

THE DISTRIBUTION OF PREPOSITIONS
IN ENGLISH ADVERBIAL PHRASES

APPROVED:

Silas Griggs

Major Professor

Marion J. De Szasz

Minor Professor

E. D. Sifton

Director of the Department of English

Robert B. Toulous

Dean of the Graduate School

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THESIS

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Judy S. Patton, B. A.

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KEY TO SYMBOLS

While the symbols contained in the phrase-structure grammar are already well established in the field of transformational grammar, it may nevertheless be useful to provide a key listing a verbal correlate for each symbol. However, the various terms offered as "handles" for these symbols in no way constitute definitions, which are provided within the grammar itself. Thus, M(ain) V(erb) means only that part of the English sentence not included under NOM(inal), AUX(iliary), and S(entence) A(dverbial), and consisting of either be + PRED(icate) or of V(erb) plus an optional LOC(ative).

AUX=auxiliary	SA=sentence adverbial
COMP _{mot} =complement of motion	SOU=adverbial of source
DIR=adverbial of direction	SUBS=substantive (i.e., nominal or adjective phrase)
DUR=adverbial of duration	TM=adverbial of time
FRQ=adverbial of frequency	V _b =verb of the <u>become</u> class
IO=indirect object	V ₁ =intransitive verb
LOC=locative (place adverbial)	V _{int} =intransitive verb phrase
MAN=adverbial of manner	V _{1C} =intransitive-complement verb
MV=main verb	V _{io} =indirect object verb
NOM=nominal	V _m =verb of the middle
PRED=predicate	V _{mot} =verb of motion
PRT=particle	
PUR=adverbial of purpose	
S=sentence	

V_p=particle-taking verb
VP=verb phrase
V_s=verb of the seem class
V_{stat}=stationary verb
V_t=transitive verb

V_T=transitive verb phrase
V_{tC}=transitive-complement
verb
V_{tComp}=transitive-complement
verb phrase

CHAPTER I

INTRODUCTION

1.1 The object of this study, the preposition, traditionally has been given low status in the hierarchy of words. It has been considered merely a relation word which connects a nominal to another element of the sentence. Implicit in the traditional treatment of the preposition is this rewrite rule:

Prepositional Phrase--> Preposition + Noun Phrase

Thus, the prepositional phrase has always been considered an exocentric construction with two necessary constituents, the preposition and the nominal, said to "function as" the object of the preposition. While it may seem strange to devote an entire thesis to the study of the common preposition, it is nevertheless true, as Owen Thomas has pointed out, that no detailed, transformationally-rigorous analysis of English prepositions has yet been made.¹ This thesis is intended to serve as a partial solution to this problem.

1.2 In this thesis, the use of the term preposition is restricted in two significant ways. First, it is restricted entirely to those prepositions that are generated by

¹Owen Thomas, Transformational Grammar and the Teacher of English (New York, 1965), p. 200.

phrase-structure rules, excluding from its consideration preposition-like function words introduced by transformations. Secondly, and perhaps more arbitrarily, the term is used exclusively to refer to prepositions that are the first element in prepositional adverbial phrases. Thus, there are many words traditionally treated as prepositions that this thesis excludes from consideration.

1.3 The preposition generated by phrase-structure rules is that form which appears in what is known as the "deep structure" of the language.² This means it will be found only as an elementary unit appearing in the base of the syntactic component below the immediate constituent level of a string of formatives.³ This restriction will rule out preposition-like structures which make up part of the transformation subcomponent.

1.4 Furthermore, the term preposition as used here will specify only that form which structurally constitutes part of an adverbial:

$$\text{adverbial} \rightarrow \left\{ \begin{array}{l} \text{adverb} \\ \text{PREP} + \text{NOM} \end{array} \right\}$$

Therefore, to be considered a preposition, such a form must not only take an object; it must also, together with its object, fit into the adverbial classification. In this study,

²Noam Chomsky, Aspects of the Theory of Syntax (Cambridge, 1965), p. 16.

³Ibid., p. 17.

the preposition will be considered only as an element of the adverbial.

1.5 This analysis of English prepositions includes a generative grammar whereby preposition-based adverbials have been developed from the base of the syntactic component through phrase-structure rules. It is therefore an attempt to arrive at the relationships of various adverbial forms within the general structure of the language. The phrase-structure grammar is as follows:

1. $S \rightarrow \text{NOM} + \text{VP (SA)}$
2. $\text{VP} \rightarrow \text{AUX} + \text{MV (TM) (DUR) (FRQ) (PUR)}^4$
3. $\text{MV} \rightarrow \left\{ \begin{array}{l} \text{be} + \text{PRED} \\ \text{V (LOC)} \end{array} \right\}$
4. $\text{PRED} \rightarrow \left\{ \begin{array}{l} \text{SUBS (LOC)} \\ \text{LOC} \end{array} \right\}$
5. $\text{V} \rightarrow \left\{ \begin{array}{l} \left(\begin{array}{l} \text{V}_{\text{int}} \\ \text{V}_{\text{T}} + \text{NOM} \\ \text{V}_{\text{g}} + \text{ADJ} \\ \text{V}_{\text{b}} + \text{SUBS} \end{array} \right) (\text{MAN}) \\ \text{V}_{\text{m}} + \text{NOM} \end{array} \right\}^5$
6. $\text{V}_{\text{T}} \rightarrow \left\{ \begin{array}{l} \text{V}_{\text{t}} \\ \text{V}_{\text{p}} + \text{PRT} \\ \text{V}_{\text{tComp}} \\ \dots \end{array} \right\}$

⁴Ibid., p. 102.

⁵Paul Roberts, English Syntax (New York, 1964), p. 396.

7. $V_{tComp} \rightarrow \left\{ \begin{array}{l} V_{tC} + COMP \\ V_{iO} + IO \\ \dots \end{array} \right\}$
8. $V_{int} \rightarrow \left\{ \begin{array}{l} V_1 \\ V_{iC} + COMP \end{array} \right\}$
9. $V_{iC} \rightarrow \left\{ \begin{array}{l} V_{stat} \\ V_{mot} \end{array} \right\}$
10. $V_{stat} + COMP \rightarrow V_{stat} + LOC$
11. $V_{mot} + COMP \rightarrow V_{mot} + COMP_{mot}$
12. $COMP_{mot} \rightarrow \left\{ \begin{array}{l} DIR \\ SOU \end{array} \right\}$

1.6 It should be pointed out, of course, that the grammar is by no means intended to be exhaustive in its scope; its purpose is merely to serve as a vehicle to differentiate the various levels at which certain adverbials may be found. Note that the grammar accounts for nine adverbial structures: place, direction, time, duration, manner, frequency, purpose, and source. The structure known as the sentence adverbial is also included. It is presented at a very high level of the grammar, appearing optionally after VP in rule one, whereas the majority of adverbials--time, duration, frequency, and purpose--appear after the main verb in rule two. The locative, or adverbial of place, is described in rules three and four, occurring in the predicate or directly following the verb as an option. None of the adverbials could be described as obligatory, however.

The adverbial of manner appears in the fifth rule as an element following V, after every classification of the verb except V_m. In rules eight through twelve, the intransitive verb with a complement is divided into V_{mot} and V_{stat}, with complements of direction and source, respectively. These adverbials will be discussed at greater length in the following chapters.

1.7 In addition to the phrase-structure grammar, a carefully limited lexicon, made up of basic or kernel prepositions which occur in these adverbial forms, may be found in the appendix. The distribution of these prepositions under adverbials in the lexicon is varied. The place adverbial, or LOC, for example, takes up the bulk of prepositions with fifty-five listed in this classification. The direction adverbial, or DIR, comes second with forty-three prepositions listed. Most of the prepositions in these two classifications are overlapping with the exception of half a dozen which are unique for either category. The prepositions governed by the adverbial of manner, or MAN, rank third in number with twenty-seven, followed by the adverbial of time, TM, with twenty-two. Also included is the adverbial of duration, DUR, with sixteen prepositions; source, or SOU, ten; frequency, FRQ, and purpose, FUR, two apiece; and the sentence adverbial, or SA, which accounts for only one preposition. Following the lexicon is a list of sentences demonstrating the use of these prepositions in their various adverbial forms.

1.8 Only those nine basic classifications of adverbials mentioned above appear in the lexicon and grammar. Forms which have been arrived at transformationally (not by immediate constituent rules) and forms which have been excluded for various other reasons will be mentioned briefly in order to explain their exclusion. First, however, it will be necessary to review the general structure of the kernel preposition, a basic element of the adverbial.

1.9 Most prepositions in the lexicon, sixty-two of the total, are of the simple type, that is, comprised of one base. These may have one morpheme (down, through, over) two morphemes (around, before, underneath), or even three morphemes (alongside), although this last number is not so common as the first two.⁶ In addition, there are listed some fifteen compound prepositions which consist of two or more free bases, with or without affixes (across from, outside of, down from).⁷ The first element is often an adverb and the second is usually a simple preposition. The third type of preposition is the phrasal, which consists of three words, usually a simple preposition followed by a noun and then another simple preposition, or actually a prepositional phrase followed by another preposition (as far as, by means of).⁸ However, the middle element of these phrasal

⁶W. Nelson Francis, Structure of American English (New York, 1958), p. 306.

⁷Ibid., p. 307.

⁸Ibid., p. 309.

prepositions comes in such a wide variety that this type of preposition has been limited to the most basic vocabulary items because of lack of space. Also for this reason, phrasal prepositions in which the middle element has a modifier or determiner, such as for the sake of, have been excluded entirely.

1.10 Preposition-like forms which have been excluded also include those dependent forms which do not stand alone as single word forms. This group is composed mostly of classic Latin forms, such as anti-. These bound morphemes appear in construction with both bound and free bases to form independent words (anti-American, antidote). A list of these forms may be found in Glossary A. On the other hand, per, a Latin preposition signifying "by means of" or "through," and via, "by way of," have both been included in the lexicon because they are now classified as independent English words.⁹

1.11 In addition to modified phrasal prepositions and dependent prepositional forms, archaic prepositions which do not appear frequently in current American English speech patterns, according to part four of the word counts of Thorndike and Lorge¹⁰ and to the latest Merriam college

⁹Funk & Wagnalls Editorial Staff, Standard Handbook of Prepositions, Conjunctions, Relative Pronouns, and Adverbs (New York, 1953), pp. 28-34.

