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# A Graphemic Analysis of an Old English Text: The Parker Manuscript, the Laws of Alfred & Ine

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A GRAPHEMIC ANALYSIS OF AN OLD ENGLISH TEXT:  
THE PARKER MANUSCRIPT, THE LAWS OF ALFRED AND INE

A thesis

Presented to

the Faculty of the Department of English

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Bowling Green, Kentucky

In Partial Fulfillment

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Master of Arts

by

Mary Anne Reiss

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A GRAPHEMIC ANALYSIS OF AN OLD ENGLISH TEXT:  
THE PARKER MANUSCRIPT, THE LAWS OF ALFRED AND INE

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## CHAPTER I

### INTRODUCTION

1.1 Purpose and Limitations. This study may be considered an exercise in graphemic analysis. It proceeds from the point of view that writing is an independent manifestation of language. As such, the writing system of a language may be subject to a descriptive analysis based upon methods similar to those used in the analysis of spoken language systems. The purpose of such a description is to determine the distinctive and non-distinctive elements of the system.

Chapter V of this study is a graphemic analysis of one section of the Parker Manuscript. This analysis is based upon the principles discussed in Chapter II and follows the specific criteria presented in Chapter IV. Since the writing system of the text is an alphabetic one, Chapter VI indicates, to a limited extent, the relationship or fit of the writing system with the Late West Saxon dialect of Old English, of which the Parker Manuscript is a specimen.

1.2 Sources. The text chosen for the purpose of analysis is one section of the Parker Manuscript, The Laws of Alfred and the Laws of Ine. It was selected primarily because of its availability and legibility. Chapter III presents further information concerning the text.

Among secondary sources relied on in this study, three are of primary importance. A short article by R. A. Crossland<sup>1</sup> is the source for the basic terminology. Studies by John C. McLaughlin<sup>2</sup> and Bardhyl Pogoni<sup>3</sup> are detailed analyses of specific writing systems. McLaughlin analyzes graphemically a Middle English text and then re-interprets the phonemic system of the relevant spoken dialect in the light of the graphemic evidence. Pogoni's study presents graphemic analyses of major Albanian writing systems and indicates their significance in the development of modern written Albanian. The criteria employed in the present study are adapted, in many instances, from these two sources.

### 1.3 Symbols Used.

<u>      </u>	Graphs and words are underlined.
<u>Σ</u>	contains allographs.
<>	contains graphemes and graphic allophones.
=	contains morphographs.
<u>Σ-Σ</u>	contains morpho-allographs.

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<sup>1</sup>R. A. Crossland, "Graphic Linguistics and Its Terminology," Proceedings of the University of Durham Philosophical Society, I (1957).

<sup>2</sup>John Cameron McLaughlin, "A Graphemic-Phonemic Study of a Middle English Manuscript: MS. Cotton Nero A.x." (Ph.D. dissertation Dept. of Language and Literature, Linguistics, Indiana University, 1961).

<sup>3</sup>Bardhyl Pogoni, "Albanian Writing Systems" (unpublished Ph.D. dissertation, Dept. of Linguistics, Indiana University, 1966).



<_>	contains morphographemes.
[ ]	contains phones or allophones.
//	contains phonemes.
{ }	contains morphemes.
<< >>	contains graphic phonemes.
/	signifies "in alternation with."
:	signifies "in contrast with."
C	Consonant
V	Vowel
FV	Front vowel
BV	Back vowel

In Chapter VI, "( )" indicates the grapheme in question. -( ) indicates final occurrence; ( )- indicates initial occurrence; -( )- indicates medial occurrence. Thus, -( )BV- should be read "medially before a back vowel"; ( )FV- should be read "initially before a front vowel," etc.

## CHAPTER II

### GRAPHEMIC THEORY

2.1 The Nature and Function of Alphabetic Writing. In the first quarter of the twentieth century, linguistic study in America became centered almost exclusively upon the analysis and description of spoken languages. With the rise of anthropological linguistics at this time, there developed "a general distrust of written materials."<sup>1</sup> It became dogmatic "that only speech is language: writing is only a reflection-- often very imperfect--of speech."<sup>2</sup>

This attitude has since influenced the thinking of American linguists about the nature and function of alphabetic writing. It underlies W. Nelson Francis' statement: "Writing is not language and language is not writing. We have defined language as 'an arbitrary system of articulated sounds,' a definition which certainly does not include marks on paper, stone, and metal, or patterns of neon tubes, smoke in the sky, tracks in the snow, or any of the other fanciful or practical media we use for writing."<sup>3</sup> Bloomfield's definition of writing as "a device for

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<sup>1</sup>H. A. Gleason, Linguistics and English Grammar (New York: Holt, Rinehart and Winston, Inc., 1965), p. 42.

