) You have such beautiful hair.

Note in the above sentences that what is used alone before mass nouns such as hair, as it is before plural nouns:

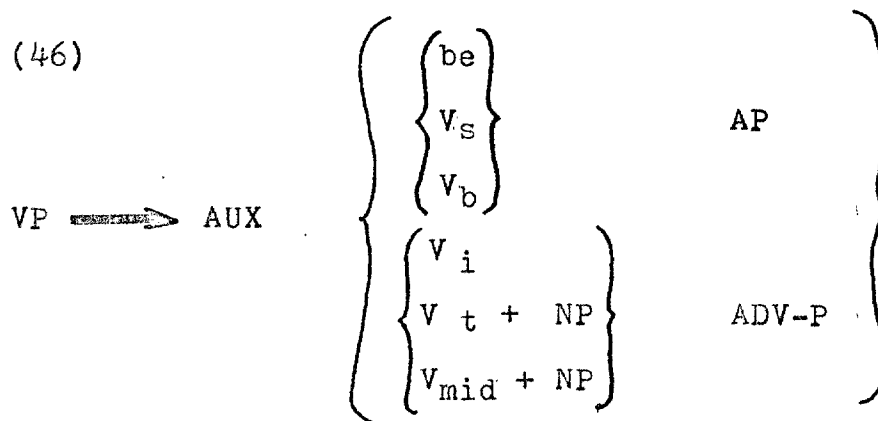
(44) What beautiful eyes!

On the other hand, before singular count nouns the indefinite article a follows what:

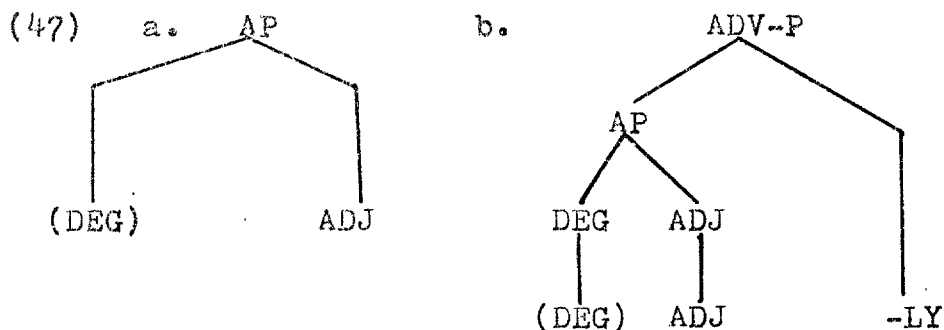
(45) What a lovely sight!

Distribution

Since DEG is an optional modifier occurring within adjective and adverbial phrases, the general distribution of DEG is described by a phrase-structure rule that specifies the distribution of adjective and adverbial phrases:



The underlying structures for AP and ADV-P are represented by the following:



These rules describe the distribution of DEG in adverbial phrases and in predicate adjective phrases. The attributive position of adjective phrases is, of course, described by a series of transformational rules which reduce a relative clause, i.e., the man who was very sad \implies the man very sad \implies the very sad man.

In the predicate DEG occurs following the verb but not before it:

(48) He moves very slowly.

(49) *He very moves slowly.

Nor may DEG modify the verb:

(50) *He works very.

The optional DEG usually precedes an adjective in the adjective phrase following the copulative verb be or any of several other copula-like verbs:

(51) The dinner was very good.

(52) The music sounds very good.

(53) He remained so quiet.

As noted at the beginning of the chapter, members of group (1c) deviate from the usual position preceding the adjective and occur in postpositive position:

(54) The music was loud enough.

(55) The book is good to a degree.

If, instead of an AP, an NP or ADV-P follows be, then a member of (1c) still appears in final position:

(56) He is not at home enough.

(57) He is a decent clerk enough (Zandvoort, 1966,
p. 246).

There are several instances of exceptional distribution of DEG in AP. First, one form from (1a) may occur either before or after the adjective:

(58) The girl is beautiful indeed.

(59) The girl is indeed beautiful.

Secondly, after the copulative verbs, much, which is an adverbial of extent, may be used like an intensifier to modify like:

(60) The boy is much like his father.

Poutsma (1926, p. 665) says that the use of much as an intensive of positives was not uncommon in Early Modern English but is now confined to like. Jespersen (1914, II,

p. 9) says that like is one of the few adjectives that can take an object.

Two more forms with exceptional distribution are any and at all, both from group (1a). These forms do not occur in simple positive declarative sentences but appear in interrogatives.

(61) Is the book $\left\{ \begin{array}{l} \text{any} \\ \text{at all} \end{array} \right\}$ good?

in negative sentences,

(62) The book is not $\left\{ \begin{array}{l} \text{any} \\ \text{at all} \end{array} \right\}$ good.

and in conditional sentences,

(63) If the book is $\left\{ \begin{array}{l} \text{any} \\ \text{at all} \end{array} \right\}$ good, I would like to read it.

Still another instance of exceptional distribution concerning (DEG) + ADJ is its use with certain intransitive verbs which function like verbs of the V_S class:

(64) It ran very true.

(65) The well ran quite dry.

(66) The children grew very tall.

Unlike verbs of the seem class, verbs of the become class are followed either by (DEG) + ADJ or (DEG) + ADV.

Note, however, that only the adverb phrase may be moved to a position before the verb. The following sentences exemplify this:

(67) He remained very quiet. \Longrightarrow

(68) *He very quiet remained.

(69) He remained very quietly. \Longrightarrow

(70) He very quietly remained.

According to Liles (1971, p. 97), adjectives with DEG modifiers generally may undergo the noun-modifier transformation:

(71) $X + N + NM + Y \Longrightarrow X + NM + N + Y$

The following sentences illustrate this transformation:

(72) He was a pitcher (who was) very good. \Longrightarrow

(73) He was a very good pitcher.

However, some DEG forms may not appear in prenominal position:

(74) He was a pitcher (who was) $\left\{ \begin{array}{l} \text{a (little) bit} \\ \text{not any} \\ \text{not at all} \end{array} \right\}$ good. \Longrightarrow

(75) *He was $\left\{ \begin{array}{l} \text{a (little) bit} \\ \text{not any} \\ \text{not at all} \end{array} \right\}$ good pitcher.

Another irregularity occurs with regard to the shift of descriptive adjectives to prenominal position. According

to Chomsky's nominalizing transformation (Chomsky, 1957, p. 72), a phrase such as the quite popular leader is derived from the constituent sentence

(76) The leader is quite popular.

In providing for the shift to prenominal position it would seem that adverbial modifiers and preverbs can accompany the shifted adjective. But according to Lees (1966, p. 97) there are some anomalies, such as the following:

(77) The popular leader
 The quite popular leader
 The sometimes popular leader
 The sometimes quite popular leader
 The not quite popular leader
but: *The not popular leader

In the above examples one finds preverbs before adverbs as well as adjectives, since Lees considers sometimes a preverb. The not which occurs before an adverb is itself an adverb rather than a preverb. Therefore, in order to cover the permitted cases one writes the following formula:

(78) (PVB) (ADV) ADJ + N

In addition to appearing in an AP, (DEG) + ADJ, DEG also occurs in adverb phrases, (DEG) + ADJ + -ly, following intransitive verbs,

(79) He worked very hard.

(80) Come right in.

following transitive verbs,

(81) He did his work very well.

and following middle verbs,

(82) It costs very much.

Verbs with the lexical feature [- __ NP] (or intransitive verbs) may be followed by nothing or by optional adverbials, as in the following sentences (Liles, 1971, p. 32):

(83) The music was playing.

(84) The music was playing very loudly.

However, some intransitive verbs must be followed by adverbials if the sentence is to be grammatical:

(85) We lay very still.

(86) *We lay.

Note that sentence (80) may also be completed by a prepositional phrase such as in the house and that the DEG modifier retains its position: right in the house.

Sentence (81) shows the usual position for an adverbial phrase following a verb with the lexical feature [+ __ NP] (transitive verb) when there is a complement — the position following the complement. When the ADV-P follows

a middle verb, it occurs in a position immediately following the verb if there is no complement (as in (82)) but follows the complement if there is one:

(87) The car costs Harry too much.