¹⁰Edward L. Thorndike and Irving Lorge, The Teacher's Word Book of 30,000 Words (New York, 1944), pp. 259-274.

dictionary,¹¹ have also been excluded from the lexicon. Thus prepositions such as abaft, as in the ancient nautical term abaft the beam; adown, as in adown the rocky crags; and aloft, as in aloft the brooding storm, have all been excluded, along with the Shakespearian use of forth: and drive the English forth the bounds of France.¹² A list of these poetic and archaic forms may be found in Glossary B.

1.12 Another group of preposition-like forms excluded from this thesis requires some comment. Rule six of the phrase-structure grammar includes as one rewrite for V_T this rule:

$$V_T \rightarrow V_p + \text{PRT}$$

Now this PRT (particle) is itself a complex element representing both traditional prepositions and adverbial particles. Both are to be excluded and it is therefore unnecessary for this rule to be more explicit. However, before this subject is abandoned, it is useful to point out that two quite different classes of verbs are involved. One class of verbs is called "prepositional verbs" by Chomsky and some traditional grammarians.¹³ The other class is known as "particle-

¹¹Webster's Seventh New Collegiate Dictionary (Springfield, 1965).

¹²Funk & Wagnalls, pp. 5-21.

¹³H. A. Gleason, Linguistics and English Grammar (New York, 1965), p. 310.

taking verbs."¹⁴ The difference between the two structures is well known and is clearly signalled by intonational differences. Thus, there are three structures that have to be kept apart: the ordinary adverbial, whose preposition is treated in this thesis; the preposition-like form that is part of a "prepositional verb"; and the particle that is part of a "particle-taking verb" (sometimes called "separable verb"), neither of which is treated here. Jespersen has compiled a list of "prepositional verbs" in his A Modern English Grammar.¹⁵

1.13 The difference in these structures becomes apparent in the following comparison:

1. The book was on the table. (adverbial of location)
2. We can depend on George. ("prepositional verb")
3. He turned on the light. ("particle-taking verb")

Notice that both the first and second forms have characteristic prepositional stress, whereas the third always carries greater stress than its accompanying verb. Notice further that in the third example the particle may be freely shifted to the end of the sentence, whereas this is impossible with the other two:¹⁶

¹⁴Chomsky, p. 190.

¹⁵Otto Jespersen, A Modern English Grammar (London, 1954), III, 252-272.

¹⁶Zellig Harris, "Co-occurrence and Transformation in Linguistic Structure," Language, XXXIII (July-September, 1957), 297.

1. *The book was the table on.
2. *We can depend George on.
3. He turned the light on.

In these two respects, then, the forms of on in the first two sentences seem to belong to the same class.

1.14 Yet consider an important transformational property of these sentences. Both the second and third, containing the shiftable and non-shiftable particles, are subject to the passive transformation, whereas this is impossible with the first, containing a true preposition-based adverbial, even when a real verb is substituted for be:¹⁷

1. *The table was lain on by the book.
2. George can be depended on.
3. The light was turned on.

Therefore there are quite clear formal distinctions among these three sentence patterns; on the basis of this last distinction the particles can be excluded, although others would justify their exclusion as well. A list of shiftable and non-shiftable particles may be found in Glossaries C and D.

1.15 Another type of preposition-like form which has been excluded from the thesis is that which appears as part of the complement in a transitive-complement verb sentence, as detailed in rules five, six, and seven of the grammar:

- $$\begin{array}{l}
 5. V \rightarrow V_T + \text{NOM} \quad 6. V_T \rightarrow V_{t\text{Comp}} \\
 7. V_{t\text{Comp}} \rightarrow V_{tC} + \text{COMP}
 \end{array}$$

¹⁷Chomsky, p. 101.

This construction comprises a large number of complements beginning with the transitive-complement formed from one underlying base string, as in the sentence,

He put the fire under control.

Here under control forms part of the verb which is one of several so-called "two-word" or compound verbs, and for this reason under control cannot be considered a prepositional phrase used as an adverbial.¹⁸ Preposition-like forms used in a construction like this have therefore been excluded from the thesis.

1.16 Another type of preposition-like element not included is that which forms a complement dealing with two particular forms, to and for, the indirect object consisting of a double base cleft with two underlying strings. This complement is outlined in rule seven in construction with the transitive verb:

$$V_{tComp} \rightarrow V_{io} + IO$$

The symbol IO is further expanded as follows:

$$IO \rightarrow \left\{ \begin{array}{l} to \\ for \end{array} \right\} + NOM$$

An indirect object string would appear thus:

$$NOM + AUX + V_{io} + \left\{ \begin{array}{l} to \\ for \end{array} \right\} + NOM + NOM$$

with for or to making up part of the complement of the verb.¹⁹

For example, the sentences

¹⁸Roberts, p. 169.

¹⁹Ibid., p. 196.

He gave the book to Martha.
I cooked the cake for Henry.

contain not basic prepositional phrases but complements of the verbs give and cook. This construction is therefore excluded.

1.17 Most lists of prepositions usually include a number of participial forms: including, regarding, etc. These have not been included because they do not appear in the base of the syntactic component but instead belong to the transformational level. As transforms they derive ultimately from the relative transformation to their participial form. For example, a string such as

The price includes tax.

undergoes first the T-REL:

the price which includes tax.

Then T-DEL-ing takes place, in which the relative is deleted and -ing replaces tense.²⁰ Thus the construction becomes

the price including tax

which cannot be considered a kernel prepositional phrase used as an adverbial.

1.18 It is interesting to note that all of the participial forms, which are given in Glossary E, are related to living verbs with the exception of during. This form, which is included in the thesis, was the present participle of the obsolete verb dure (endure), and now has independent status

²⁰ Ibid., p. 328.

as a basic preposition which constitutes part of the adverbials of time and duration.²¹ The past participle past is the one other exception to these participial forms, for it is included in the thesis on the basis of its kernel structure in the adverbials of location, direction, and time. Among those participial forms which have been excluded here, those worth noting are the archaic bating from the verb bate, meaning "to diminish," having been replaced by saving or barring, and the form notwithstanding, an unusual compound of a negative with the verb withstand.²²

1.19 Still another form which has been excluded from the study because it is transformational in nature is that deriving from the possessive transformation and employing the form of. For example, the construction,

The hat is John's.

undergoes the relative transformation, as in the case of the participle mentioned in 1.17, and becomes the following:

the hat which is John's

Then a variation of the T-genitive:

WH + NOM₁ + AUX + be + NOM₂ + POSS--> of + NOM₂ + POSS

gives the hat of John's, according to Carlota Smith.²³ The double genitive of John's is therefore not actually a kernel

²¹Funk & Wagnalls, p. 19.

²²Ibid., p. 13.

²³Carlota Smith, "Determiners and Relative Clauses in a Generative Grammar of English," Language, XL (January-March, 1964), 46.

prepositional phrase but part of a transformation, and it has been excluded also.

1.20 Another construction which has been excluded from the study is the ostensible sentence adverbial which is actually derived from a transformation deletion. This construction covers a wide variety of forms, but all undergo deletion and then T-SM (Transformation-Sentence Modifier) to the front of the sentence. The most obvious is the participial; after T-BEL and T-DEL-ing, the insert is placed at the front of the matrix sentence and becomes a string such as

Considering the menu, the man decided on roast beef.
Paul Roberts in English Syntax gives a different type of participle as a sentence modifier, in which the subject of the insert is different from that of the matrix string:

Considering the difficulties, John did well.
In this usage, he feels, the construction has actually ceased to be a participle, and therefore it is not dangling.²⁴
However, neither construction is an adverbial which is found in the deep structure of the language, and both must be rejected as a basic sentence adverbial.

1.21 In addition to the participial forms, there are numerous others which have undergone some sort of transformation and deletion before T-SM gives them the structure of a

²⁴Roberts, p. 429.

sentence adverbial. These include forms such as besides, except, and save:

Besides Harry, no one came.

This construction seems to be the result of a deletion transformation. This category includes a number of compound and phrasal structures:

On account of rain, the game was called off.
Instead of waiting, they left.

More research is needed on these structures, but at this point they cannot readily be assigned to the kernel sentence adverbial classification.

1.22 This construction also claims a number of basic adverbial forms which have simply undergone T-SM. Chomsky believes that the place and time adverbials are "closely associated . . . with sentence adverbials which form a 'pre-sentence' unit in the underlying structure."²⁵ Adverbials of manner also lend themselves to this transformation:

At five o'clock, Harry arrived.
In the garden, people admired the flowers.
By running, I caught the bus.

All these strings seem to contain sentence adverbials but these forms are actually the result of the simple T-SM from the end to the front of the sentence, or else are deleted from an insert sentence. But in this thesis they will be considered only in their basic forms, that is, as place, time, and manner adverbials.

²⁵Chomsky, p. 102.

1.23 A transformational structure that accounts for the form by (which is a preposition when used in the kernel adverbials of location, direction, time and manner) is the general passive transformation:

$$\text{NOM}_1 + \text{AUX} + \text{V} + \text{NOM}_2 \text{---}\rightarrow$$

$$\text{NOM}_2 + \text{AUX} + \text{be} + \text{en} + \text{V} + \text{by} + \text{NOM}_1^{26}$$

A string is therefore converted in the following manner:

John assisted me.--->
I was assisted by John.

The sentence contains the function word by identifying the nominal which was the subject of the kernel sentence, not an adverbial prepositional phrase, although the latter would be the traditional definition.²⁷ The transformation is subject to deletion, but it is nevertheless a powerful factor in the formation of English sentences. However, it must be excluded in this study because of its transformational derivation.

1.24 In addition to by, there is new evidence that other prepositional forms are involved in the particular transformation discussed above. Paul Schachter has offered a list of verbs which determine the choice of preposition in certain passive constructions, such as concern, excite.

²⁶Noam Chomsky, Syntactic Structures (The Hague, 1957), p. 43.

²⁷Emmon Bach, An Introduction to Transformational Grammars (New York, 1964), p. 80.

worry, etc.²⁸ In this way he can derive the following sentences:

The test worried the student.-->
The student was worried about the test.

The test amazed the student.-->
The student was amazed at the test.

The verb interest produces a third possibility:

The student was interested in the test.

The verb charm takes the form with, on the other hand:

The student was charmed with the test.

(Semantically by has traditionally denoted the agent, with, the instrument.) Since these preposition-like forms are each governed by a particular verb, it is possible that the subcategorization of verbs will cause the scope of the passive transformation to be expanded to include a variety of these forms. None would be kernel prepositions, however, and the structure would not be a basic adverbial.