<sup>2</sup>Ibid.

<sup>3</sup>W. Nelson Francis, The Structure of American English (New York: Ronald Press Company, 1958), p. 36.



recording language by means of visible marks"<sup>1</sup> implies that alphabetic writing should be considered as secondary to and, in fact, dependent upon the spoken language.

The view that writing is not language and that the function of writing is to record language, i. e., speech, as accurately as possible is not, by any means, universal. Vachek distinguishes between writing and phonetic transcription and states that while "any sound linguistic theory must be based on concrete utterances of speech, . . . it is often overlooked . . . that speech utterances are of two different kinds, i. e. spoken and written utterances."<sup>2</sup> In his view, phonetic transcription "is, and should be, regarded as a primarily technical device. Its principal raison d'être is the optical embodiment of acoustic phenomena constituting a spoken utterance; a projection of sounds, so to speak, on paper."<sup>3</sup> Writing, on the other hand, is a first order sign of language.

W. F. Edgerton believes that certain elements in alphabetic writing are entirely unrelated to sound. The symbols used may be either ideographic, representing the ideas themselves, or phonetic, "suggesting the ideas indirectly through the medium of speech sounds."<sup>4</sup> Certain

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<sup>1</sup> Leonard Bloomfield, "Linguistic Aspects of Science," International Encyclopedia of Unified Science, I, no. 4 (Chicago, 1939), 6.

<sup>2</sup> Josef Vachek, "Some Remarks on Writing and Phonetic Transcription," Acta Linguistica, V (1945-49), 87.

<sup>3</sup> Ibid.

<sup>4</sup> W. F. Edgerton, "Ideograms in English Writing," Language, XVII (April-June, 1941), 149.

signs--numerals, for example--are ideographic in that they represent ideas directly. \$2.25 may be read "two dollars and twenty-five cents" or "two twenty-five." There are no words for what the decimal point or the dollar sign represent. These symbols can be explained only in "the world of ideas."<sup>1</sup>

That alphabetic writing may operate independently from the sound system is also indicated by the presence of "visual morphemes."<sup>2</sup> Words such as see, sea; wood, would; to, too, two are distinguished, out of context, only in the writing system. In this connection, McLaughlin points out that "the words hair-hare are presumably distinguished by the grapheme sequences <ai> and <a e>; obviously this opposition tells us nothing about the phonemic oppositions in the phonology."<sup>3</sup>

On the morphological level, there are differences between the spoken and written systems of a language. In English, for example, there are at least three allomorphs--/-s/, /-z/, /-ez/--for the plural morpheme, {-z}. In the writing system, however, there are only two morpho-allographs, <̣-s-̣> and <̣-es-̣>, for the morphographeme, <̣-s-̣>.<sup>4</sup>

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<sup>1</sup> Ibid.

<sup>2</sup> Dwight L. Bolinger, "Visual Morphemes," Language, XXII (1946), 333-340.

<sup>3</sup> McLaughlin, p. 16.

<sup>4</sup> Gleason, Linguistics and English Grammar, p. 109.



Evidence thus indicates that

... a written text may be something other than an inaccurate secondary visual representation of an actually or potentially spoken primary; in fact that it may be a sort of primary itself, with its own structure deriving from a separate system having a history of its own, closely related to, but not directly dependent upon the spoken language.<sup>1</sup>

An alphabetic writing system obviously represents, more or less, the spoken system of a language. It is not, however, just a method of transcription. Instead, writing is an independent manifestation of language with its own "system of graphic oppositions capable of differentiating meanings."<sup>2</sup> As such, it may be more accurately defined as "a system of visual symbols whose purpose is to convey the thought of one individual or group to another."<sup>3</sup>

2.2 The Development of Graphemic Theory. If writing is considered an independent system and not just a type of transcription, it follows that writing should be capable of subjection to a descriptive analysis independent from the spoken system. Gleason points out that "we must have a thorough description of the phonology of English in its own terms. That means we must describe how English is spoken on the basis of the phonemes and their patterns, not of letters. And we must have a description of the writing system of English in its own terms, that

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<sup>1</sup>W. Nelson Francis, "Graphemic Analysis of Late Middle English Manuscripts," Speculum, XXXVII (January, 1962), 33.

<sup>2</sup>Vachek, p. 88.

<sup>3</sup>Crossland, p. 13.

is, of the basic units of the writing system, not of the phonemes."<sup>1</sup>

In order to describe written language, some linguists have begun to focus their attention upon the development of a theory for analyzing writing systems which can parallel, more or less, the phoneme theory used in the analysis of spoken languages. Differing views concerning the notion of grapheme divide the theorists into two groups.