Occurrence with Other Adverbials

As previously noted, DEG occurs not only with adjectives but also with adverbials and may appear with any one of the following:

(88) ADV-P \Rightarrow (DEG) $\left\{ \begin{array}{l} \text{Manner} \\ \text{Sentence adverbial} \\ \text{Frequency} \\ \text{Duration} \\ \text{Extent} \\ \text{Time} \end{array} \right\}$

DEG usually precedes MAN (manner adverbials) in sentences such as (89). However, since MAN does not occur with the copula be, (DEG) + MAN may not follow be, as sentence (90) shows:

(89) She ran rather slowly.

(90) *John is very slowly.

Although DEG may occur before some TM (time adverbials), as in sentence (91),

(91) He came very late.

it may not occur before others, as sentence (92) shows:

(92) *He came very then.

It seems then that DEG may appear only with the TM that may be compared: early, late, soon.

Liles (1971, p. 16) points out that LOC (adverbial of place) may not be preceded by DEG:

(93) They are here.

(94) *They are very here.

The same is true for adverbials of goal and other DEG:

(95) *He walked very homeward.

(96) *He is quite very.

Thus one might present this information in the following rule:

$$(97) \text{ ADV-P} \Rightarrow (\text{DEG}) * \left\{ \begin{array}{l} \text{LOC} \\ \text{GOAL} \\ \text{DEG} \end{array} \right\}$$

Roberts (1967, p. 462) says that various kinds of adverbials may occur at the beginning of a sentence and they shift position by the single-base transformation:

$$(98) \text{ X + verbal + ADV} \Rightarrow \text{ADV + X + verbal}$$

Liles (1971, p. 60) says, however, that most MAN do not shift to the front except for emphasis. This seems to be true not only for MAN, but also for DUR (duration), EXT (extent), and TM.

- (99) *MAN - Very carefully he checked the papers.
(100) *DUR - So long they stayed.
(101) *EXT - So much he worries.
(102) *TM - So late they came.

SA (sentence adverbials) and FRQ (Frequency), on the other hand, may occur in front position at least as often as in the predicate:

- (103) He was lying, quite obviously.
(104) Quite obviously, he was lying.
(105) They come very often.
(106) Very often they come.

This account of the co-occurrence of DEG with other adverbials completes the description of the distribution of this adverbial. Together with the earlier characterization of the form and function of DEG, this constitutes a full description of this important modifying structure in English. In the next chapter, we turn our attention to another adverbial often confused with DEG, namely the adverbial of extent.

CHAPTER III

ADVERBIAL OF EXTENT

The adverbial of extent, which is also called a quantifier or qualifier, is an optional element occurring in certain adverbial positions. Like the adverbial of degree, many forms which occur in the adverbial of extent position also occur in different positional classes.

Background

Traditional grammarians include in the one category, adverbial of degree, all the adverbials of degree, amount, and number (Curme, 1947, p. 26). Thus this category includes a miscellaneous collection of forms that, though sharing some of the same characteristics, are different in many respects. Jacobson's definition of DEG indicates that he recognized the need for subclassification and that he attempted this in his definition: "The adverbial of degree answers questions like to what degree?, how much?, which seems to indicate two groups: a. Intensity, b. Amount, quantity, measure" (Jacobson, 1964, p. 23).

The structuralist grammarians go a little further by recognizing the fact that adverbials are strictly a positional class and any form-class word may occupy an adverbial position (Stageberg, 1965, p. 215). Francis recognizes the need for subdividing his qualifier class by giving one

list of qualifiers for use before the positive degree of adjectives and adverbs and still another list for use before the comparative. Of course, many of the same words appear on both lists. Stageberg, on the other hand, merely mentions the fact that with qualifiers of adjectivals and adverbials in the comparative degree, the description is a little different. He gives the following sentences as illustration:

- (1) *I feel much good.
- (2) *I feel very better.

His explanation is that as native speakers we know that these are un-English. Consequently, he, like Francis, makes only the point that ". . . qualifiers used before a comparative are not quite the same as those before the positive degree" (Stageberg, 1965, p. 228).

Although grammarians have characterized several categories of adverbials from the miscellaneous lot of the traditional adverb, most of them have not recognized the adverbial of extent as a category separate from DEG. Therefore, the description that follows is based for the most part on what has been written about other adverbials and then applied to extent. Transformational linguists recognize the fact that many questions concerning adverbials are yet to be answered. Hopefully, this characterization of the adverbial of extent, hereafter referred to

as EXT, is in some way helpful in its integration into the grammar of the language.

General Description

A study of the forms which make up EXT reveals a variety of forms, the most common of which are one-word forms with the other forms being phrasal. In order to be included in the category of EXT a form must occur in at least one of the sentence frames that follow:

- (3) Does Joe study _____?
- (4) He is _____ { (the) taller. }
 { the tallest. }
- (5) Bill works _____ { (the) harder. }
 { the hardest. }
- (6) They want _____ of the money.

Another limitation on the EXT category is its restricted occurrence with mass nouns only. Even though forms such as both, many, (a) few, fewer, fewest, a good many, a great many, and cardinal numerals may occur in frames like (6), they are excluded from the EXT category because they occur only with count nouns.

Forms of EXT are presented in (7) and (8), where they have been divided into significant groups.

- (7) a. any rather
 enough so
 lots some
 much somewhat
 none what
 quite

- | | | |
|--------|--|--|
| | (a) little
a (little) bit
a (whole) lot
a good bit
a good deal
a great deal
at all | in the least
to an extent

excessively
extensively
greatly
widely
• • • |
| b. | all
any
enough
lots
much
no
none
quite
rather
some
somewhat | (a) little
a (little) bit
a degree
a (whole) lot
a good bit
a good deal
a great deal
at all |
| c. | all
any
half
lots
much
none
some | (a) little
a (little) bit
a degree
a (whole) lot
a good bit
a good deal
a great deal |
| d. | best
better
(the) least | less
more
(the) most |
| e. | (the) least
less | more
(the) most |
| (8) a. | heaps
oodles (= lots)
a heap
a shade | a trifle
a whit
(a) right smart
a hell of a lot |
| b. | heaps
oodles
scads
a shade
a trifle | a heap (sight)
a (good) sight
(a) right smart
a hell of a lot |

c. oodles a heap
 scads a hell of a lot

Limited distribution

<u>oceans</u> of good	a <u>shade</u> of doubt
<u>worlds</u> of good	a <u>shadow</u> of a claim
the <u>ghost</u> of a chance	a <u>shred</u> of evidence
a <u>particle</u> of difference	a <u>world</u> of good

(7) consists of the forms which are acceptable to most dialects whereas (8) consists of forms that are acceptable only in certain regional and social dialects. Groups (7a) and (8a) are the forms that usually occur in final position following the verb in frames such as (3). The forms in (7b) and (8b) are those that usually precede adjectives and adverbs in the comparative and superlative degree in frames like (4) and (5). (7c) and (8c) consist of the forms that may occur in the pre-article position in frames such as (6). Note that the forms in (8c) with limited distribution may occur only in stereotyped expressions. These forms, which come primarily from the works of Curme (1935) and Poutsma (1916), receive no further consideration in this thesis.

(7d) and (7e) consist of comparative and superlative forms; and as noted in Chapter II, this thesis makes no serious effort to provide a detailed analysis of those forms. They are included in the EXT classification, however, because (7d) forms may appear in frames such as (3) and (7e) forms may appear in frames such as (6). Forms

from each of the preceding groups receive individual consideration later in the chapter.

Distribution

EXT appears in the grammar in the following ways:

$$(9) \quad VP \rightarrow \text{AUX} \left\{ \begin{array}{l} \underline{\text{be}} + \left\{ \begin{array}{l} \text{AP} \\ \text{LOC} \\ \text{NP} \end{array} \right\} \\ V_s + \text{ADJ} \\ V_b + \text{ADJ} \\ V_i \\ V_t + \text{NP} \\ V_{\text{mid}} + \text{NP} \end{array} \right\} \quad (\text{EXT})$$

EXT may appear with the copula be in a position following the complement:

- (10) Mary was sick so much.
 (11) John is at home a lot.
 (12) Joe was president a lot.

However, according to Lees' assertion (1966, p. 7) that not all adverbials may appear in verb phrases after be, EXT may not occur in the position immediately following be:

- (13) *John is very much.