1.25 It is interesting to note that the passive transformation, like T-SM mentioned in 1.21, can sometimes disguise itself to appear as a basic adverbial structure. For example, a sentence such as

The novel was written by Tolstoy.

formerly labelled as "adverbial of agency," is obviously a

²⁸Paul Schachter, "Some Problems in the Transformational Analysis of English Verbs," a paper read to the Linguistic Society of America in Chicago, December, 1961.

passive transformation.²⁹ Structures appearing to be adverbials of manner are often products of the passive transformation:

The gun was examined by experts.

These forms, like the others mentioned, do not appear in the base of the syntactic component of the language, in the deep structure which produces basic prepositional adverbials, and therefore they have been excluded from the thesis.

²⁹Funk & Wagnalls, p. 3.

CHAPTER II

SENTENCE ADVERBIAL

2.1 The first basic or kernel adverbial form to be taken up is the sentence adverbial. This is a difficult structure to discuss because of the ambiguity surrounding its definition, both structural and semantic. Admittedly, it is a structure which is hard to classify as basic to the syntactic component, but it must be considered objectively to get a complete picture of the role which the preposition plays in adverbial structures. The following position has been assigned to the sentence adverbial in the grammar:

S--> NOM + VP (SA)

It can be seen that this "free" adverbial occupies a very basic position in the phrase structure of the grammar, coming at a higher level than adverbials of location and time, etc.

2.2 It has already been pointed out that some structures thought to be kernel sentence adverbials have actually been transformations (1.20), and these have been eliminated from the study of kernel forms. Nevertheless, it must be acknowledged that this transformational SA is the only one recognized by some grammarians, such as Owen Thomas and

Paul Roberts.¹ According to Roberts, a sentence such as

In the meantime, they played bridge.

comes from two base strings: the matrix sentence,

They played bridge.

and the insert sentence, something like

It happened in the meantime.²

Obviously in the meantime is an adverbial of time in its kernel form, but Roberts classifies it as SA in its transformed status because it applies its meaning to the whole sentence pattern, not just part of it. In this study, however, such an adverbial would be classified under the heading of adverbial of time because of the restriction that only kernel forms are discussed here.

2.3 Owen Thomas also sees the SA as deriving by transformation from the form NOM + be + ADJ so that it is attributive to the entire sentence.³

Something is certain.

and

The semester is nearly over.

transform to

Certainly the semester is nearly over.

This stand is similar to that of Roberts, who traces a sentence like

¹Thomas, p. 163.

²Roberts, p. 315.

³Thomas, p. 163.

Fortunately, Todd had plenty of time.
to an insert sentence,

It was fortunate.

in which NOM + be is deleted and -ly added.⁴ The theory that NOM + be + ADJ can be transformed to SA ending in -ly seems to be at odds with Katz and Postal's suggestion that adverbials of the form ADJ + -ly are derived from in + DET + ADJ + way.⁵ In other words, the insert sentence may be more like

It happened in a fortunate way.

2.4 It is obvious, therefore, that Thomas and Roberts have not considered the SA as a kernel node in the structure

S--> NOM + VP (SA)

so that if this adverbial is to be justified, one must look further at other evidence. One source is Katz and Postal's An Integrated Theory of Linguistic Description, in which forms such as yes and no are presented as kernel sentence adverbials.⁶ Will prepositional forms such as of course and on the contrary fit the same category? If so, they would provide a case for the preposition in a kernel sentence adverbial structure.

⁴Roberts, p. 313.

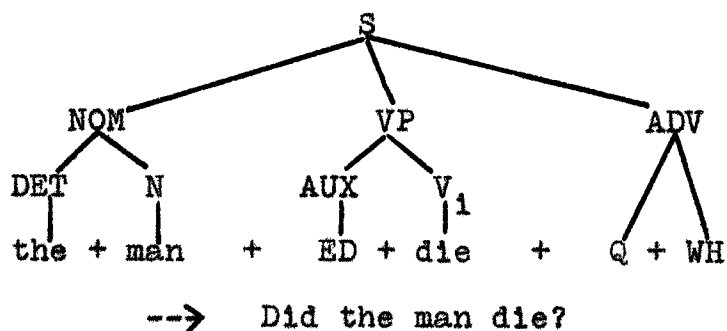
⁵Gerrold J. Katz and Paul M. Postal, An Integrated Theory of Linguistic Description (Cambridge, 1964), p. 141.

⁶Ibid., p. 85.

2.5 In the study mentioned above, the SA is presented as a form which is capable of containing morphemes which trace back to underlying phrase markers in a preceding string. Specifically, the SA can have both an optional Q morpheme and an optional WH morpheme, the Q indicating that its P-marker describes a question and subject to the presence of WH, which has the function of picking out constituents of the P-marker that are questioned.⁷ If both WH and Q are chosen, then the element questioned is the sentence itself, a yes-no question. The following diagram of the sentence,

The man died, of course.

shows the possibilities when morphemes of the sentence adverbial trace back to the yes-no question:



2.6 If simple yes-no questions are based on underlying P-markers containing a sentence adverbial constituent dominating WH in the presence of Q, then it is logical, say the authors, that the sentence demand an identical answer (except that the content of Q is omitted). For example, the yes-no question,

⁷Ibid., p. 113.

Did the man die?

contains morphemes which paraphrase the question as

I request you answer "X the man died."⁸

Of course is admitted as a possible answer even though it volunteers more information than strictly requested; it is therefore a deviation of the yes-no sentence adverbial, they feel.⁹ But it is quite possible that it does fit into the category of kernel adverbial in this structure. On the contrary is more doubtful as a kernel form because it deviates even more widely in answering the question morphemes, and structurally it lends itself fairly well to the deleted transformational structure.

2.7 Here again, however, a question arises concerning the legitimacy of the SA as a kernel form. If the SA of course, like yes or no, has its source in the morphemes of P-markers of a yes-no question that precedes it, is it not transformational in character since the yes-no question itself is a transformation? It seems apparent that if such a sentence adverbial form is present in the deep structure of the language, the transformational character of the structure it appears in will not affect its kernel form, so that the structure of course probably should receive strong consideration as a kernel sentence adverbial form. It is the

⁸Ibid., p. 85.

⁹Ibid.

opinion of Zellig Harris that an inert construction of this type could "hardly enter into transformations."¹⁰

2.8 The range of kernel SA is apparently quite small, and much more research is necessary before the exact role this structure plays in the grammar can be determined. It should be pointed out that even Katz and Postal acknowledge the variety of SA derived by transformation, for they have clearly referred to sentence adverbials of time, place, manner, condition, quantity, and purpose.¹¹ Apparently their "sentence adverbial of time" is that structure mentioned in 2.2, in which an insert string containing an adverbial of time is deleted by transformation and the adverbial moved to the front of the matrix string by the process of T-SM. This is the transformational structure Troike refers to also, but at the same time he differentiates it from "that elusive species, the sentence adverbial," apparently meaning the kernel form.¹²

2.9 Nevertheless, even though more kernel SA forms are probably in existence, they may fall outside the scope of this thesis because it is doubtful that they would occur in prepositional structures. On the other hand, whether the -ly

¹⁰Harris, p. 335.

¹¹Katz and Postal, p. 159.

¹²Rudolph Troike, "Linguistics for the English Teacher" (the Teacher's Manual for the Texas Education Agency In-Service Training Course in Linguistics for English Teachers), Austin, 1964, p. 35.

form falls into the category of basic node adverbial is still not clear, whether it derives transformationally according to Thomas' or Roberts' NOM + be + ADJ or from the form in + DET + ADJ + way. At any rate, these uncertainties offer ample justification for the conclusion of this thesis that only of course can with confidence be assigned to the base component as a prepositional sentence adverbial.

CHAPTER III

ADVERBIAL OF PLACE

3.1 Prepositions which occur in the place adverbial, or LOC, are as follows:

aboard	athwart	off	across from
about	atop	on	alongside of
above	before	opposite	apart from
across	behind	over	as far as
after	below	past	away from
against	beneath	round	back of
along	beside	through	down from
alongside	between	throughout	inside of
amid	beyond	under(neath)	out of
among	but	up	outside (of)
around	by	upon	up from
aslant	diagonal	with	
astraddle	down	within	
astride	in	without	
at	near		

3.2 The LOC appears the following way in the grammar:

$$MV \rightarrow \left\{ \begin{array}{l} \text{be} + \text{PRED} \\ \text{V (LOC)} \end{array} \right\} \quad \text{PRED} \rightarrow \left\{ \begin{array}{l} \text{SUBS (LOC)} \\ \text{LOC} \end{array} \right\}$$

Note that of the two alternatives for the Main Verb, be + PRED or V, both have the option for a LOC. In the first case, be can take a predicate consisting of a substantive with an optional LOC, or a LOC directly following it:

Marsha was a student at school.
Butch was sick in history class.

These two sequences show substantives--a noun in the first, an adjective in the second--followed by LOC. However, LOC can follow be directly:

Marsha was at school.
Butch was in history class.

3.3 In the second alternative for Main Verb, the verb is followed by a LOC also:

The car ran over George in the street.
We sat under the tree.

This includes any classification of V, such as V_{int} or V_t, or any other V detailed in rule five of the grammar. This relation is treated in further detail at a lower level of the grammar in rules eight through ten, also, where it is proposed that in order to take LOC, the intransitive verb occurs in a special classification:

$$8. V_{int} \rightarrow \left\{ \begin{array}{l} V_1 \\ V_{1C} + COMP \end{array} \right\}$$

$$9. V_{1C} \rightarrow \left\{ \begin{array}{l} V_{stat} \\ V_{mot} \end{array} \right\}$$

$$10. V_{stat} + COMP \rightarrow V_{stat} + LOC$$

At this level LOC can appear as follows:

He stood in the doorway.

Here stood in the doorway is composed of the stationary verb stand with its complement, the locative in the doorway. The stationary verb must be intransitive, specifically one that can take a complement.