One group defines a grapheme according to its reference in the phonology of the language in question. Thus, Gleason, in an Introduction to Descriptive Linguistics, gives the following example of graphemic analysis from Greek: "As used in modern printed books, there are two forms of the letter sigma. At the ends of words it is written  $\sigma$  elsewhere  $\sigma$ . These two symbols are in complementary distribution and have a similar reference to the phonology of spoken Greek."<sup>2</sup> Stockwell's much discussed analysis of Old English diphthongs<sup>3</sup> follows the same principle, which McLaughlin criticizes: "Stockwell . . . makes it clear that the allographs of a given grapheme are allographs by virtue of the fact that they represent allophones of the same phoneme."<sup>4</sup>

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<sup>1</sup>Gleason, Linguistics and English Grammar, p. 110.

<sup>2</sup>H. A. Gleason, An Introduction to Descriptive Linguistics, rev. ed. (New York: Holt, Rinehart and Winston, 1966), p. 409.

<sup>3</sup>Robert P. Stockwell and C. Westbrook Barritt, Some Old English Graphemic-Phonemic Correspondences ("Studies in Linguistics: Occasional Papers 4"; New York: Johnson Reprint Corporation, 1963).

<sup>4</sup>McLaughlin, pp. 17-18.



Gleason's and Stockwell's notion of grapheme actually proceeds from the view that writing is dependent on phonology. Complementary distribution ". . . is neither necessary nor sufficient. The condition that allographs of the same grapheme must represent allophones of the same phoneme is both necessary and sufficient, and no other is needed."<sup>1</sup>

Among those who view writing as an independent system, Pulgram, Crossland, McLaughlin, and Pogoni have devised graphemic theories, and of these, only McLaughlin and Pogoni have actually performed substantial analyses of particular texts. In their analyses, McLaughlin and Pogoni basically follow Crossland's ideas and employ his terminology.

The essential difference in Crossland's approach to graphic linguistics is his view that the units of a writing system should be described independently from their function as signs of units in the phonological system. His objection to previous attempts at the development of a terminology for graphic linguistics is that "the analyses which they imply are in some cases not purely graphic, as they reflect the function of the written signs or the conventions of their combination in representing phonic features of spoken languages."<sup>2</sup>

Accordingly, Crossland suggests a set of terms corresponding to those used in phonemic analysis which can provide the basis for independent graphemic analysis. Corresponding to sound, sound-class, and phoneme, he suggests graph or sign ("A sign, modification of a sign or feature of

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<sup>1</sup>Ibid., p. 13.

<sup>2</sup>Crossland, p. 14.

arrangement in a particular segment of a particular document"), graph-class or sign-class ("a group of similar signs, modifications or features classed together, provisionally or permanently, in graphemic analysis"), and grapheme ("any group which appears to contrast significantly with another or with zero").<sup>1</sup>

Thus, in Crossland's graphemics, a, as in the word class, is a graph. In a particular text, all similarly-formed a's comprise a graph-class. Q (cursive) is another graph; all similar Q's comprise another graph-class. Likewise A is a graph; all A's make up a graph-class. In modern English, a and Q constitute a grapheme since they never contrast significantly except in phonetic transcriptions. A (capital) is considered a separate grapheme because it distinguishes the pair, the Archers (proper name) and the archers. According to this method, graphemes are differentiated "on the basis of the manner of their employment in the script to which they belong"<sup>2</sup> which Crossland believes "is the only proper differentiation in a descriptive study of a written language."<sup>3</sup>

According to McLaughlin, Crossland's graphemic theory is most significant because "the appeal of same-different can be made directly to written pairs of words without invoking phonemic structure at all. Whereas for Crossland, the graph-class A is graphemically distinct

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<sup>1</sup>Ibid., p. 15.

<sup>2</sup>Ibid., p. 16.

<sup>3</sup>Ibid.



from the non-distinctive graph classes Q and a because it distinguishes the minimal written pairs Archer vs. Archer or Archer, for Stockwell, all three graph-classes would be allographs of the same grapheme since they all have the same phonemic referent, whatever it may be."<sup>1</sup>

The two important points in Crossland's theory are (1) that graphemic status depends on whether or not a difference between characters is capable of distinguishing meaning; (2) that graphs are identified and classified into graph-classes (allographs)<sup>2</sup> according to the principle of graphic similarity.

McLaughlin adopts both of these criteria and, in his development of Crossland's theory, makes extensive use of complementary distribution. He also extends the notion of graphic similarity and uses it as a partial criterion for determining allographs of the same grapheme.

2.3 The Notion of Graphic Similarity. Pogoni follows Crossland and McLaughlin, but he does not depend exclusively upon the notion of graphic similarity for the establishment of graph classes; he does not employ the notion at all to determine allographs of the same grapheme. Whereas for Crossland and McLaughlin, a graph-class is determined solely according to similarity in the shape of graphs, for Pogoni, an alphabetic graph-class may include all graphs recognizable as members

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<sup>1</sup>McLaughlin, p. 20.