After verbs of the seem and become class EXT more often occurs as part of a pre-article noun phrase than in a one-word form:

- (14) She seems nervous much of the time.

However, when a verb of the become class is followed by an NP, it is rare for EXT to follow at all. The following sentence illustrates one of the few cases in which EXT may occur:

- (15) She became queen a lot in her lifetime. (a
lot = a great many times = how much)

EXT commonly appears with either transitive, intransitive, or middle verbs, as the following sentences illustrate:

- (16) Bill plays tennis a great deal.
(17) Harry snores so much at night.
(18) She weighs too much.

Several members of group (7a) have exceptional distribution. First, quite and rather, which are two often-used members of the EXT category, occur before the main verb and may not occur in final position:

- (19) I quite understand your motive.
(20) *I understand your motive quite.
(21) Bill rather enjoys his work.
(22) *Bill enjoys his work rather.

Also, little usually occurs in the position preceding the verb:

(23) I little thought he was such a brute.

(24) *I thought little he was such a brute.

Another instance of exceptional distribution concerns the use of much. Many dialects do not accept the use of much in unnegated declaratives unless it is preceded by a word such as too or so (Long, 1961, p. 21). However, one sometimes finds much used without a DEG modifier:

(25) He worries much (Curme, 1935, p. 81).

(26) They used it much (Hale, 1970, p. 32).

Two more forms from (7a) with limited distribution are any and at all. These forms like the corresponding DEG forms occur only in negatives, interrogatives, and conditional sentences and not in positive declaratives.

What is still another member of EXT which has exceptional distribution. It occurs as a one-word interrogative in sentences such as

(27) What (how great) is the damage?

(28) What (how much) is the house worth?

(29) What more do you want?

but, unlike the DEG form, it may not occur in exclamations.

Although EXT may occur after any kind of verbal, there are certain restrictions that apply. The first restriction concerns the verbs with which EXT may occur. Lakoff and Ross point out the fact that for some time

transformational grammarians have known that all adverbs cannot be lumped together indiscriminately. These grammarians have concentrated their attention on the fact ". . . that certain adverbs may not occur with verbs of certain classes and that other adverbs seem to have to occur with certain classes of verbs" (Lakoff and Ross, 1966, p. II-1). Lakoff's claim (1966, p. I-10) that manner adverbials which are "subcategorized with respect to subjects can occur only with NON-STATIVE verbs" seems to apply to EXT as well. (Lakoff uses the term NON-STATIVE for action verbs and the term STATIVE for non-action verbs.) The following sentences illustrate this theory:

- (30) Bill played tennis enthusiastically. (MAN)
- (31) Bill played tennis very much. (EXT)
- (32) *Bill knew the game enthusiastically. (MAN)
- (33) *Bill knew the game very much. (EXT)

Lakoff (1966, p. I-13) continues by saying that some exceptional verbs are semantically non-active but are syntactically active. EXT may occur after verbs of this type:

- (34) She stays at home so much.
- (35) He stands by the desk a lot.

Action verbals carry the lexical features [+ verbal], [+ verb], [+ action] (Jacobs and Rosenbaum, 1968, p. 64);

therefore, verbs after which EXT may appear must carry these same features. Although Lakoff and Ross (1966, p. I-15) seem to share with Jacobs and Rosenbaum (1968, p. 54) the view that adjectives and verbs are the same kind of constituent in the deep structure, they feel that there is no restriction concerning action or non-action adjectives:

(36) That man is much more patient. (Action)

(37) That man is much shorter. (Non-action)

Still another restriction concerns the place of EXT in the verb phrase. As previously noted, EXT forms of (7a) and (8a) typically occur in final position after the verb and complement (if there is one) and EXT may also occur preceding the main verb:

(38) He has not much enjoyed his work.

However, EXT may not occur in the position preceding the AUX:

(39) *He much has not enjoyed his work.

This restriction is quite useful in distinguishing EXT forms from preverbs, which may occur in the verb phrase in the same positions as EXT:

(40) He scarcely works.

Gleason (1965, p. 132) says, however, that when a preverb

occurs in final position, it is usually separated by a terminal:

(41) He drives recklessly, always.

In addition to following the verb in final position, EXT may also precede the comparative or superlative forms of adjectives and adverbs. It then appears in the grammar as an optional modifier of the comparative or superlative morpheme of an adjective, after a special rule converts more to -er and most to -est:

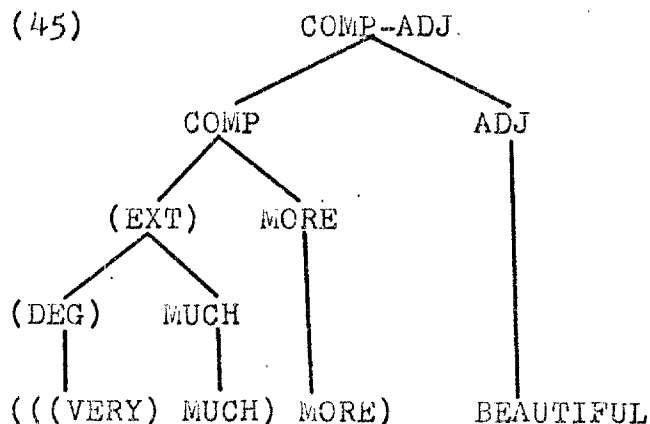
(42) AP \rightarrow ((EXT) { $\begin{matrix} -er \\ \text{the } -est \end{matrix}$ }) ADJ

The following sentences illustrate this rule:

(43) Mary is much more talkative.

(44) He is much the most handsome man.

EXT may also have an optional DEG modifier, as exemplified in (45):



Note that in sentence (44) the definite article the precedes the superlative most handsome. Smith (1961, p. 345) observes that superlative adjectives occur only with nouns having the definite article:

(46) *He is much a most handsome man.

Consequently, the definite article the must intervene between EXT and the superlative whether the noun is expressed or implied:

(47) She is much the tallest.

(48) She is much the tallest girl.

Most of the EXT forms in (7b) and (8b) may occur either in a sequence such as EXT + the + COMP + ADJ or in a sequence such as EXT + COMP + ADJ. Three of the forms, however, occur only with the definite article plus the comparative:

(49) This movie is $\left\{ \begin{array}{l} \text{all} \\ \text{none} \\ \text{rather} \end{array} \right\}$ the more exciting.

Two more exceptional forms from (7b) are any and at all. Here as in other positions they occur only in interrogative, negative, and conditional sentences but not in positive declaratives. Some, on the other hand, does not often occur in negated clauses unless they are main interrogatives or subordinate interrogatives with questioned or conditioned force.

Semantically, some adjectives such as square, false, absolute, dead, equal, infinite, complete, expired, and void are not compatible with EXT forms such as much and the comparative form of the adjective. Consequently, one substitutes much . . . nearly + COMP + ADJ for much + COMP + ADJ (Hale, 1970, p. 33):

(50) *This block is much squarer.

(51) This block is much more nearly square.

Hale points out also that much . . . nearly is required as the quantifier element with prepositional phrases:

(52) *He shot the arrow much nearer toward the center.

(53) He shot the arrow much more nearly toward the center.

EXT appears in the grammar in still another place — the predeterminer or pre-article position. This position is formulated by Chomsky (1965, p. 107) in the phrase structure rule that follows:

(54) DET \Rightarrow (Pre-Article of) Article (post-Article)

The EXT forms occurring as pre-article modifiers in nounal units are adverbial in function by adding to the NP a meaning of quantity or number. Groups (7c), (7e), and (8c) consist of forms which may occur in the pre-article position.

There are certain restrictions that apply to nouns before which EXT may occur. First, the noun must have the lexical feature [-count]; consequently, the verb in the sentence in which a pre-article occurs is singular since mass nouns take only singular verbs:

- (55) Much of the money was stolen.
 (56) *Much of the jewels was stolen.

Although there seems to be no restriction on the feature [\pm common], the more usual occurrence is with nouns marked [+ common]:

- (57) Little of the work has been done. [+ common]
 (58) Most of China is Communist controlled. [-common]

Note that in the preceding sentence of after the pre-article does not drop even though the article is the indefinite, \emptyset (null). Usually before the indefinite article \emptyset , of must drop, as in the following sentence:

- (59) *Much of candy has been eaten. ~~→~~
 (60) Much candy has been eaten.