3.4 There is evidently a very close relationship between V_{stat} and be on several levels. Structurally, the fact that they both precede LOC unites them, and V_{stat} may be substituted

for be almost without exception. As a matter of fact, this characteristic distinguishes verbs which take LOC from V_{mot} which usually takes only DIR or SOU:

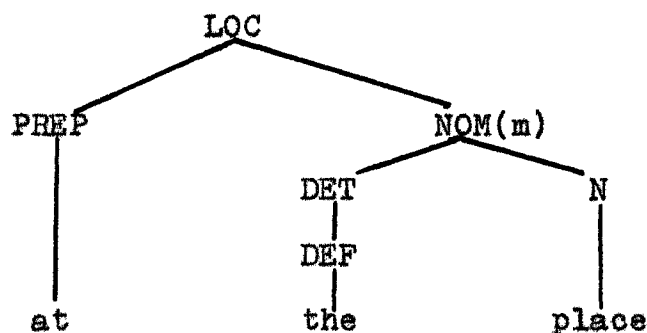
We were away from the others.-->
We sat away from the others.

When a V_{mot} is substituted for be, however, the adverbial changes from LOC to SOU or DIR, depending on the preposition:

We hurried away from the others.

V_{mot} cannot be substituted for be without a change both in semantics and in adverbial form.

3.5 Moving to a consideration of the prepositions which make up part of LOC, one notes the internal structure of the prepositional phrase which forms LOC:



According to the diagram above, the place is the nominal occurring as head of the adverbial of location. This is usually the pattern of the locative, which substitutes for the adverb there in a tree diagram--or, as Katz and Postal believe, there is a reduced form of the structure, at + some + place, since adverbs are, according to them, reduced versions of PREP + NOM.¹ Place usually becomes more specific

¹Katz and Postal, p. 129.

in the actual LOC: house, street, store. There are a wide variety of nouns that serve as the head of the LOC, including both mass and count nouns, most inanimate nouns, and occasionally an animate noun, but all of them seem to resemble place semantically. More important, the whole prepositional phrase is always replaceable by there.

3.6 As noted before, LOC takes up the bulk of prepositions in the lexicon, with fifty-five prepositions listed in this classification. With the exception of a small number, these same prepositions apply also to the classification of direction adverbial. This point is a major one to remember when considering these prepositions: they are not always absolute forms in themselves but may apply variously to one adverbial or another depending on syntax or verb. Nevertheless, the prepositions discussed in this group are termed LOC prepositions because, although they may possibly be used in other adverbial structures, their role in the place adverbial is being discussed here.

3.7 A study of the prepositions that make up adverbials of place reveals a preponderance of forms prefaced by a- or be-: aboard, above, between, beside. The a- is from Old English an, "on," and be- is from the Old English prefix be-, "by."² Although these two forms are the most common among locative prepositions, there are many others which

²Funk & Wagnalls, p. 13.

show that prepositions of today are often compounds that have swallowed up previous prepositional forms, usually along with their objects, an historical process which has resulted in the present kernel preposition form:

preposition + object--> kernel preposition

The object was typically a nominal, but may also have been an adverb or even an adjective.

3.8 For example, about is a combination of an and Old English butan, "outside."³ Beside is from Old English be sidan, "by the side of."⁴ There are many combinations not prefixed by a- or be-, of course. A simple preposition such as down, for example, hides the Old English prepositional phrase meaning "off the hill."⁵ Some combinations, on the other hand, are rather obvious, such as inside, outside, etc. But all of these have in common the structure of preposition plus nominal which, as one form, has become a preposition now taking an object of its own.

3.9 Understanding the historical process behind these forms helps to explain their present structure in kernel LOC. For example, between, coming from Old English twēonum, the dative plural of two,⁶ takes a plural object as follows:

$$\text{between} + \left\{ \begin{array}{l} \text{NOM} + \text{and} + \text{NOM} \\ \text{NOM} + \text{PL} \end{array} \right\}$$

Among, however, represents the noun mang, a "crowd."⁷ So it

³Ibid., p. 5.

⁴Ibid., p. 16.

⁵Ibid., p. 19.

⁶Ibid., p. 16.

⁷Ibid., p. 11.

is easy to see that the structure of a locative containing this preposition logically takes a plural object representing a larger number. But aside from the historical explanation, this sequence is set forth structurally by Zellig Harris, who categorizes certain morphemes according to their co-occurrence with others.⁸ However, he does not make the distinction between the two forms above. There is no structural distinction between the plural s form denoting two and that denoting more than two in English, but it should be noted that between is limited to only two nominals whereas among is not.

3.10 It is hard to pinpoint the locative's position in the sentence when prepositions are involved, but as the grammar shows, this adverbial comes after MAN, DIR, and SOU, and usually precedes the other adverbials in this position after the verb. Nevertheless, since most adverbials are fairly free elements in the sentence, one can be shifted to a position before LOC rather easily. This shift is probably the result of an optional transformation. Because LOC does appear with be, it lends itself fairly well to the sentence adverbial transformation, T-SM, also:

John was in the garden.
John worked among the petunias.-->

In the garden, John worked among the
petunias.

⁸Harris, p. 319.

or may follow the LOC:

The child napped at home after lunch.

The transformation mentioned in 3.10 may apply also, changing after lunch to the position preceding at home.

4.3 There is an important exception to be + PRED.

This occurs whenever the subject of the verb be is it, a form that substitutes for the time. In this construction, TM can follow be directly without the intervention of a PRED:

It is after lunch.
It is past noon.

This exception is important because it enjoys widespread use in English, and it accounts for an important structural difference in TM.

4.4 Ostensibly there are two classes of prepositions, one following be and the second following V; these two are interchangeable for the most part, however. Of the first class, consideration will be given only to the sequence it + is + time which requires no PRED, because the be + PRED structure is fairly regular and requires no further study. The important exception, on the other hand, offers some interesting structural points to consider. There are four prepositions in this category which are unique: of, till, to, and until. These can appear after it + is only with what appears to be a substantive expressing time:

It is two minutes until four.

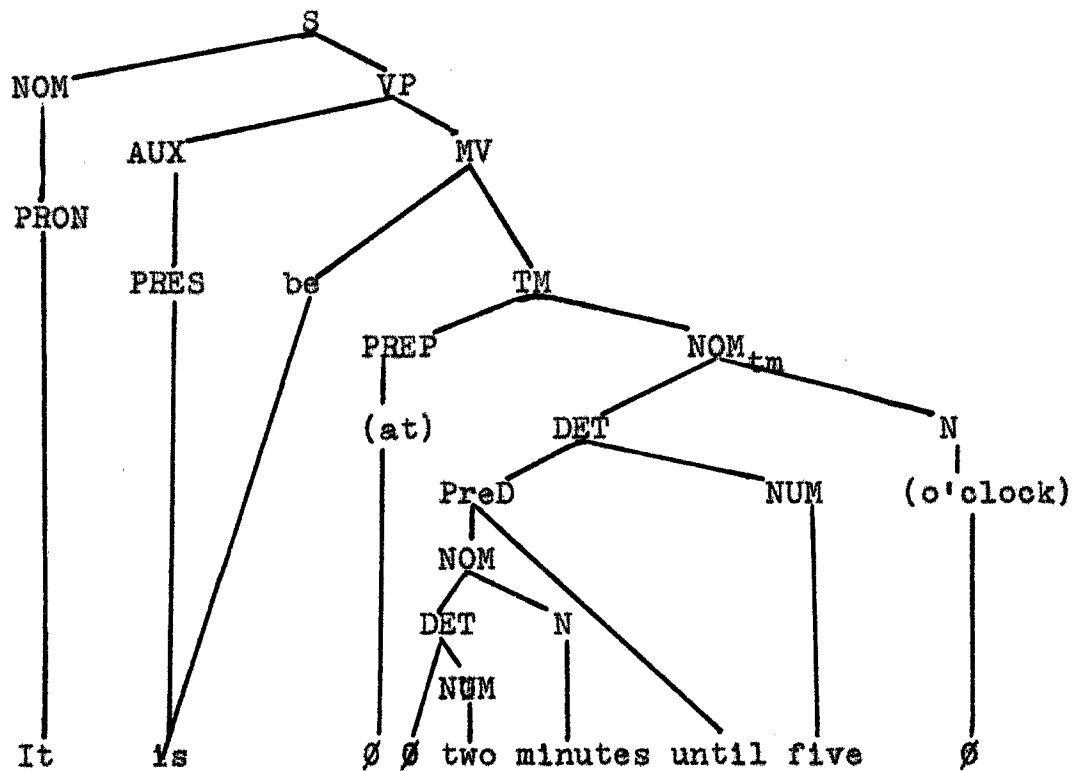
Actually, however, the preposition at and the NOM o'clock are implied, so that the whole construction, (at) two minutes until four (o'clock), constitutes TM. The rest of this group of prepositions may follow it + is directly without a preceding structure needed to make up part of the adverbial construction.

4.5 Regarding the sequence,

It is (at) two minutes until four (o'clock).

an interesting possibility would be to consider the implied forms, (at) (o'clock), as basic to the structure of TM and to derive two minutes until from a predeterminer and four from a determiner modifying o'clock. In this way, a restricter such as only could derive from the same node as two minutes. This structure is suggested by Stageberg in his discussion of prenominal modifiers.¹ The following diagram outlines such a structure:

¹Norman Stageberg, An Introductory English Grammar (New York, 1965), p. 244.



4.6 In the second classification of prepositions, those following V, the exceptions are the same. Four prepositions, of, till, to, and until, are the only ones that cannot follow V directly; they must be prefaced here again by at + NOM, except that here at is actually present, not just implied, and again it makes up part of TM:

She arrived at ten minutes until four.

These four prepositions take the following structure in the diagram which applies both to it + is and V:

$$TM \rightarrow (at) + NOM + \left\{ \begin{array}{l} of \\ to \\ till \\ until \end{array} \right\} + NOM$$

As for the rest of the prepositions in the TM class, these

can follow it + is or V directly and can apply to either of the two interchangeably.

4.7 The four prepositions mentioned are the only prepositions appearing in the TM category which cannot also occur in the LOC structure; to, an element of the adverbial of direction which occurs with verbs of motion, can be substituted by the other three prepositions. Therefore they are related to direction or movement (forward toward a future time) rather than location. It is true that they may follow V directly in a few cases:

It rained until noon.

without being prefaced by an at construction, but these exceptions are not adverbials of time; they fall into the category of adverbial of duration. Only with the preceding at phrase, fixing the location, do they become TM.

4.8 This fact leads to an important implication: There is a direct link not only between adverbials of duration and direction with their sense of motion, but also between locatives and adverbials of time with their stationary sense. The four prepositions mentioned above must be preceded by at to occur in TM, for the at serves to fix them at a certain point or place in time and cancels their sense of direction:

It rained until noon.

gives a sense of passing time, but

It rained at a quarter until noon.

places a chronological boundary mark at a certain specific period in time. In fact, it is possible that TM is a sub-classification of LOC, just as DUR may belong to the classification of DIR:

LOC

DIR

Space: He died at sea. He walked into the house.
Time: He died at noon. He talked into the evening.