<sup>2</sup>Crossland uses the term "graph-class"; McLaughlin uses "graph-class" and "allograph" interchangeably. Both terms signify a class of similarly-formed graphs. If two or more allographs are in non-contrastive distribution, they are said to constitute an "allographic set" and are thus allographs of the same grapheme. These terms are explained more fully in Chapter IV.

of the same letter of the alphabet. Differences in the shape of particular graphs, such as a, ā, ā or a, ā, are considered variations of a stylistic or paragraphemic nature. Falling into this category are differences resulting from the use of various printing fonts and types, differences between printed and handwritten forms of the same letter, and differences in various handwriting forms.

McLaughlin would reject the above approach, as he does a similar proposal by Pulgram, by saying that we have two types of graphs in one allograph: graphs whose shapes are similar (a, ā, ā) and graphs whose shapes are different (a, ā). ſ and ſ (handwritten forms of t) are shaped differently also. Should each be considered a separate graph-class? Consistency in the application of the principle of graphic similarity would demand the establishment of a separate graph-class for every difference of this type.

The notion of graphic similarity as a criterion for the establishment of graph-classes is a valid one to the extent that, normally, in a particular text, even a manuscript, the graphs belonging to a particular allograph are shaped similarly. The notion of stylistic variation allows the simplification of analysis at this basic level by accounting for variations which may be interesting but which are non-significant in the analysis of the writing system.

As applied to another level--the determination of allographs of the same grapheme--the notion of graphic similarity has no validity. McLaughlin states initially that "a set of allographs which are in



non-contrastive distribution will be called an allographic set, regardless of their graphic similarity or lack of it."<sup>1</sup> In McLaughlin's analysis, however, graphic similarity is used as a criterion for determining allographic sets ( $\zeta i \Sigma$ ,  $\zeta y \Sigma$ ,  $\zeta j \Sigma$ ;  $\zeta u \Sigma$ ,  $\zeta v \Sigma$ ) except where it obviously does not apply, in the case of  $\zeta s \Sigma$ ,  $\zeta \int \Sigma$ , for example.  $\zeta \int \Sigma$  is certainly more similar to  $\zeta f \Sigma$  than  $\zeta s \Sigma$ , yet  $\zeta s \Sigma$  and  $\zeta \int \Sigma$  often constitute an allographic set.

Graphic similarity cannot be measured in the same way that phonetic similarity can be. There is no useful criterion at present for the description of graph types which can compare with the classification of phone types according to the point and manner of their articulation. Similarity, as a criterion in graphemic analysis, is thus much more relative than it is in phonemics.<sup>2</sup>

It seems, therefore, that it is more useful, in dealing with an alphabetic writing system, to consider the alphabet a given factor. Each different alphabet may be found to contain a certain inventory of symbols in small and capital form. Graphemic analysis should proceed

<sup>1</sup>McLaughlin, pp. 23-24.

<sup>2</sup>The lack of parallelism with phonemic theory should not be a matter for great concern, however. McLaughlin questions "whether or not it makes any difference that the notion of grapheme would be exactly, partially, or not at all parallel to the notion of phoneme. Apparently it does not, since the grapheme is another and a different thing from the phoneme. Descriptive statements about the nature and function of one kind of phenomenon are under no compulsion to parallel those of another kind of phenomenon." (McLaughlin, p. 22).

from this basis and determine the graphemic status of letter allographs according to "the manner of their employment in the script to which they belong"<sup>1</sup>--that is, whether they occur in contrastive or non-contrastive distribution with each other.

#### 2.4 The Relationship Between the Graphemic and Phonemic

Descriptions of a Language. According to Gleason, separate descriptions of the spoken and written systems of a language "are not enough. To these must be added a statement of the interrelations between the two. . . . The need for such a description results from the very important connections that exist between the two. First, the phonology and the writing system are parts of a single language. Each interacts with the grammatical system, and hence is subject to some of the same forces from this direction. . . ."2

Such a statement of relationship between the two systems can be valid only after separate descriptions of the two have been completed. Once the distinctive units of both systems, the graphemes and the phonemes, are known, a comparative statement can be made which should reveal the nature of the fit that exists between the two systems.

Since one function of alphabetic writing is to represent "a segment of the spoken system,"3 a comparative study should reveal, in particular,

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<sup>1</sup>Ibid., p. 16.

<sup>2</sup>Gleason, Linguistics and English Grammar, p. 110.