However, before the definite article the, of usually may not drop:

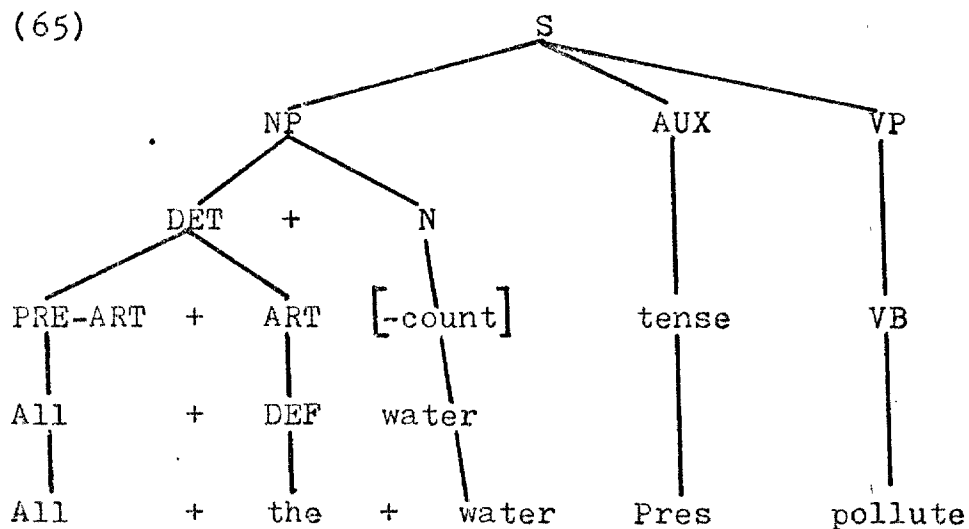
- (61) Some of the water is polluted. ~~→~~
 (62) *Some the water is polluted.

All and half are exceptions to this rule because of may drop optionally:

(63) {
All
Half } of the water is polluted. \Rightarrow

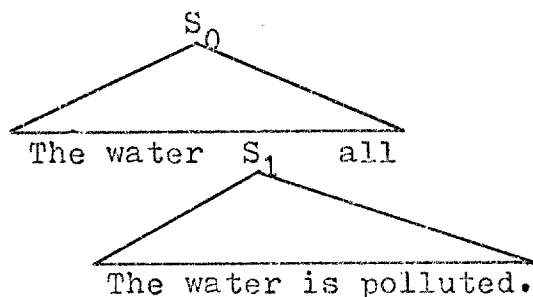
(64) {
All
Half } the water is polluted.

As with various other aspects of transformational grammar, linguists differ in their theories on the derivation of the pre-article. The following tree diagram of sentence (64) represents the mode of derivation based on Roberts and Chomsky:



Carden (1970, p. 285), however, proposes the "higher-S" derivation: that is, that the pre-article element is not part of the sentence in which it occurs but is part of a higher sentence. According to this theory, the deep structure for sentence (64) is as follows:

(66)



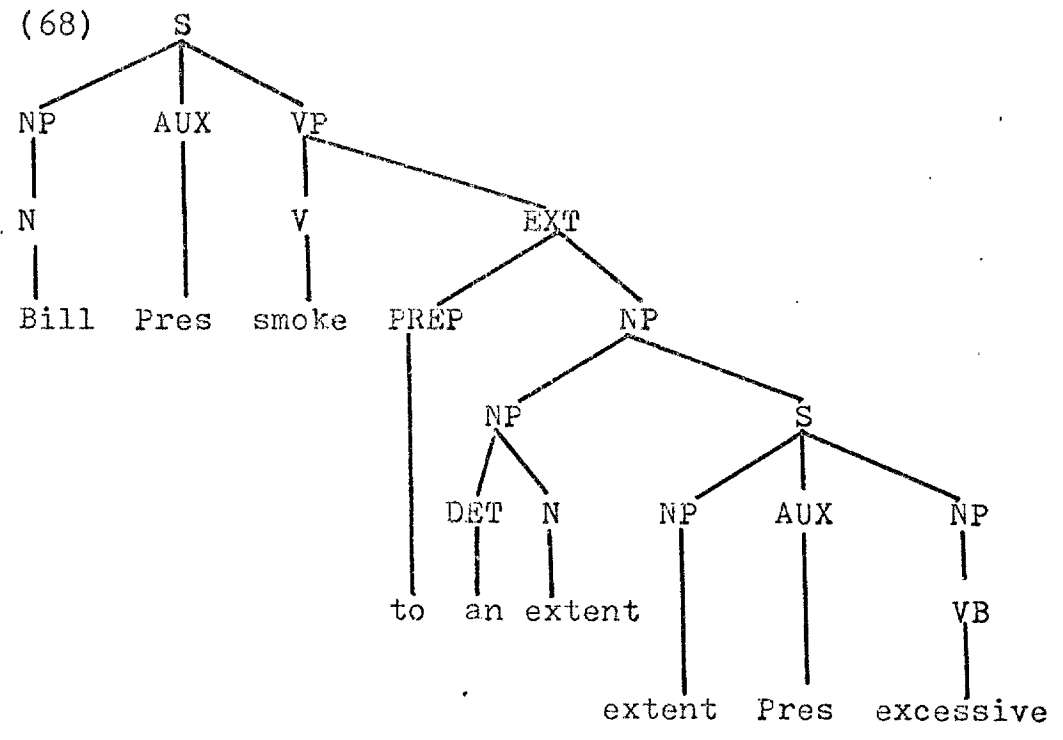
Derivation

According to the Katz and Postal suggestion for deriving adverbials of the form ADJ + -ly (which was noted in Chapter II), an extent adverbial such as excessively is derived from the underlying structure to an excessive extent. Not only EXT, but all adverbials of the -ly form have a preposition in their deep structure whether the surface structure shows it or not. Patton (1966, p. 41) points out that Katz and Postal would have the following rewrite rule for adverbs:

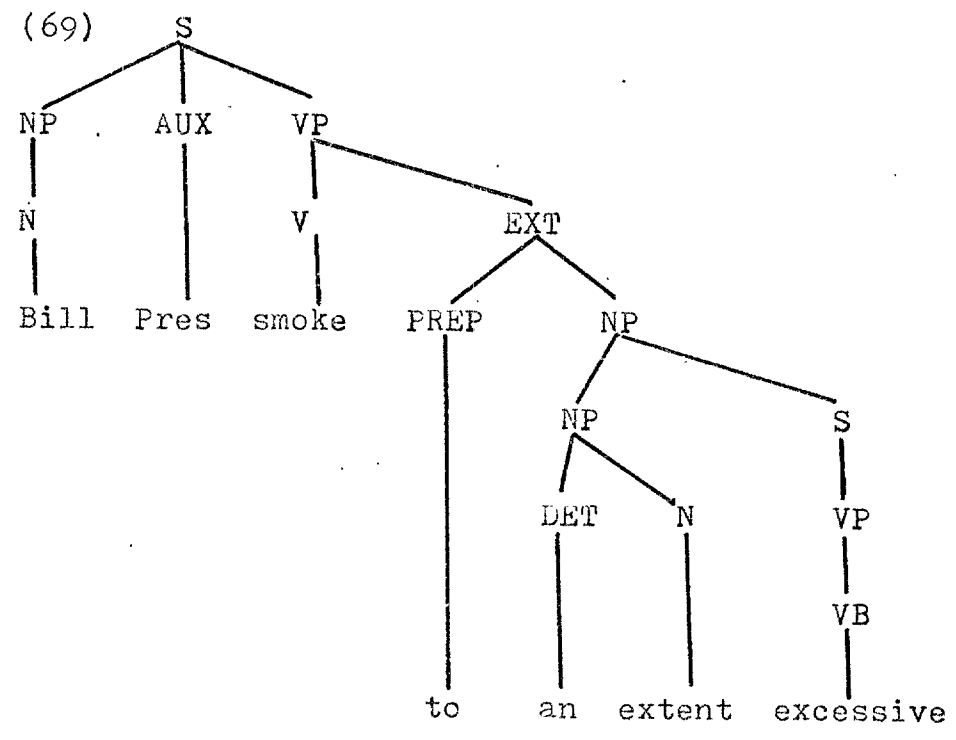
(67) $ADV \rightarrow P + D + A_{dum} + N + REL$

She says that ". . . N would be rewritten as way, reason, time, place, . . ." to which one may add degree and extent. The following trees show that by applying certain transformational rules to the deep structure form it is possible to derive the ADJ + -ly form. (These structures are based on the form used by Jacobs and Rosenbaum, 1968.)