4.9 The adverbial of time answers the question when, just as LOC answers the question where, and TM in its reduced form boils down to then. If it is true, however, that all adverbials are reduced versions of PREP + NOM structures, as Katz and Postal suggest, the reduced form of then would actually be something like at + some + time.² Almost all the classes of NOM in TM can be summed up as follows: they clearly refer to points or periods of time, whether by numerals on the clock: after twelve o'clock, or a period of the day: before noon, a day of the week: about Tuesday, or a month or year, even a century. At any rate, they all refer to chronological periods of time, measured by clock or calendar.

4.10 In addition to the transformational shift mentioned in 4.2 in which TM may precede the LOC after the verb, it should be pointed out that TM is a fairly free element which can occur in front of the sentence by T-SM. In this way it

²Katz and Postal, p. 141.

would be converted to a transformational sentence adverbial:

John worked in the garden after lunch.-->
After lunch, John worked in the garden.

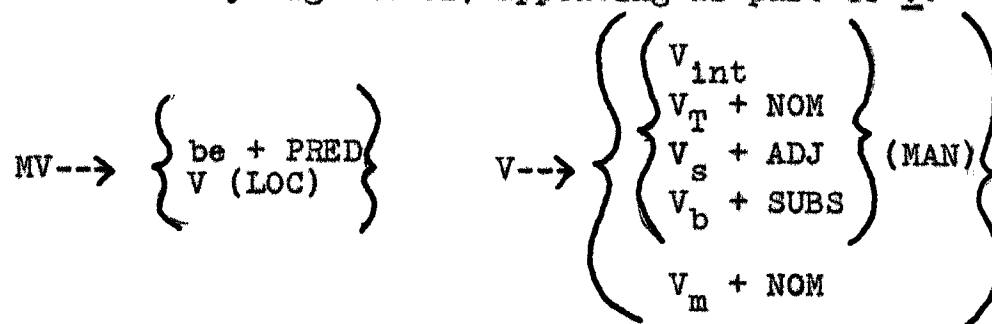
CHAPTER V

ADVERBIAL OF MANNER

5.1 The twenty-seven prepositions which occur in the adverbial of manner include the following:

after	despite	through	according to
against	for	under(neath)	by means of
along	from	unlike	in spite of
as	in	via	out of
at	like	with	
behind	off	within	
beyond	on	without	
by	per		

5.2 The manner adverbial, or MAN, appears in the grammar at a very high level, appearing as part of V:



MAN therefore does not co-occur with be, but it precedes LOC, which comes after V. Note, however, that it is an optional element with the verb, and that although it may appear with either a transitive or intransitive verb, it rarely follows a middle verb, or V_h (cost, resemble, have . . .):

*Bob has a car eagerly.

According to Roberts, verbs of the become and seem classes

may take MAN.¹ Gleason, however, includes one of the latter, look, to illustrate his statement that, as a general rule, linking verbs do not admit MAN:²

*Bulldogs look fierce rapidly.

5.3 There is evidently much work still needed on the classification of verbs with MAN before the situation can be clarified. For example, there are cases in which MAN can follow a verb of the middle:

The watch cost like the devil.
She resembled her mother in a way.

There is also the possibility, on the other hand, that the examples given to show that certain verb types cannot co-occur with MAN violate only semantic conventions, not structural occurrences. At any rate, Roberts' classification has been followed here, with the understanding that MAN does not follow be, along with many other linking verbs. It is entirely possible that in the future, clause patterns can be subdivided on the basis of their co-occurrence with MAN, as Gleason suggests.³

5.4 As noted in section 2.3, Katz and Postal have suggested that adverbials of the form ADJ + -ly derive from the sequence in + DET + ADJ + way. This means that a MAN such as happily is a transformation of in a happy way, and that all adverbials of manner have a preposition in their deep structure, whether the surface structure shows it or not.

¹Roberts, p. 58.

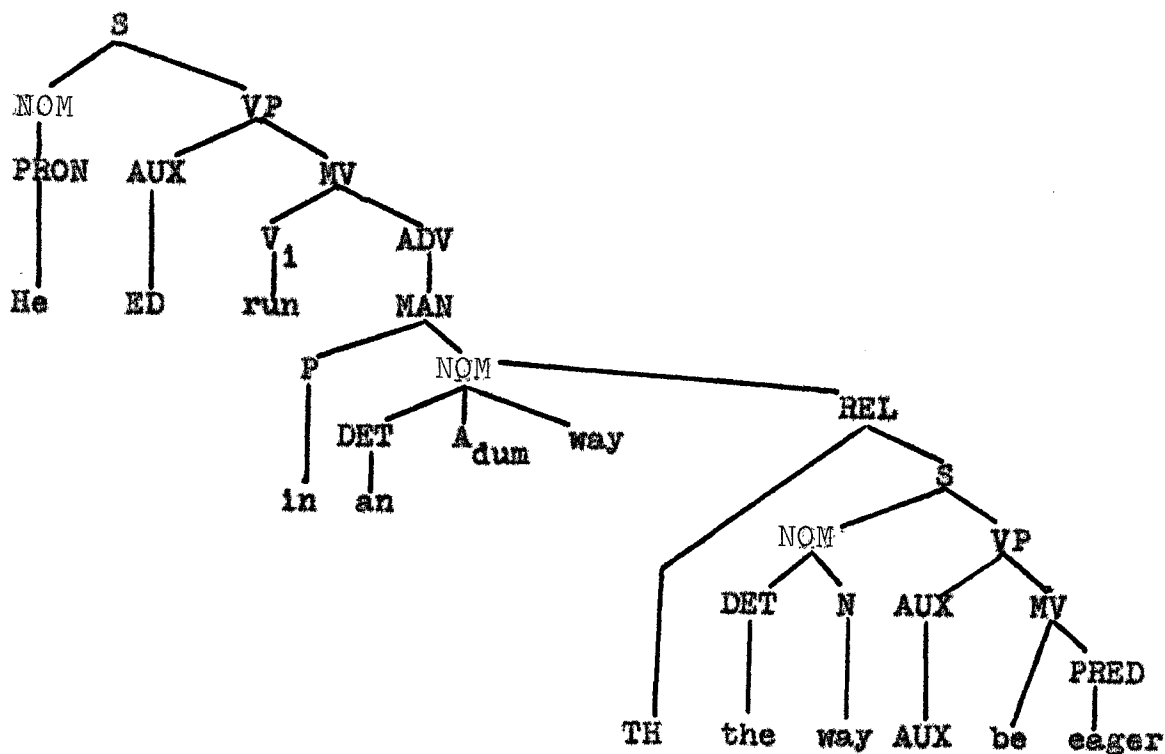
²Gleason, p. 311.

³Ibid.

Katz and Postal would have as a kernel rule, this kind of rewrite for adverbs:

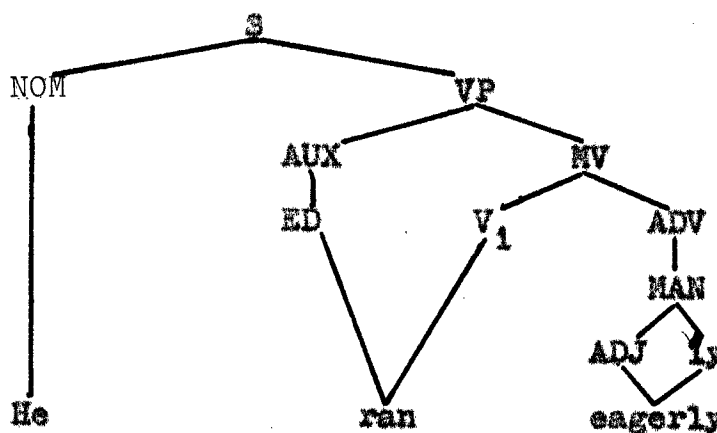
$$\text{ADV} \rightarrow \text{P} + \text{D}_1 + \text{A}_{\text{dum}} + \text{N} + \text{REL}^4$$

N would be rewritten as way, reason, time, place, etc., and the dummy adjective form, A_{dum}, would make it possible to derive ADJ + -ly. The following tree shows how this is arrived at from the deep structure:



5.5 Transformation rules provide for an obligatory relative clause containing be + ADJ to the NOM, which is then reconstructed as ADJ + -ly:

⁴Katz and Postal, p. 144.



Therefore it is apparent that it is the preposition-based adverbial which occurs in the deep structure of the language, not the -ly form, according to Katz and Postal. Since MAN answers the question how, just as LOC answers to where and TM, when, how would be a reduced form of in what way.

5.6 It was noted in 5.4 that the object of the preposition in MAN is N, which can be rewritten as way, manner, etc. The indefinite determiner, D₁, listed by Katz and Postal, is actually an optional form in the surface structure which is not always needed to modify N.⁵ However, one can generalize that when N takes certain forms, the use of a determiner can be predicted on a fairly regular basis. For example, when N is a verbal, no determiner is required:

He was skilled at painting.
They won by cheating.

If N is a proper noun, there is also no determiner needed:

The boy was named for Charles.

If a noun denotes a quality, it requires no determiner as N:

⁵Ibid., p. 141.

He spoke in anger.
They worked with vigor.

In most other cases, the N does require a determiner, although it can be either definite or indefinite. Also, an adjective is frequently used to modify N.

5.7 According to the grammar, it is evident that MAN can appear before LOC when MV is not be, and therefore precedes all other adverbials as well on a structural basis, except DIR and SOU. However, it was noted in 3.10 that other adverbials can be shifted to the front of MAN, and this is often the case:

She arrived at noon with a happy smile.

Adverbs of manner, transformational forms with -ly, can often occur before verbs:

She hurriedly ran to the store.

But structural preposition-based adverbials cannot:

*She in a hurry ran to the store.

5.8 Of the prepositions which serve in the structure of MAN, it is interesting to note that all occur also in LOC with the exception of four pairs of prepositions: despite and in spite of, per and according to, via and by (way) of, and like (unlike) and as. It is probably no coincidence that the meanings of the first and second preposition in three pairs are identical, the first a one-word borrowed form and the second a more cumbersome Anglo-Saxon phrase. These eight prepositions appear only in MAN; they are unique in

this respect. The last pair, as and like, are used frequently, both denoting a relation of similarity or resemblance:

He served as best man.
He took it like a man.