<sup>3</sup>McLaughlin, p. 26.



the correspondences between graphemes and phonemes. For example, in a particular writing system, one grapheme may be found to represent one or more phonemes, as does modern English <c>, which represents /k/ and /s/; two or more graphemes may represent only one phoneme, for example, modern English <sh>, which represents /ʃ/; one grapheme may represent a series of phonemes, as modern English <x>, which represents /ks/.<sup>1</sup> McLaughlin points out further that ". . . it should be kept in mind that the same writing system is often used by speakers of different dialects; as a result, a grapheme may have different referents in different dialects."<sup>2</sup>

From the point of view of analysis, there is a special relationship between the graphemic and phonemic systems of a language when the sound system cannot be observed directly. McLaughlin's remarks clarify the nature of this relationship:

One of the most interesting features of an alphabetic writing system is, of course, that as a system of signs it provides the basis for assumptions about the structure of the spoken system when that system is no longer available for direct observation. Obviously, it is only because there are writing systems and written texts that historical linguistics is possible. This fact should not prejudice our previously stated position that the relationship or fit between the spoken and written systems of a language cannot be known until both of these systems have been described.

A writing system provides the starting point for a set of assumptions about the spoken system which, in one way or another, it represents; however, these assumptions are generally subject to a great variety of tests and subsequent

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<sup>1</sup>Ibid., p. 27.

<sup>2</sup>Ibid.

revisions. It is frequently the case that once a beginning has been made much of the evidence provided by the spelling system must be abandoned in favor of other types of evidence (e. g. one's knowledge of linguistic behavior in general, rhymes, the structure of related languages, etc.). That this should happen is not at all surprising since we do not expect a writing system to be a transcription. Precisely how one "discovers" the phonological structure underlying a historical document is difficult to state in any useful way. Apparently the procedure rests ultimately on a broad linguistic experience, on the ability to make intelligent guesses, on inspirations, and on a number of other factors which elude reduction to scientific methodology.

Once all available evidence relevant to the identification of phonological units has been assembled and the structure of the spoken language described in the most reasonable manner consistent with that evidence, initial assumptions about the relationship between the written and spoken systems can be revised and more precise statements made.<sup>1</sup>

2.5 The Purpose of Graphic Linguistics. The fundamental purpose of graphic linguistics as it has been presented here is the determination of the distinctive elements in a particular writing system. In the examination of historical documents, such as the one under study, the segments identified and described may enable one to investigate the spoken system of a language. The ideal purpose of such a study is "to establish the written idiolect of a text which when correlated with similar studies of other written expressions of the same language at approximately the same time will enable the analyst to define the written dialect of a set of texts in terms of their common core and overall pattern."<sup>2</sup>

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<sup>1</sup>Ibid., pp. 32-33.

<sup>2</sup>Ibid., p. 38.



## CHAPTER III

### THE MANUSCRIPT

3.1 Contents and Significance. The Parker Manuscript contains the Anglo-Saxon Chronicle (folios 1-32) and The Laws of Alfred and Ine (folios 33-52). The text analyzed in this study is the latter section of the manuscript, The Laws of Alfred and Ine. The entire manuscript is technically referred to as Corpus Christi College Manuscript 173 (C.C.C. 173). All textual analysis is based upon Robin Flower's and Hugh Smith's excellent facsimile edition of the manuscript, entitled The Parker Chronicle and Laws.<sup>1</sup>

The Laws are also found in several other manuscripts.<sup>2</sup> The Parker Manuscript, however, is "the earliest and best"<sup>3</sup> source for The Laws; it provides the basis for the translation of The Laws.<sup>in</sup>

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<sup>1</sup>Robin Flower and Hugh Smith (eds.), The Parker Chronicle and Laws: A Facsimile ("Early English Text Society," Original Series, No. 208; London: Oxford University Press, 1941).

<sup>2</sup>The most important ones are C.C.C. 383 and the Textus Roffensis Manuscript at Rochester Cathedral. The first part of Ine's Laws is contained in the Burney Manuscript 277 at the British Museum.

<sup>3</sup>F. L. Attenborough (ed. and trans.), The Laws of the Earliest English Kings (New York: Russell and Russell, Inc., 1922), p. 35.

Attenborough's edition and is of primary importance in Liebermann's edition.<sup>1</sup>

Ine and Alfred ruled the Anglo-Saxon kingdom of Wessex. Ine reigned from 688 to 725 and promulgated the first laws of the kingdom, which probably date between 688 and 694. There is no record of legislation in Wessex from Ine to Alfred, whose reign extended from 871 to 900. According to Liebermann, Alfred's Laws were promulgated in 892 or 893. Attenborough, however, supports a somewhat earlier date because, in the Laws, Alfred refers to himself as Westseaxna cyning; other documents indicate that by 892, he was already referring to himself as Anglorum Saxonum rex.