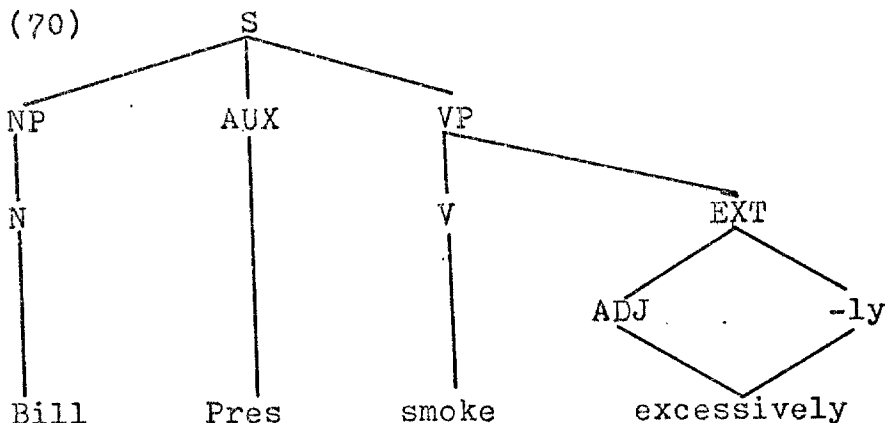
Thus the sentence



becomes, through relative clause reduction,



This, in turn, is transformed into the following sentence:



Somewhat, which has the underlying structure to + a/some + extent where the occurrence of extent is a PRO, derives in the same way as the -ly adverbs (Katz and Postal, 1964, p. 99). In short, somewhat bears the same relationship to to some extent that someplace bears to at some place.

Katz and Postal (1964, p. 128) point out that although many adverbials have one-word interrogative forms such as where with at some place, the only interrogative forms for EXT are to what extent? and how much?. According to their analysis

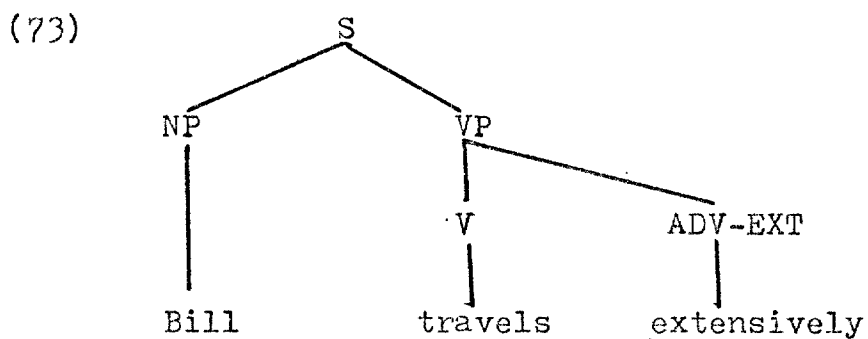
(71) How much did he snore?

is a reduced version of the preposition + noun phrase structure

(72) To what extent did he snore?

Transformational linguists do not agree on the relationship of an adverbial to the VP of the sentence in which it appears. Some feel that in the deep structure an adverbial is a constituent of the VP in which it appears while others feel it is outside the VP. Since these grammarians do not treat EXT as a separate category, it is necessary to extrapolate from those analyses of other adverbials to EXT on the assumption that the latter can be treated in an analogous fashion.

Chomsky (1965, p. 102) feels that most adverbials are constituents of the verb phrases in which they appear and analyzes them as follows:



The application of the identical verb phrase deletion transformation offers further evidence that EXT appears in the deep structure as part of the VP. According to Jacobs and Rosenbaum (1968, p. 42), "A suspected verb phrase may be put in a string in which it can be deleted by the identical verb phrase transformation." If the second verb may be deleted, then it is a verb phrase:

- (74) Harry didn't work much because his parents didn't expect him to (work much).

By this application one sees that the adverbial of extent much, as part of the verb phrase, is deleted along with the verb work.


Lakoff and Ross, on the other hand, try to disprove Chomsky's theory by introducing a test which shows that most of these adverbs are really outside of the verb phrase. They use the phrase "do so" as a substitute for a verb phrase in showing that sentence (76) derives from (75) (Lakoff and Ross, 1966, pp. II-4-5):

- (75) Harry forged a check, but Bill could never bring himself to forge a check.
- (76) Harry forged a check, but Bill could never bring himself to do so.

However, since "do so" may be substituted only for active verbs, sentence (78) may not derive from (77):


- (77) Bill knows his job, and John knows his job too.
- (78) *Bill knows his job, and John does so too.

The theory presented by Lakoff and Ross is that "do so" replaces all of the constituents of the verb phrase, and that elements occurring after "do so" are outside of the verb phrase. Note that in the following sentence EXT is part of the VP according to this test:

(79) Linda swims a lot, but Sandy is not able to swim a lot. 

(80) Linda swims a lot, but Sandy is not able to do so.

However, in sentence (81) EXT is outside of the VP:

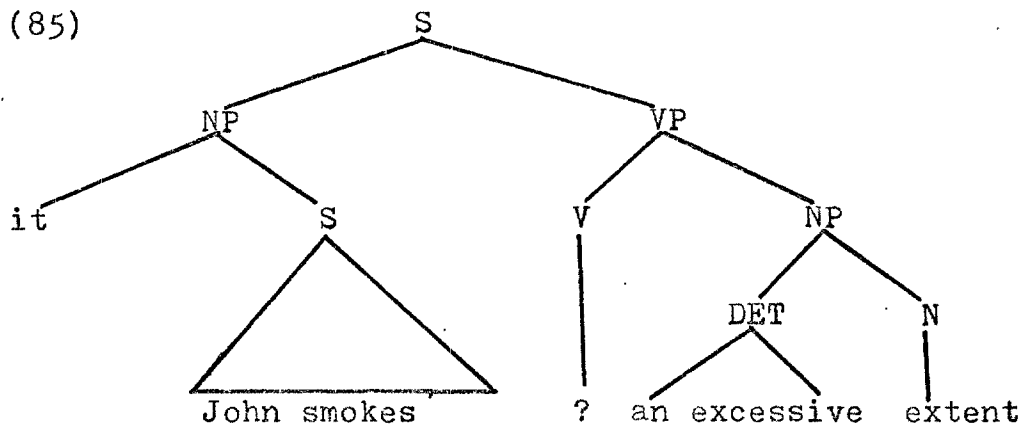
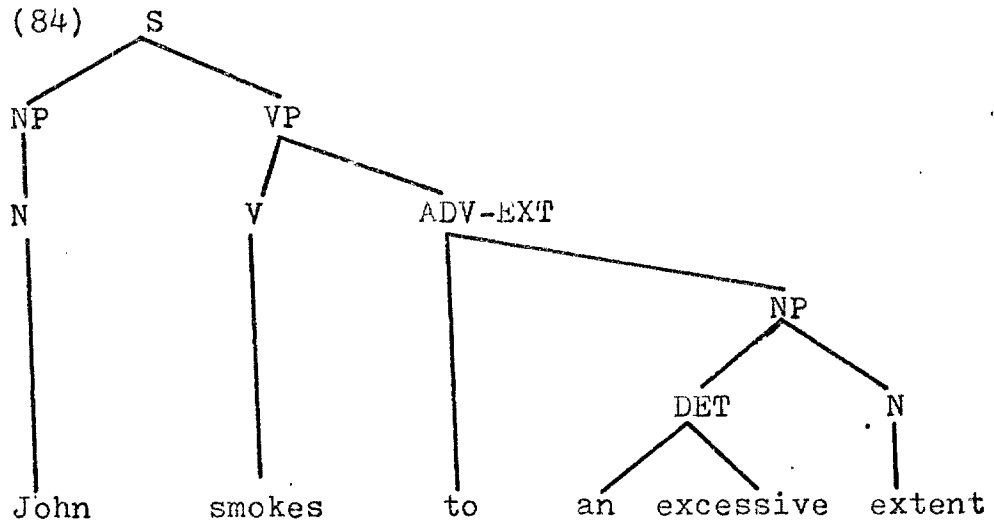
(81) Linda swims a lot, but Sandy swims a little. 