Probably the two prepositions most commonly used in MAN, however, are with and in, for they can easily make up constructions similar to -ly adverbs (in a hurry--hurriedly; with anger--angrily). At (at a glance) and by (by force) also appear frequently.

CHAPTER VI

ADVERBIAL OF DIRECTION

6.1 The forty-three prepositions which occur in the adverbial of direction, or DIR, are as follows:

aboard	athwart	near	as far as
about	atop	off	back of
above	before	onto	over to
across	behind	opposite	up to
against	below	over	
along	beneath	past	
alongside	between	round	
amid	beyond	through	
among	by	throughout	
around	diagonal	to	
aslant	down	toward(s)	
astraddle	far	under(neath)	
astride	into	up	

6.2 As shown in the grammar, the adverbial of direction occurs with the intransitive verb, more specifically as the complement of an intransitive verb of motion:

$$V_{int} \rightarrow \left\{ \begin{array}{l} V_1 \\ V_{1C} + COMP \end{array} \right\}$$

V₁ can be divided further into two classes, depending upon the verb used:

$$V_{1C} \rightarrow \left\{ \begin{array}{l} V_{stat} \\ V_{mot} \end{array} \right\}$$

It has already been pointed out that LOC occurs with V_{stat} in section 3.3; actually, at a higher level LOC may also occur with other verb types, including V_T. DIR, however, can

be preceded only by verbs of motion; it is quite limited in this respect:

$$\begin{array}{ccc}
 V_{\text{mot}} + \text{COMP} & \rightarrow & V_{\text{mot}} + \text{COMP}_{\text{mot}} \\
 \text{COMP}_{\text{mot}} & \rightarrow & \left\{ \begin{array}{c} \text{DIR} \\ \text{SOU} \end{array} \right\}
 \end{array}$$

Verbs of motion include such forms as run, hurry, walk, or any verb denoting motion or direction.

6:3 As shown in the grammar, DIR prepositions form a close relationship with the verb, probably closer than most other adverbials which are not quite so dependent upon the verb. It will be noted in the next few sections, for example, that DIR is not quite so free syntactically as some other adverbials. The prepositional form which co-occurs with the transitive verb, however, forms such a rigid complement that it has been omitted as DIR:

He put the gun on the table.

This structure is presented in rule seven of the grammar and discussed in section 1.12-15. As a matter of fact, some grammarians, such as Troike, would exclude DIR, which occurs with V₁, from the structure of adverbial on this same basis.¹

6.4 It has been mentioned before that prepositions are usually not absolute forms in themselves; the list of prepositions in the LOC classification of the lexicon overlaps that of DIR. In fact, the similarity often gives rise to

¹Troike, p. 36.

some confusion, but there are two simple ways to distinguish LOC from DIR. The most obvious is to check to see whether the verb is V_{mot} or V_{stat}. Moreover, of the forty-three prepositions which occur in DIR, there are seven which can serve in DIR but never in LOC. These seven prepositions comprise the to-group: into, onto, to, toward(s), over to, and up to.

6.5 There is an important functional reason which precludes the use of these prepositions in LOC. The latter can follow be--that is, a sentence such as

He stood in the corner.

can be converted to

He was in the corner.

with no important semantic change. The to-group, however, cannot follow be:

*She was to the store.

is not grammatical. It should be added that there are some exceptions in colloquial use; for example, in some Midwest American dialects this structure is acceptable. Nevertheless, this rule holds true generally.

6.6 Syntactic structure places DIR directly after the intransitive verb, taking its place before MAN. One can say

We walked there in a hurry.

but not

*We walked in a hurry there.

But when DIR is a preposition-based adverbial, not an adverb, the syntax is a little freer and the transformation noted in 3.10 can occur in some cases:

We walked to the store in a hurry.
We walked in a hurry to the store.

The length of DIR in this case probably makes syntax much looser than usual. It should be noted that word order here is also relatively unimportant in identifying the structure after the verb, with the result that it should not be used as the basis for making the distinction between LOC and DIR.

6.7 There is still one more way to make this distinction; it is important to note that DIR rarely occurs before the subject of the sentence, either as a simple T-SM or as a two-string transformational sentence adverbial, except in poetry. Nor can it appear between the NOM functioning as subject of the sentence and the verb, a structure derived from the relative transformation, as it can in LOC. These transformations usually require be in the insert sentence, and DIR, as pointed out in 6.5, cannot follow be. Examine the following sentences:

The fish swam slowly into the pool. (-->)
The fish swam slowly in the pool. (⊙)

The adverbial in the first sentence, a DIR, cannot be transferred before the verb, either before the subject or the verb except in poetic forms:

*Into the pool the fish swam slowly.
*The fish into the pool swam slowly.

However, the following sentences with LOC will obtain, even though there is a semantic change in the second sentence as the result of T-REL:

In the pool the fish swam slowly.
The fish in the pool swam slowly.

If there is any doubt whether an adverbial denotes LOC or DIR when the preposition belongs to both categories, then, the adverbial can be tested to see whether it co-occurs with V_{mot} or V_{stat}; whether it can follow be, or whether it can occur before the subject or verb of the sentence in normal usage.

6.8 To has been mentioned as a uniquely DIR form.

However, to as a preposition must be carefully distinguished from to used as the sign of the infinitive:

The soldiers were prepared to fight.

To as a preposition also must not be confused with the to used as indirect object noted in 1.16:

Susan gave the tie to George.

In addition, there is a form of to that occurs as part of the "separable" verb mentioned in 1.12, such as answer to and listen to. Another preposition of the to-group, toward, is a unique form deriving from Old English to and -weard, a suffix denoting "motion to or from."² It is thus a modified form of to, never reaching the full force of this form but always stopping with the idea of direction or approach.

²Funk & Wagnalls, p. 33.

The other prepositions in this group are simple to forms combined with adverbs to give them a more specific direction.

6.9 Of the prepositions which may occur in either LOC or DIR, the form along is worth mentioning because it carries the idea of "extent or motion in the direction of length."³

Beside and by may convey this same meaning:

We walked by the river.
We walked beside the river.
We walked along the river.

Usually a V_{mot} will accompany DIR, whereas V_{stat} most often occurs with LOC:

We sat by the river.
We sat beside the river.
We sat along the river.

6.10 Although TM answers the question when and LOC, the question where, DIR can answer only the obsolete form whence (to where). Its reduced form, the obsolete thence, would then be derived from to + some + place, if the theory that adverbs are reduced versions of P + N structures is accepted. With the loss of thence, DIR has sometimes been the source of confusion because there is usually nothing to distinguish (-->) and (⊗).

³Ibid., p. 4.

CHAPTER VII

ADVERBIAL OF SOURCE

7.1 Prepositions which occur in the adverbial of source, or SOU, consist of the from-group:

across from	down from	from
apart from	up from	
away from		

and its equivalent, of, with its variations:

out (of)
outside (of)
of

SOU is introduced in the phrase-structure grammar in conjunction with DIR. Like DIR it cannot co-occur with be, only the V classification of the main verb; more specifically, it requires the intransitive verb which has a complement, or V_{1C} ± COMP, and from this structure it is narrowed down even further to the verb of motion which takes a complement of motion, either DIR or SOU:

$$V_{\text{mot}} + \text{COMP} \rightarrow V_{\text{mot}} + \text{COMP}_{\text{mot}}$$
$$\text{COMP}_{\text{mot}} \rightarrow \left\{ \begin{array}{l} \text{DIR} \\ \text{SOU} \end{array} \right\}$$

7.2 This adverbial has the same structure as DIR; besides the fact that it cannot appear with be, it cannot appear before the subject or verb of a sentence:

*From the building he ran.

nor appear in a transformation where be is required in the insert string. But there is an exception to this rule which will be discussed in detail later. However, although DIR and SOU are related structurally as a pair and co-occur with V_{mot}, the first appears in the WH-transformation as where . . . to and the second as where . . . from. A more obvious difference is the fact that they use different prepositions: just as to is the preposition which signifies DIR (to + some + place), from signifies SOU, which may be summed up as from + some + place:

He ran to the building.
He ran from the building.

7.3 The prepositions used in this particular adverbial, in fact, are almost uniquely in the from class. As mentioned in 7.1, there are the from-group and the of-group, the latter just an older variation of from. Most are used in LOC and SOU adverbials, but from and out of occur also in MAN, the former again in DUR, while of appears also in TM. The NOM which serves as object of the preposition in SOU specifies place or location in some manner: the store, Texas, 29 Main Place. Therefore they all have this characteristic which they share with the LOC, with the difference that LOC usually takes V_{stat} whereas SOU and DIR take V_{mot}.

7.4 It was mentioned in section 7.2 that SOU could not co-occur with be. This is true with most prepositions appearing in SOU; when be is used, one can generally assume

that the adverbial is a LOC. It will then answer the question where with from omitted:

Where is he?	{	He is across from the garage. He is apart from the group. He is away from the office. He is down from the attic. He is up from the cellar. He is out of the building. He is outside of the store.
--------------	---	---

However, when the simpler forms from and of are employed, from is needed in the WH-transformation:

Where is he from?	{	He is from Missouri. He is of Ireland.
-------------------	---	---

Obviously these adverbials would not be classified as LOC, but they do appear with be. Although of is becoming archaic or poetic in usage, from in this sequence is used very widely. Therefore, it accounts for an important exception to the statement that SOU co-occurs only with V_{mot}. Yet it could perhaps be explained as an abbreviated form of V_{mot} with only the auxiliary remaining:

He is (come) from Ireland.

The auxiliary today would of course be have, but one might conjecture that at the time the deletion took effect, be was actually the auxiliary form.

7.5 As mentioned in section 7.3, from serves not only in SOU but in DUR. For example, one might say

The building dated from 1600.

Here there may be some question whether from appears in SOU or DUR, for the question form, when, does not absorb the

preposition as it usually does:

When does the building date from?
is the result. Nevertheless, from in SOU is usually replaced by where . . . from, and the form here is definitely when . . . from. Also, there are other cases in which prepositions occurring in DUR are not absorbed by the WH-form.

I will be here for one hour.
How long will you be here for?