In all extant manuscripts, Ine's Laws are included as an appendix to the Laws of Alfred. In the Parker Manuscript, Alfred's Laws "are preceded by a long introduction (cap. 1-48) which contains translations of the Ten Commandments, and many other passages from the Book of Exodus (cap. 20-23), followed by a brief account of Apostolic history (with quotations from the Acts of the Apostles, cap. 15), and the growth of church law, as laid down by ecclesiastical councils, both ecumenical and English (cap. 49, 1-7)."<sup>2</sup> In the concluding paragraph, immediately

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<sup>1</sup>F. Liebermann's edition of Anglo-Saxon law, Die Gesetz der Angelsachen (Halle, 1903-1916), is the most complete and detailed work on the subject. Although his book has not been translated into English and is now out of print, it is extensively referred to in Attenborough's edition, reissued in 1963. In the present study, Attenborough's edition is consulted for problems in transliteration and translation.

<sup>2</sup>Attenborough, p. 35.



before the Laws begin, Alfred acknowledges his indebtedness to Ine's Laws, to those of Offa (the Mercian king), and to the laws of the Kentish king, AEthlebert.

In addition to the Laws, the Parker Manuscript also includes, in folios 1-32, the earliest, and perhaps the most important, extant source of the Anglo-Saxon Chronicle. Of seven existing manuscripts containing the Chronicles, the Parker Manuscript is given prominence in nearly all modern editions, including Charles Plummer's and Garmonsway's.

Part of the significance of the Parker Chronicle is that in the annals from 892-1070, the events were recorded, more or less, as they happened. Thus, "we can watch the development as each scribe takes up the pen where his predecessor left off: in each generation, throughout the reigns of Alfred, Athelstan, and Edgar until after the accession of AEthelred, this chronicle was maintained by as many as ten . . . successive scribes in the same monastic house, and the lineaments of its growth can be traced on its pages."<sup>1</sup> The other manuscripts of the Chronicle are copies.

3.2 Dialect and History of the Manuscript. The Parker Manuscript is one of the ancient specimens of the Late West Saxon dialect of Old English.<sup>2</sup> The exact date of the manuscript's inception and early details

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<sup>1</sup>G. N. Garmonsway, ed. and trans., The Anglo-Saxon Chronicle, rev. ed. (London: J. M. Dent and Sons, Ltd., 1965), p. xxxiii.

<sup>2</sup>E. Sievers, Grammar of Old English, 3rd ed., trans. and ed. by Albert S. Cook (New York: Ginn and Co., 1903), p. 4.

of its history are disputed. However, the debate cannot be dealt with here. The most widely accepted facts and hypotheses are the following:

The events described in the Parker Chronicle relate to a period from 60 B.C. to 1070 A.D. The annals from 60 B.C. to 891 are written in the hand of one scribe. Another scribe finishes the year 891, and from then on the Chronicle is continued in the hands of several different scribes. This fact seems to indicate that the manuscript was begun in 891. According to Madan and other authorities, a collation of the Chronicle was compiled from several sources, at Winchester, possibly at the order of Alfred.<sup>1</sup> The Parker Manuscript contains not the original compilation, but a very early copy made at Winchester which, as indicated above, was probably begun in 891. Liebermann and A<sup>+</sup>tenborough agree that the section of the manuscript containing the Laws was written about 925.

The manuscript was later transferred to and completed at Christ Church, Canterbury, possibly after the Conquest. It seems that all the annals of the Chronicle after 1001 were added at Canterbury since these entries contain material relating to Canterbury and its See. Matthew Parker, archbishop of Canterbury (1559-1575) donated the manuscript to Corpus Christi College; hence, its name.

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<sup>1</sup>Falconer Madan, M. A., Books in Manuscript: A Short Introduction to Their Study and Use, 2nd ed., rev. (New York: Empire State Book Company, 1927), p. 119.



### 3.3 Paleographical Characteristics of the Parker Manuscript.

The handwriting of the Parker Manuscript manifests characteristics of the Insular script, a style which was introduced into England by the Irish in the 7th century and which prevailed until after the Conquest.

When the Anglo-Saxons first came to England, they used the runic alphabet or futhark<sup>1</sup> for whatever writing they did; Latin language and writing disappeared. Latin was reintroduced in Ireland, however, with the introduction of Christianity by St. Patrick in the 4th century. The return of Latin meant, of course, the return of the Roman alphabet and the Roman style of writing. The Insular script is one of the "national" hands which developed at this time from the Roman semi-uncial book hand,<sup>2</sup> and according to Diringer, it is the "most beautiful and the most important of all the national styles . . . ."<sup>3</sup>

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<sup>1</sup>The runes were brought by the Anglo-Saxons from the Continent and seem to have been derived from the Roman alphabet since their shapes are quite similar to corresponding Greek and Latin symbols. They were evidently meant to be carved, because they are formed with diagonal and vertical strokes. The word, rune, originally meant "secret," and the letters were used "as magic symbols on weapons and ornaments, and also for messages, inscriptions, and signatures." (Robert A. Peters, A Linguistic History of English [Boston: Houghton Mifflin Co., 1968], p. 13.)