(82) Linda swims a lot, but Sandy does so a little.

According to Lakoff and Ross (1966, p. II-7) their test supports Chomsky's claim that LOC adverbials are inside the VP in some cases and outside of it in other cases. The above examples, which indicate that EXT, like LOC, is sometimes inside the VP and sometimes outside of it, also indicate that in order for EXT to be inside the VP, the sentence must contain identical EXT forms.

Lakoff (1970, p. 157) presents further evidence to support his theory that adverbials are outside of the VP. EXT may be included with TM and LOC in his suggestion that these forms " . . . do not occur in the deep structure as parts of the sentences that they modify. Rather they appear to derive from predicates of other "higher" sentences. . . ." The tree diagrams that follow exemplify the differences between Lakoff's theory and the theory held by Chomsky. The underlying structure of sentence (83) according to Chomsky is represented by diagram (84), whereas, diagram (85) represents Lakoff's analysis:

(83) John smokes to an excessive extent.



Lakoff (1970, p. 157) explains that the fact that he does not know all the answers should not invalidate the line of reasoning that he has pursued.

Relationship to Adverbials

Possibly one of the reasons why most grammarians have failed to identify EXT as a separate category of adverbials is the fact that the forms of this category share strong similarities with those of other categories. Chomsky (1965, p. 103) says that ". . . verbs generally take manner adverbials freely. . . ." Consequently, one might say that verbs freely take EXT since EXT may occur in the same positions as MAN and in some positions in which MAN may not occur. However, as previously noted, linguists agree that there are certain restrictions that apply to the occurrence of these adverbials.

In spite of the similarities between EXT and MAN, there are two major differences concerning distribution. First, although neither MAN nor EXT may appear in the position immediately following the copula be,

(86) *John is slowly.

(87) *John is very much.

EXT, unlike MAN, may follow be provided there is an intervening complement. The following sentences illustrate this:

(88) John is sick a lot.

(89) *John is sick slowly.

The second difference concerns the occurrence of MAN and EXT with middle verbs. Whereas MAN rarely follows middle

verbs, EXT commonly follows middle verbs:

(90) *The book costs so slowly.

(91) The book costs so much.

When MAN and EXT both occur in the same clause, EXT follows MAN and appears in the phrase structure as follows:

(92) VP \rightarrow AUX + MV (MAN) (EXT)

Sentence (93) illustrates this rule:

(93) He doesn't snore loudly at all.

Note that when at all precedes MAN, it is not a member of EXT but of DEG:

(94) He doesn't snore at all loudly.

There is an exception to the usual order of MAN + EXT when EXT occurs with means and instrument adverbials which are sometimes included with MAN. Here EXT must precede those adverbials:

(95) She saves a lot by shopping carefully. (Means)

(96) He is able to do so much with his one hand.
(Instrument)

As well as being analogous to MAN, EXT is also analogous to LOC as the discussion in the preceding section indicated. Apparently, when EXT and LOC co-occur,

EXT may either precede or follow LOC and appears in the grammar as follows:

$$(97) \quad VP \longrightarrow \text{AUX} + \text{MV} \left\{ \begin{array}{ll} (\text{LOC}) & (\text{EXT}) \\ (\text{EXT}) & (\text{LOC}) \end{array} \right\}$$

The following sentences exemplify these positions:

(98) The students study here a lot.

(99) The students study a lot here.

Note too that when there is a complement following be, as in the following sentences, EXT must follow LOC in final position:

(100) Joe was not in school very much.

(101) *Joe was not very much in school.

When EXT and TM co-occur, EXT may either precede or follow TM and appears in the grammar as follows:

$$(102) \quad VP \longrightarrow \text{AUX} + \text{MV} \left\{ \begin{array}{ll} (\text{EXT}) & (\text{TM}) \\ (\text{TM}) & (\text{EXT}) \end{array} \right\}$$

The following sentences illustrate this rule:

(103) The child doesn't sleep much at night.

(104) The child doesn't sleep at night much.

Note that if one substitutes a one-word TM for the prepositional phrase in sentence (104), the sentence is no longer acceptable:

(105) *The child doesn't sleep now much.

FRQ, like TM and LOC may either precede or follow EXT:

(106) They play tennis a whole lot on weekends.

(107) They play tennis on weekends a whole lot.

Thus FRQ appears in the grammar as follows:

$$(108) \text{ VP} \longrightarrow \text{AUX} + \text{MV} \left\{ \begin{array}{ll} (\text{EXT}) & (\text{FRQ}) \\ (\text{FRQ}) & (\text{EXT}) \end{array} \right\}$$

Fraser (1971, p. 95) points out that FRQ is semantically incompatible with verbs such as murder, strangle, die, and gives the following examples to illustrate his point:

(109) Their murdering of the princess happened at midnight.

(110) *Their murdering of the princess happened every day.

The same restriction applies to EXT. Note the following sentences:

(111) *They murdered the princess very much.

(112) *Their murdering of the princess happened very much.

When EXT occurs with either DUR or PUR, it must precede these adverbials and appears in the grammar as follows:

(113) VP \rightarrow AUX + MV (EXT) $\left\{ \begin{array}{l} \text{(DUR)} \\ \text{(PUR)} \end{array} \right\}$

Thus (114) and (115) are well-formed:

(114) The boy smoked excessively for two hours.(DUR)

(115) She exercises a lot in order to keep that lovely figure. (PUR)

The distribution of the co-occurrence of DEG and EXT is especially interesting to observe because there seems to be no set rule for the limitations. The distribution is as follows:

- (116)
- a. The child sleeps $\left\{ \begin{array}{l} \text{damn(ed)} \\ \text{darn(ed)} \\ \text{mighty} \\ \text{quite} \\ \text{so} \\ \text{surprisingly} \\ \dots \\ \text{that} \\ \text{this} \\ \text{too} \\ \text{very} \end{array} \right\}$ little.
- b. She practices $\left\{ \begin{array}{l} \text{so} \\ \text{that} \\ \text{this} \\ \text{too} \\ \text{very} \end{array} \right\}$ much.
- c. He loves me the very $\left\{ \begin{array}{l} \text{best.} \\ \text{least.} \\ \text{most.} \end{array} \right\}$
- d. He travels fairly extensively.

(116a), (116b), and 116c) exemplify the limited co-occurrence of certain of the DEG and EXT forms. Note

that the EXT forms ending in -ly freely occur with DEG in frames such as (116d).

Showing its relationship with other adverbs is the final aspect of the description of the distribution of EXT. Distribution along with the aspects considered earlier—form, function, derivation—make up a complete description of the adverbial of extent. The next chapter, then, offers a comparison of the two English adverbials of degree and extent.

CHAPTER IV

A COMPARISON OF THE ADVERBIAL OF DEGREE AND THE ADVERBIAL OF EXTENT

Chapters II and III have characterized the adverbials of degree and extent respectively. Using these separate descriptions as a basis, this chapter now compares the two structures, noting similarities and identifying differences. Specifically, the two adverbials are compared in terms of these criteria: form, function, distribution, derivation, and relationship with other adverbials.

Form

Although some of the same forms appear in both DEG and EXT, each subcategory contains forms which are not found in the other. The following lists show the distribution of forms:

(1)	all	some
	any	somewhat
	enough	
	indeed	(the) least
	less	(a) little
	more	(the) most
	no	what (a)
	quite	a (little) bit
	rather	at all
	so	

(2) awful	kind of
damn(ed)	sort of
darn(ed)	
dead	by no means
mighty	to a degree
how	
however	awfully
plenty	exceedingly
pretty	extremely
powerful	fairly
real	really
right	surprisingly
stark	terribly
that	utterly
this	. . .
too	
very	
wonderful	
(3) best	in the least
better	to an extent
lots	
much	excessively
none	extensively
	greatly
a degree	widely
a good bit	. . .
a good deal	
a great deal	All the forms in (8),
	chapter III
a (whole) lot	

The forms (1) may appear in at least one of the sentence frames for either DEG or EXT, the forms of (2) occur in DEG but not in EXT, and the forms of (3) occur in EXT but not in DEG. It is significant, however, that none of the forms appear only in DEG or only in EXT --- all may occur in other positional classes as well. This is one of the difficulties incurred by grammarians in trying to subcategorize the traditional adverb.