The line between SOU and DUR can sometimes be somewhat thin, however, and the form above might be challenged as SOU. On the other hand,

The society dated from 1600 to 1900.
would definitely belong to the DUR category, whereas the two sentences,

He drove from Fort Worth to Dallas.
He drove to Fort Worth from Dallas.

would be classified as SOU-DIR and DIR-SOU, for these two adverbials can appear concurrently with V_{mot}; neither has precedence.

7.6 It has been stated that from signifies SOU; interestingly, from is originally Old English fram, signifying primarily "removal or separation in space or time."¹ Another use of from, as in

The airport is five miles from Denton.
is actually LOC with at implied but omitted. At is needed

¹Ibid., p. 19.

here just as it is needed with to in TM (4.6) because from, just as to, co-occurs with V_{mot} only and requires the LOC form, at, to be able to co-occur with be, or else it would not qualify in this particular structure.

is TM or DUR depending upon the verb used:

He arrived as late as eight o'clock. (TM)
 He remained as late as eight o'clock. (DUR)

Clearly this is indicative of the need to subcategorize verbs according to their adverbials. In the first sentence, the WH-transformation would be when, and in the second the question form would be how long.

8.3 If how long is the question form of DUR, the basic prepositional form is probably for some time. This would contrast to the form for TM: at some time. It was suggested in section 4.8 that TM may be a subclassification of LOC and that DUR may belong to DIR in the same way, owing to their prepositional forms. In most cases, it must be noted, prepositions which appear in DUR appear also in DIR. The exceptions are obvious: as late as refers to a temporal idea, but it has a counterpart in DIR: as far as. During and since appear only in DUR; they are unique in this respect, and they also have a temporal status. Till and until also express this, and from, in addition to appearing in DUR, occurs in SOU, a counterpart of DIR with V_{mot}. Therefore it can be stated that DUR and DIR have definite structural similarities, with only obvious exceptions relating to their differing spatial and temporal concepts (4.8).

8.4 One characteristic of DUR is that the preposition is sometimes omitted:

The boys stayed (for) three hours.

Note that the object of the preposition in DUR is usually a temporal expression. In this case, as in the case of the prepositions listed in 8.3, DUR does have something in common with TM, in addition to filling the same slot. This object is expressed in minutes, hours, days, weeks, months, years, just as in TM. It is often expressed in digits, representing periods of time as measured by the clock or calendar.

8.5 One very interesting preposition which occurs in DUR is since, a form uniquely DUR which is unusual in that it almost never occurs in the present tense:

*They are here since noon.

In most cases this particular structure requires have + en to be grammatical:

They have been here since noon.

The preterit tense is also grammatical with since, although not as common:

They were here since noon.

8.6 Although DUR appears after be, it does not usually appear before the subject of the sentence:

*Till midnight, he stayed.

However, there are some cases in which it is transposed by T-SM, depending on the preposition used in DUR. In general there are seven of these prepositions occurring in DUR when it can be shifted: during, for, through(out), until, across,

along, and down:

The students played gin rummy for three hours.-->
For three hours the students played gin rummy.

Other prepositions in this category may sometimes occur before the subject of the sentence, but usually in some other adverbial structure, not DUR.

exceptions:

The girls on occasion were late to supper.
 In this respect it is similar to MAN; the preposition-based form causes a change in syntax (section 5.7). Its position following the verb, according to the phrase-structure grammar, follows MAN and LOC, as well as the complements DIR and SOU, and is co-equivalent to TM and DUR. It is not surprising, however, that when FRQ appears as a preposition-based adverbial, the transformational shift to various positions following the verb, mentioned in section 3.10, is fairly common:

She worked in the office at times.
 She worked at times in the office.

Syntax would depend upon where emphasis was placed.

9.3 FRQ poses the question how often or how many times in the WH-transformation, taking an optional adverb of degree in the yes-no question form:

How often did he come? How many times did he come?
 Did he come very often? Did he come very many times?

There is a prototype adverbial structure of at times. FRQ is necessarily limited to a handful of prepositions, at and on, because of the nature of this structure, which appears in transformational adverb form as occasionally, sometimes, often, frequently, seldom, etc. The preposition in, as in

The machine gun was fired in rapid succession.
 The water came in quick spurts.

semantically presents a possible case as belonging to FRQ,

but structurally it presents the WH-transformation as how rather than how many times, and thus is best considered as belonging to MAN.

9.4 The structure of FRQ requires a NOM serving as object of the preposition which is usually in the plural form. On can be followed by periods of time, such as days of the week or months of the year, in addition to the form occasion which is either in plural form or expresses continual action, signified by use of the present tense:

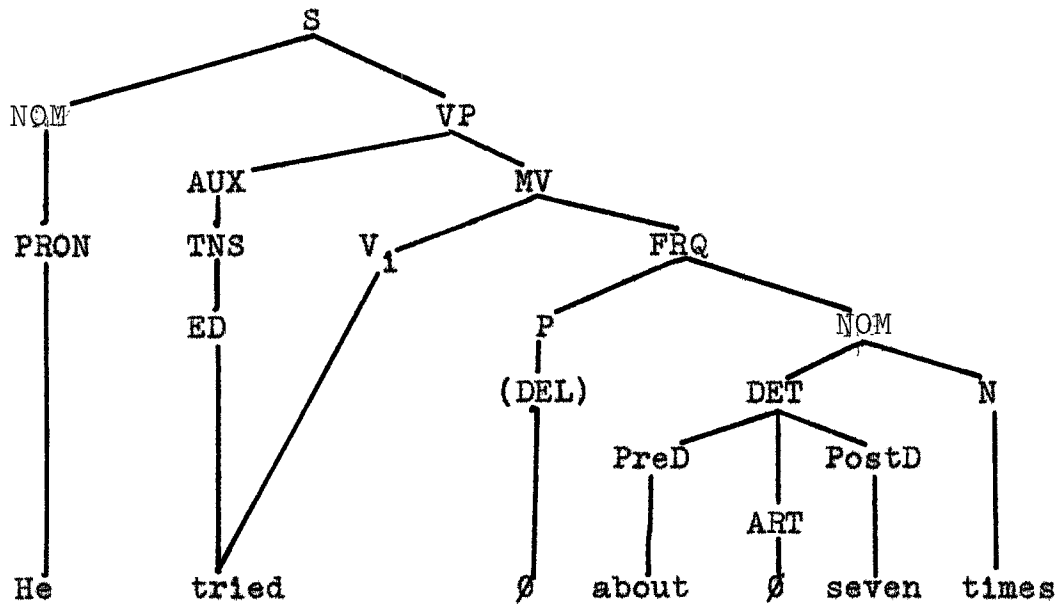
He came on three occasions.
He comes on occasion.

At can be followed by expressions of time in the plural, including times, intervals, etc. Thus one characteristic of FRQ can be stated as its tendency to be expressed in the plural, with the exception noted above.

9.5 Both prepositions may sometimes be omitted:

The maid comes every Tuesday and Friday.
He tried about three times.

Note that when the preposition is deleted, there is usually a fill-in by the determiner:



9.6 It is interesting to note that at and on appear also in TM and LOC, but it would be very difficult to subclassify FRQ under any other adverbial form until more research is done. Semantically there would be a tendency to classify it under TM because the object of the preposition is expressed temporally, but this would be structurally unsound; it has already been pointed out that although DUR expresses a temporal state, it is more nearly related to DIR than TM. One of the differences between FRQ and TM is that the former is expressed in the plural and the latter is singular. It would take a great deal of research in order to establish a link between FRQ and other adverbials.

CHAPTER X

ADVERBIAL OF PURPOSE

10.1 The adverbial of purpose, or PUR, just as FRQ, is limited to two prepositions:

on
for

PUR appears with several other adverbials in its position following the main verb in the phrase-structure grammar:

VP--> AUX + MV (TM) (DUR) (FRQ) (PUR)

MV--> { be + PRED }
 { V (LOC) }

After be it takes a predicate, either a substantive and possibly LOC or just LOC alone:

He was early (in the office) for a reason.

After the verb, PUR can appear with or without LOC:

He worked (in the yard) for good cause.

PUR therefore appears in the grammar in the same slot as the great bulk of adverbials.

10.2 PUR does not ordinarily appear at the front of the sentence in T-SM as do FRQ or LOC.

*For a reason she is working.

is not grammatical, although there are a few constructions which under certain circumstances are acceptable, as when the NOM contains the indefinite determiner some:

For some reason, the window was left open.
 Other exceptions might include modified NOM, etc. There are also a few exceptions to the rule that PUR does not appear between the subject and the verb of a sentence:

Herbert, for a good reason, was late to the office.
 After the verb, PUR appears in conjunction with the three other adverbials mentioned in 10.1:

He was in the office frequently at noon for a good reason.
 The location of PUR after the verb is varied. It can appear after TM, which is often last in order when more than one adverbial appears in a sentence, for example. But the transformational shift mentioned in 3.10 can sometimes shift it before even LOC:

The child hid on purpose in the tall weeds.

10.3 PUR appears in the following structures:

$$\text{PUR} \rightarrow \left\{ \begin{array}{l} \text{for + D + reason} \\ \text{on + purpose} \end{array} \right\}$$

Such structures are necessary to account for WH questions:

Why did he come?
 What did he come for?

The WH-transformations why and what for have their counterpart in the prototype phrase-structure adverbial for some purpose. The object of the preposition is a NOM which can specifically substitute for purpose: reason, cause, etc. Since there are also few prepositions which can occur in PUR, this adverbial is therefore quite limited. It is useful.

however, in accounting for the structure because (for the reason that . . .).

10.4 If a NOM other than those mentioned in 10.3 appears as the object of the preposition, the adverbial is altered to a great degree. For example, sequences such as

We ran for a doctor.
She is working for her degree.

are not adverbials of purpose, but complements of the verb; run for and work for form transitive verbs taking as objects doctor and degree (section 1.12). Two contrasting sentences will show the difference here:

What are you working for? (why?)
What are you working for? (for what object?)

10.5 The preposition for which appears in PUR should also be kept distinct from the be + for + NOM sequence:¹

Subways are for sleeping.

In the same way, it should not be confused with T-for-to:²

He waited. John came.-->
He waited for John to come.

Also, the other preposition appearing in PUR, on, is sometimes confused with that appearing in MAN:

He refused on purpose.
He refused on impulse.

The first sentence, containing PUR, answers to the question why whereas MAN, in the second sentence, answers to how.

¹Thomas, p. 114.

²Roberts, p. 401.

but the similarity of the two structures can sometimes cause confusion.