<sup>2</sup>Uncial (literally, inch-high) refers to formal Greek and Roman writing which contains all majuscules. Semi- or half-uncial is a modification of uncial writing, employing minuscules, characteristically not joined together. Cursive writing, containing minuscules joined together, is the most informal and utilitarian style.

Since the language of Christianity was formal, not vulgar, the Insular script developed from semi-uncial, rather than cursive as did the other national hands. (B. L. Ullman, Ancient Writing and Its Influence [New York: Longmans, Green and Co., 1932], p. 83.)

<sup>3</sup>David Diringer, The Alphabet: A Key to the History of Mankind, 2nd ed. (New York: Philosophical Library, Inc., 1948), p. 546.

The Insular script was already in use in Ireland by the 6th century and "in the seventh century spread first to the north and then to the south of England and stopped the independent development of the uncial writing introduced there by the first missionaries from Rome."<sup>1</sup>

There are two styles of the Insular script. The round hand is broad and formal; it disappeared in England and Ireland in the 9th century. The pointed hand, the style of the Parker Manuscript, is more compressed and was written more rapidly. In these respects, it is similar to cursive. It is characterized by long and narrow letters which have a tendency toward angularity, the pointed  $\text{r}$  ( $\text{r}$ ), for example. The pointed hand also contains the characteristic half-uncial  $\text{g}$ ,  $\text{S}$ , and numerous ligatures. Other easily confused letters are  $\text{r}$  ( $\text{s}$ ) which is similar to pointed  $\text{r}$ .  $\text{þ}$  (thorn),  $\text{p}$  (wen), and  $\text{p}$  are also very much alike.

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<sup>1</sup>Ullman, p. 83.



## CHAPTER IV

### TERMS AND DEFINITIONS

4.1 Preliminaries. The principles presented in this chapter may be considered relevant to the analysis of alphabetic writing systems in general. However, some notions such as stylistic variation and juncture may be more significant in the analysis of manuscript writing than in the analysis of modern printed texts. Illustrations throughout the chapter are taken from Old English and Modern English.

#### 4.2 Primary Terms

4.21 An alphabetic writing system is composed of small letters, capital letters, non-literal marks and signs, and certain features of arrangement.

4.22 The Graph. Any sign, mark or feature of arrangement is a graph.

4.23 The Allograph. An allograph is a class of similarly-shaped graphs, e. g., all a's; the class may also include graphs whose shapes are dissimilar when the difference may be accounted for according to the principle of stylistic variation.

4.24 The Allographic Set. Two or more allographs in non-contrastive distribution with each other are said to constitute an allographic set.

4.25 Non-contrastive Distribution. Two or more allographs are considered in non-contrastive distribution if they are in complementary distribution (occurring in mutually exclusive environments) or if they are in free variation (alternating freely with each other in identical environments).

4.26 The Grapheme. An allograph or allographic set in significant contrast with all other allographs and allographic sets or with  $\emptyset$  is considered a grapheme.

4.27 Significant contrast means that substitution of one allograph or allographic set with another or with  $\emptyset$  results in alteration of meaning.<sup>1</sup>

#### 4.3 The Identification of Graphs

4.31 The Alphabetic Graph. Any letter of the alphabet will be considered a graph. A small letter will be referred to as a letter graph. A capital letter will be referred to as a capital graph.

4.32 The Non-alphabetic Graph. Non-alphabetic graphs include (1) non-literal marks and signs; (2) arrangement features.

4.321 Non-literal marks and signs may be conveniently divided into three types: punctuation marks, word signs, and graphic marks.

4.3211 Punctuation marks in an alphabetic writing system include a variety of marks such as the period, comma, colon, semicolon, exclamation point, and so forth. Punctuation marks will be referred to as punctuation graphs.

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<sup>1</sup>McLaughlin, p. 24.



4.3212 Signs, which in a given writing system are determined as representing words, will be called word-sign graphs. In many Old English texts, for example, the non-alphabetic sign, 7, represents the word and.

4.3213 Graphic marks, such as the accent mark and the tilde, occur immediately around or connected to an alphabetic graph. Graphic marks are of two types: (1) those which represent one or more alphabetic graphs; (2) those which modify or distinguish alphabetic graphs. Graphic marks which represent alphabetic graphs will be called replacive graphs. Graphic marks which modify or distinguish alphabetic graphs will be called diacritic graphs.

4.322 Arrangement features, in a particular text, determine the type of transition between alphabetic graphs. They will be referred to collectively as juncture graphs.