Function

Although function is the basis for the traditional classification of adverbs, Sledd (1959, p. 212) feels that the term itself is unnecessary and confusing because it is so loosely and variously used in English grammar. According to traditional school grammar, "An adverb is a word that modifies a verb, adjective, or other adverb" (Gleason, 1965, p. 131). With this definition in mind one sees that DEG and EXT are alike in some ways yet different in others.

The greatest similarity shared by these adverbials is the fact that both modify adjectives and adverbs. This likeness, no doubt, is one reason that most grammarians place forms from both groups under the one heading adverbial of degree. Another similarity is the fact that both DEG and EXT usually modify adjectives that may be compared: tall, beautiful, lazy.

Based on function there are two major differences between DEG and EXT. First, DEG may modify only the positive forms of adjectives and adverbs, whereas EXT modifies only the comparative or superlative forms of adjectives and adverbs. Secondly, EXT may modify verbs but DEG may not. As noted in Chapter II, this is such a strong restriction on DEG that it gives a useful criterion for distinguishing adjectives from other forms such as noun phrases and verbal phrases.

Distribution

As noted in Chapters II and III, the distribution of the adverbials of degree and extent is as follows: DEG forms usually occur in prepositive position preceding adjectives and adverbs, in postpositive position, or in pre-article position. EXT forms, in addition to occurring in prepositive position before adjectives and adverbs, usually occur in final position following the verb, and also in pre-article position.

From the above summary of distribution of DEG and EXT, one may note that both adverbial categories consist of forms that may occur in either the prepositive or pre-article position. A second similarity is the fact that these adverbials, like all adverbials, are optional elements in a sentence. Also, both are like determiners in that they precede adjectives but are unlike determiners because they are optional elements. Next, both DEG and EXT may occur in the predicate after any kind of verb.

Still another similarity between DEG and EXT concerns certain forms with exceptional distribution. The same restrictions apply to any and at all whether they occur as DEG or as EXT: that is, they appear in interrogative, negative, or conditional sentences but not in positive declarative sentences. Also, indeed may occur either preceding or following the adjective both as a DEG form and as an EXT form.

Although both DEG and EXT appear in the predicate after any kind of verb, there are restrictions that limit the distribution of EXT but do not apply to DEG. In frames such as

(4) He doesn't work _____.

EXT may follow only verbs with the lexical features [+verbal], [+verb], [+ active]. Also, EXT may not co-occur with verbs such as murder and die because they are semantically incompatible. There is no reason why DEG may not co-occur with these verbs since it serves as prepositive modifier of some other adverbial in the predicate:

(5) The police estimated that she died very
early in the morning.

The same is true for EXT when it serves in prepositive position.

As previously noted, the one DEG form that occurs in pre-article position occurs only in exclamations before either count or mass nouns. The forms of EXT that occur in pre-article position precede only mass nouns, as exemplified in (6):

(6) The robber took much of the jewelry.

Although DEG forms may occur before the EXT forms much and little when they are used in pre-article position,

(7) The robber took very much of the jewelry.

they may not occur alone in the pre-article position:

(8) *The robber took very of the jewelry.

Still another difference between DEG and EXT concerns a (little) bit and not any. As noted in Chapter II (74), these forms may not appear in prenominal position in DEG frames:

(9) *He was { a (little) bit
not any } good pitcher.

But in EXT frames, they may occur in prenominal position:

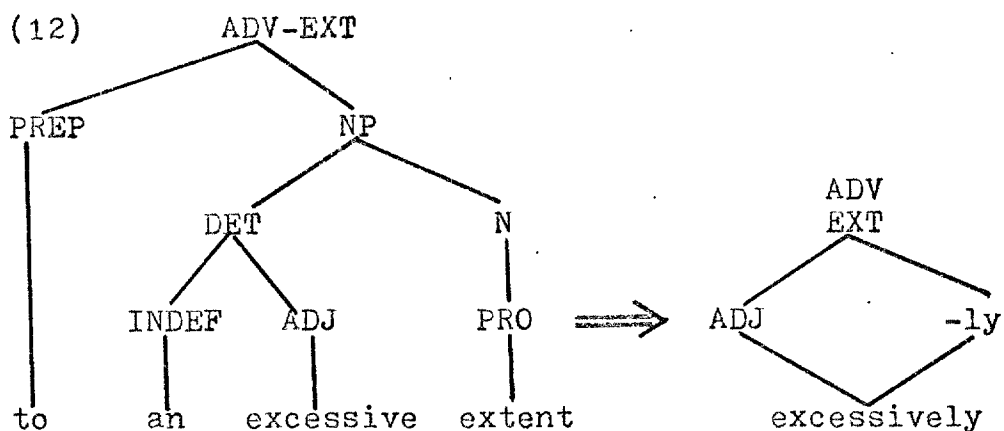
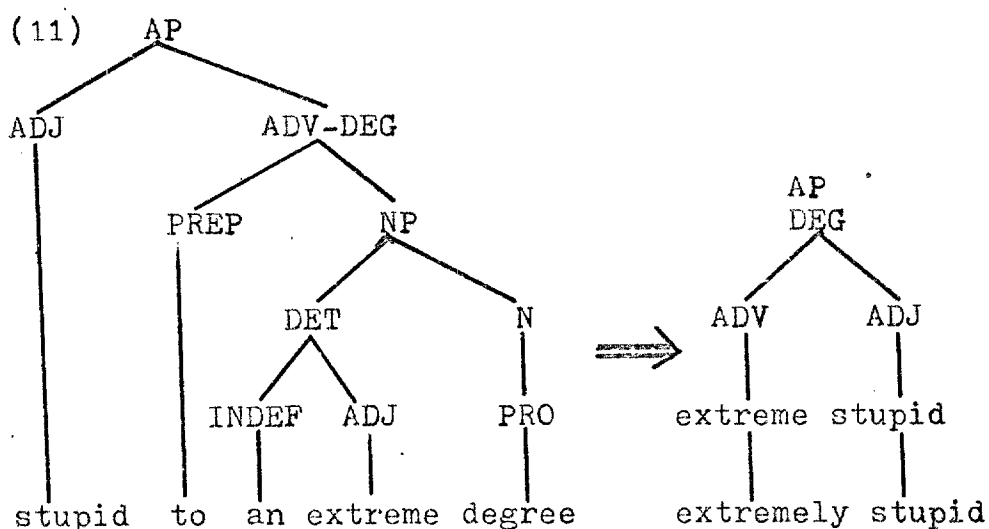
(10) He was { a (little) bit
not any } better pitcher.

Finally, another difference between DEG and EXT exists concerning the form what. Although what occurs in DEG and EXT, it is limited to the pre-article position in exclamations only as a DEG form. As an EXT form, however, it may not occur in exclamations but appears only in interrogatives.

Derivation

The next criterion for comparing degree and extent adverbials is derivation. Here there exist striking similarities between the two adverbials in the derivation of -ly forms and interrogative forms. As previously noted, the -ly forms of both DEG and EXT derive in the same way: extremely stupid derives from the underlying structure

stupid to an extreme degree, and smokes excessively derives from smokes to an excessive extent. By applying certain transformational rules the preposition, article, and noun are dropped and the suffix -ly is added to the adjective (as in (11)).



Not only do the -ly forms of DEG and EXT derive in the same way but so do the interrogative forms. Note that sentences (13) and (15) are reduced versions of the preposition and NP structures of sentences (14) and (16):

- (13) How quickly did he fall? (DEG)
 (14) At how quick a rate did he fall?
 (15) How much did he snore? (EXT)
 (16) To what extent did he snore?