APPENDIX

LEXICON OF ENGLISH PREPOSITIONS

No.	Preposition	L	DI	T	Du	M	F	S	P	SA
1.	aboard	X	X							
2.	about	X	X							
3.	above	X	X	X						
4.	according to					X				
5.	across	X	X		X					
6.	across from	X						X		
7.	after	X		X		X				
8.	against	X	X	X		X				
9.	along	X	X		X	X				
10.	alongside	X	X							
11.	alongside of	X								
12.	amid	X	X							
13.	among	X	X							
14.	apart from	X						X		
15.	around	X	X							
16.	as					X				
17.	as far (close) as	X	X							
18.	as late (early) as			X	X					

Adverbial Key: L-Location DI-Direction T-Time Du-Duration M-Manner F-Frequency S-Source P-Purpose SA-Sentence Adverbial

No.	Preposition	L	D1	T	Du	M	F	S	P	SA
19.	aslant	X	X							
20.	astraddle	X	X							
21.	astride	X	X							
22.	at	X		X		X	X			
23.	athwart	X	X							
24.	atop	X	X							
25.	away from	X						X		
26.	back of	X	X							
27.	before	X	X	X						
28.	behind	X	X			X				
29.	below	X	X							
30.	beneath	X	X							
31.	beside	X								
32.	between	X	X	X						
33.	beyond	X	X		X	X				
34.	by	X	X	X		X				
35.	by means ^{reason} (way) of					X				
36.	down	X	X		X					
37.	down from	X						X		
38.	despite					X				
39.	diagonal	X	X							
40.	during			X	X					
41.	for		X		X	X			X	
42.	from				X	X		X		

No.	Preposition	L	Di	T	Du	M	F	S	P	SA
43.	in	X		X		X				
44.	in spite of					X				
45.	inside of	X		X						
46.	into		X		X					
47.	like					X				
48.	near	X	X	X						
49.	of			X				X		X
50.	off	X	X			X				
51.	on	X		X		X	X		X	
52.	onto		X							
53.	opposite	X	X							
54.	out	X						X		
55.	out of	X				X		X		
56.	outside (of)	X						X		
57.	over	X	X							
58.	over to		X							
59.	past	X	X	X						
60.	per					X				
61.	round	X	X		X					
62.	since				X					
63.	through	X	X		X	X				
64.	throughout	X	X		X					
65.	till			X	X					
66.	to		X	X						

No.	Preposition	L	D1	T	Du	M	F	S	P	SA
67.	toward(s)		X	X						
68.	under(neath)	X	X			X				
69.	unlike					X				
70.	until			X	X					
71.	up	X	X							
72.	up from	X						X		
73.	up to		X		X					
74.	upon	X		X						
75.	via					X				
76.	with	X		X		X				
77.	within	X		X		X				
78.	without	X				X				

EXAMPLE SENTENCES OF PREPOSITIONS IN THE LEXICON

1. The men sat aboard the plane.
The men climbed aboard the plane.
2. Henry stayed about the house on Tuesday.
Henry walked about the house.
3. The sign was above the window.
The plane flew above the clouds.
It must be above two o'clock.
4. Sherman did the job according to directions.
5. The town lies across the bridge.
Alice ran across the bridge.
The tradition dates across the years.
6. The store is across from my house.
He ran across from the building.
7. The boy had to stand in line after two other men.
We will leave after lunch.
He answered the questions after a fashion.
8. The boys leaned against the fence.
He pushed the chair against the door.
It is only a minute against the bell.
She did it against my wishes.
9. Many trees are planted along the road.
We bicycled along the lane.
This theory has been discussed along the centuries.
We talked along these same lines.
10. Many people stood alongside the ship as it docked.
We hurried alongside the steamer.
11. Flowers grew alongside of the road.
12. Flowers grew amid the weeds.
She ran amid the displays looking for the book.
13. She stood among the ancient ruins.
Boys ran among the crowd selling papers.
14. This work stands apart from the others.
Dorothy drew apart from the crowd.
15. The store is just around the corner.
The train sped around the corner.
16. He talked to the youth as a friend.
17. We were as close as anyone else.
Herman ran as far as the post.
18. It is as late as six o'clock, I am sure.
He often stays as late as seven.
19. She lay aslant the hammock.
Vines grew aslant the roof.
20. He sat astraddle the horse.
George jumped astraddle the fence.
21. The boy sat astride the pony.
The cowboy swung astride the horse.

22. Mary is surely at the store.
He said he would arrive at six o'clock.
I saw at a glance what she was making.
They come at times.
23. He stood athwart our path.
His plans ran athwart the teacher's wishes.
24. The sign stood atop the roof.
The cat climbed atop the tree.
25. The men were all away from camp.
The boy ran away from home.
26. We stood back of the others.
The actors hurried back of the stage.
27. He stood before the audience.
He hurried before the audience.
28. The tree grew behind the well.
Harry rushed behind his desk.
They are working behind time.
29. We sat below deck talking.
The sailors jumped below deck.
30. The dog sat beneath the porch.
People were strolling beneath the stars.
31. Jim sat beside the dog.
32. I sat between the two girls.
We drove between the towns.
It must have been between four and five o'clock.
33. His home is beyond the mountains.
She swam beyond the marker.
We will stay beyond supper.
She convinced him beyond a doubt.
34. The boy stood by his friend.
We passed by Denton after noon.
We will arrive by five o'clock.
He won by working hard.
35. They raised the piano by means of a hoist.
36. The woman lives five miles down the road.
He tirelessly hurried down the road.
They toiled without ceasing down the hours.
37. The boy is down from the roof now.
He climbed down from the roof on a ladder.
38. The man finished his job despite difficulties.
39. The store was located diagonal the post office.
The team ran diagonal the field.
40. George died during the storm.
Mary shopped during her lunch hour.
41. The countryside stretching for miles is beautiful.
It has not rained for many years.
The child had suffered for lack of food.
I was late for a good reason.
42. The village dates from 1600.
The building crumbled from age.
He hurried from the building.

43. They served coffee in the library.
He will arrive in ten minutes.
He certainly dresses in style.
44. They continued in spite of difficulties.
45. We stayed inside (of) the fence.
He left inside (of) an hour.
46. Harry walked into the office.
They worked into the evening.
47. The boy fought like a professional.
48. We lived near the lake.
Joe hurried near the town.
It was near midnight when they left.
49. We started at a quarter of four.
The boy comes of a good family.
Of course, she will leave early.
50. We deliberately stayed off the subject.
The man jumped off the bridge.
The statement was made off the record.
51. We formerly lived on Elm Street.
He will arrive on the hour.
She stayed behind on a hunch.
On occasion he is late.
She stayed behind on purpose.
52. Henry jumped onto the train.
53. The station is opposite the bank.
He ran opposite the fieldhouse.
54. Richard leaned out the window.
He ran out the door.
55. We stayed out of the drafty corner.
He came out of curiosity.
We hurried out of the room.
56. We were outside (of) the building at the time.
The boy hurried outside (of) the room.
57. A sign was placed over the door.
The cow jumped over the moon.
58. The passengers crowded over to the side of the ship.
59. He was past the gate.
He ran past the gate.
I am sure it was past noon.
60. Jim did the work per instructions.
61. The horse was already round the third lap.
The boy hurried round the corner.
They worked round the clock.
62. He has been working since eight o'clock.
63. We were soon through customs.
We drove through the city.
We worked through the night.
We left early through a mistake.
64. Police were stationed throughout the building.
Sarah walked throughout the city.
We stayed throughout the evening.

65. He left at ten minutes till one.
They waited till noon.
66. Herman walked to class.
She left at fifteen minutes to four.
67. He hurried toward(s) the store.
It must be well toward(s) noon.
68. We sat under(neath) the umbrella.
He fell under(neath) the bridge.
She acted under(neath) the influence of her mother.
69. He looked unlike an ill person.
70. We arrived at a quarter until noon.
Jane worked until closing time.
71. We were fishing up the creek.
They sailed up the river.
72. The man is up from the ranks.
He ran up from the cellar.
73. The boys ran up to the attic.
We worked up to an hour in the office.
74. The men worked upon a platform.
We left upon the hour.
75. We arrived via Stockholm.
76. George wanted to stay with the others.
With the break of day we began working.
She did the job with enthusiasm.
77. We lived within the city.
Within an hour they will arrive.
We can do the work within certain limits.
78. They stood without the door.
He finished the work without a qualm.

GLOSSARY

Glossary A: Dependent Forms (Section 1.10)

a-, ante-, anti-, by-, circum-, cis-, co-, contra-, counter-,
 de-, dis-, em-, en-, epi-, ex-, extra-, for-, fore-, hyper-,
 hypo-, il-, im-, in-, infra-, inter-, intra-, intro-, ir-,
 meta-, mid-, para-, peri-, post-, pre-, preter-, pro-, sub-,
 super-, sur-, syn-, thorough-, through-, trans-, ultra-,
 with-

Glossary B: Archaic Prepositions (Section 1.11)

abaft, adown, aloft, amidst, amongst, anent, bating, betwixt,
 ere, forth, unto, withal

Glossary C: Non-shiftable Particles (Section 1.14)

about (ask, forget, know, mind); against (fight, hold, offend);
 at (catch, clutch, fire, get, grasp, guess, play, point,
 strike, wonder); for (allow, arrange, ask, beg, care, fear,
 hope, lack, prepare, provide, search, seek, stand, think, try,
 want, wish); from (depart, dismiss, escape, flee, refrain);
 in (believe, indulge, share); into (enter, examine, inves-
 tigate, penetrate); of (approve, boast, hear, know, make,
 partake, repent, taste, treat); on, upon (attend, begin, call,
 decide, enter, improve, jar, operate, ponder, prevail, play,
 remark, resolve, seize, spy, touch, wait); over (ponder,
 tyrannize, watch); to (admit, answer, attain, attend, confess,
 lecture, listen, pretend, see, stick, trust, witness); with
 (bear, consult, fight, finish, marry, meet, visit)

Glossary D: Shiftable Particles (Section 1.14)

bring down, in, out, up; drop in; hand down, in, out, round;
 help along, out; hold down, in, off, over; pass by, off,
 over; put across, down, off, on; shake off; show around, off,
 up; slice up; stamp out; tear up, down; throw down, in,
 up

Glossary E: Participials (Section 1.17)

according to, barring, bating, concerning, considering,
 excepting, excluding, in keeping with, including, not-
 withstanding, pending, regarding, respecting, saving,
 touching

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