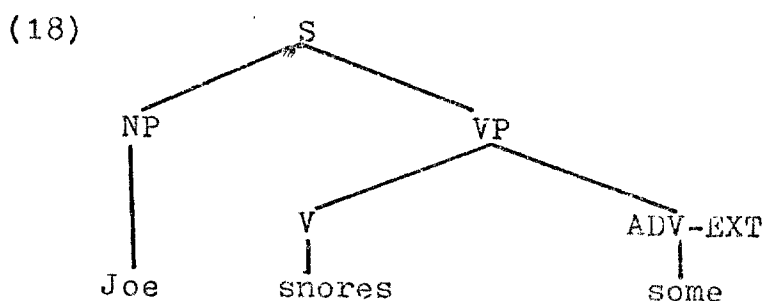
In (14) and (16) the preposition has been moved to the far left by a separate rule after the NP is moved to the far left by a transformational rule.

As previously noted, both DEG and EXT occur in the VP either in an AP or ADV-P, and EXT also occurs in final position following the verb. Transformational grammarians do not agree on whether an adverbial is a constituent of the verb phrase in which it appears or whether its source is outside of the verb phrase. Also, since most grammarians do not deal with EXT as a class, one must observe what they say about other adverbial classes and then apply this to EXT.

Chomsky (1965, p. 102) contends that most adverbials are constituents of verb phrases. Thus the sentence

- (17) Joe snores some.

may be represented by the following tree diagram:



Jacobs and Rosenbaum (1968, p. 42) with their identical verb phrase deletion transformation (which was discussed in Chapter III) offer further evidence that adverbials appear in the deep structure as part of the VP.

George Lakoff and John Robert Ross, on the other hand, present evidence to support their theory that most adverbials are not constituents of verb phrases. They use the phrase "do so" as a substitute for a verb phrase and claim that "do so" replaces all of the constituents of the VP. Thus any elements occurring after "do so" are outside the VP. As noted in the preceding chapter, some forms of EXT are inside the VP while other forms are outside:

(19) Bill travels a lot, and Joe travels a lot
too. ~~_____~~ →

(20) Bill travels a lot, and Joe does so too.

(21) Bill travels a lot, but Joe travels just
a little. ~~_____~~ →

(22) Bill travels a lot, but Joe does so just a
little.

From these sentence examples one observes that in order for EXT to be inside the VP according to this test, the EXT forms must be identical.

Further evidence in support of the preceding findings is Lakoff's claim (1970, p. 157) that some adverbials ". . . do not occur in the deep structure as parts of the

sentences that they modify . . .," but they appear to derive from predicates of "higher" sentences. Diagram (85) in Chapter III exemplifies the assumption that EXT may be treated in the same way that Lakoff treats TM and LOC in his presentation of this theory.

Relationship with Other Adverbials

All adverbials are structurally related because of their general optionality: that is, their omission usually has no effect on the grammaticality of the sentence. Also, all adverbials are assumed to be prepositional phrases in their deep structure. In addition to these general assumptions, specific likenesses exist between DEG and EXT. DEG occurs in a position preceding most adverbials, yet other adverbials do not permit it. EXT, on the other hand, may occur freely with any adverbial but is restricted to a place before some adverbials and following others. The co-occurrence of DEG and EXT with other adverbials is as follows:

- (23) a. ADV-P \longrightarrow (DEG) $\left\{ \begin{array}{l} \text{(DUR)} \\ \text{(EXT)} \\ \text{(FRQ)} \\ \text{(MAN)} \\ \text{(SA)} \\ \text{(TM)} \end{array} \right\}$
- b. ADV-P \longrightarrow (DEG)* $\left\{ \begin{array}{l} \text{(DEG)} \\ \text{(Goal)} \\ \text{(LCC)} \end{array} \right\}$

- (24) a. ADV-P → { (LCC)
(MAN)
(TM) } (EXT)
- b. ADV-P → (EXT) { (DUR)
(FRQ)
(PUR)
(TM) }

Both DEG and EXT have characteristics in common with MAN. First, all three categories consist of one-word -ly forms as well as prepositional phrase forms; DEG and EXT, however, also consist of phrasal forms such as a little bit. Secondly, DEG and EXT are like MAN in that neither may occur in the position immediately following the copula be:

(25) *John is very.

(26) *John is somewhat.

EXT, however, may follow be provided there is an intervening complement:

(27) He is in Europe a lot.

(28) They are happy most of the time.

Next, EXT like MAN does not front shift except for emphasis, and DEG front shifts if the adverbial it precedes may shift to the front:

(29) *Very fast he talked. (MAN)

(30) *So much they sleep. (EXT)

In addition to the two differences noted above, a third

significant difference between EXT and MAN is the fact that EXT commonly occurs with middle verbs but MAN does not:

(31) The house costs too much. (EXT)

(32) *The house costs skillfully. (MAN)

When DEG and MAN co-occur, DEG must precede MAN but EXT must follow MAN unless it is in prepositive position before a comparative or superlative.

As previously noted, there exists a strong relationship between EXT and LOC; and when the two co-occur, EXT may either precede or follow LOC. DEG, on the other hand, may not even appear with LOC.

Both DEG and EXT, however, may appear in a position preceding compared TM adverbials:

(33) He came very late.

(34) He came much later.

DEG may not occur before other TM whereas EXT may appear with and either precede or follow TM. In addition, DUR and FRQ accept and follow both DEG and EXT, but PUR accepts only EXT. Also, DEG may appear with SA and EXT, but EXT may not occur with SA or with any other member of its own category.

As noted in Chapter III (116), there seems to be no set rule for the limitations that apply to the co-occurrence of DEG and EXT. Apparently, only the -ly forms freely

accept DEG; however, little and much have a limited acceptance of degree forms, and the superlatives best, least, most accept very.

On the basis of the descriptions of the adverbials of degree and extent in Chapters II and III respectively and of the comparison of the adverbials in this chapter, this thesis concludes that the following major differences exist between these two adverbials:

(35) Although DEG and EXT consist of many of the same forms, each category contains forms not found in the other.

(36) Both DEG and EXT modify adjectives and adverbs, but DEG modifies only the positive forms and EXT modifies only the comparative and superlative forms.

(37) EXT forms may modify verbs, but DEG forms may not.

(38) In spite of the fact that both DEG and EXT may occur in the predicate after any kind of verb, there are restrictions which apply to EXT but not to DEG.

a. EXT may appear only after verbs with the lexical features [+ verbal], [+ verb], [+ action].

b. When EXT occurs in the pre-article position, it is limited to occurrence before mass nouns only.

(39) DEG is assumed to be in the predicate as part of an AP or ADV-P; however, the evidence surveyed here indicates that EXT is not always part of the predicate

of the sentence in which it occurs.

(40) EXT may appear after the verb in the same places as manner adverbials and in some places in which MAN may not appear—following be with an intervening complement and after middle verbs.

(41) DEG, EXT, and MAN all are made up of one-word forms and prepositional phrase forms, and DEG and EXT contain phrasal forms as well.

(42) DEG forms may co-occur with EXT, but the distribution is limited.

Even though there are many similarities between the adverbial of degree and the adverbial of extent, the differences just summarized—those of form, function, distribution, derivation, and relationship with other adverbials—offer sufficient evidence to justify the recognition of EXT as a category distinct from DEG.

APPENDIX

KEY TO SYMBOLS

Although the symbols used in this thesis are well-established in the field of transformational grammar, the key that follows may, nevertheless, be useful for quick reference. The key gives the word or words represented by each symbol; it does not, however, give a definition for the word or words represented by each symbol.

ADJ = adjective	MV = main verb
ADV = adverb	N = noun
ADV-P = adverb phrase	NP = noun phrase
AP = adjective phrase	POS = positive
ART = article	PRED = predicate
AUX = auxiliary	PREP = preposition
COMP = comparative	PRO = pronominal
DEG = adverbial of degree	PUR = adverbial of purpose
DET = determiner	PVB = preverb
DUR = adverbial of duration	S = sentence
EXT = adverbial of extent	SA = sentence adverbial
FRQ = adverbial of frequency	SUPER = superlative
INDEF = indefinite	TM = adverbial of time
LOC = locative, adverbial of place	V = verb
MAN = adverbial of manner	V _b = verb of the <u>become</u> class

V_i = intransitive verb

V_s = verb of the seem class

V_{mid} = middle verb

V_t = transitive verb

VP = verb phrase

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