The arrangement of alphabetic graphs, in Modern English texts, is based upon a lexical principle. In cursive texts, the letters are joined, within words, by a fine line; space occurs between words. In printed texts, alphabetic graphs, within words, are separated by a very narrow space; between words the space is wider. In both cases the lexical principle is operative, juncture is mechanical, and the whole matter is presumably of no further significance in analysis of the writing system.

In the text under study, however, juncture is a considerably more complex feature of the writing system. In the first place there are five

types of juncture, all of which occur regularly. Secondly, spacing (// juncture) is not based entirely upon a lexical principle. Further discussion of juncture as it applies to the Parker Manuscript is contained in Chapter V. The types of juncture which occur and which will be analyzed are the following:

(1) 0 (zero, or normal juncture) - Graphs are separated by a very narrow space as, for example, the space between m and o and between o and n in mon.

(2) ~ (fine line juncture) - Graphs are joined by a fine line or single point of contact. This type of juncture occurs between l, l, and e in pille (wille).

(3) ⊃ (ligature juncture) - Graphs are joined "either by two or more points of connection or by a continuous line which makes an integral part of both."<sup>1</sup> mynstere (mynstere) contains this type of juncture between the t and e and between the e and r.

(4) // (double bar juncture or space) - Graphs are separated from each other by a space which is greater than that of 0. This type of juncture is irregular; it varies from a space only a little wider than 0 to a three-minim space (that is, one wide enough for an m). There are accurate means of measuring this type of juncture which are discussed in Chapter V.

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<sup>1</sup>Francis, "Graphemic Analysis of Late Middle English Manuscripts," p. 36.



(5) # (double cross juncture) - This type of juncture occurs at the end of the line.

4.4 The Allograph and Stylistic Variation. Variations, in different degrees, may occur in the shape of graphs belonging to the same allograph. Slight variation, for example, may be found in the difference between a, ā, ā and between ε, ε. The difference between a (printed) and a (cursive) provides another example. In historical texts, extreme variation may occur in the shape of capital allographs. The present text contains five different shapes for the capital allograph,  $\Sigma G \Sigma$ : G, G, G, G, G.

Any graphic variation such as the above will be considered a variation of a stylistic nature. Each such variation of a particular allograph, whether alphabetic or non-alphabetic, will be represented by the graph symbol utilized in this study. All variations of  $\Sigma G \Sigma$ , for example, will be represented by the type-face symbol available--that is, G.

4.5 The Alphabetic Grapheme. In accordance with definitions 4.22, 4.23, and 4.26, a is a graph; b is another graph. All a's in a given text constitute an allograph,  $\Sigma a \Sigma$ ; all b's constitute an allograph,  $\Sigma b \Sigma$ . If  $\Sigma a \Sigma$  and  $\Sigma b \Sigma$  are in contrast with each other and all other allographs, they are each considered an alphabetic grapheme,  $\langle a \rangle$  and  $\langle b \rangle$ .

4.51 Allographic Sets

4.511 Including Letter Allographs. The graphs  $\underline{s}$  and  $\int$ , in all their occurrences, constitute two allographs,  $\int s \Sigma$  and  $\int \int \Sigma$ . If  $\int s \Sigma$  and  $\int \int \Sigma$  are in non-contrastive distribution, they are said to constitute an allographic set. (See 4.24) If  $\int s \Sigma$  and  $\int \int \Sigma$  are each in contrast with all other allographs, together they constitute one alphabetic grapheme which may be written  $\langle s \rangle$ .

4.512 Including Letter Allographs and Capital Allographs of the Same Alphabetic Order. All occurrences of a letter graph or capital graph, such as  $\underline{a}$  and  $\underline{A}$  constitute the allographs,  $\int a \Sigma$  and  $\int A \Sigma$ . In certain texts  $\int a \Sigma$  and  $\int A \Sigma$  may be found to occur in contrast as in Crossland's example, archer: Archer. In such cases  $\int a \Sigma$  and  $\int A \Sigma$  are separate graphemes,  $\langle a \rangle$  and  $\langle A \rangle$ . In other texts, allographs of the same alphabetic order may occur in non-contrastive distribution. In such cases, they are said to constitute an allographic set. If each occurs in contrast with all other allographs, they will be considered as forming together one alphabetic grapheme.

#### 4.6 The Non-alphabetic Grapheme.

4.61 The Non-alphabetic Allograph. A non-alphabetic graph, in all its occurrences, is said to constitute a non-alphabetic allograph. Thus, the tilde,  $\underline{\sim}$ , is a graph; all tildes are members of the same non-alphabetic allograph,  $\int \sim \Sigma$ .

4.62 Non-alphabetic Allographic Sets.  $\underline{\sim}$  is a non-alphabetic graph, all occurrences of which constitute a non-alphabetic allograph,



$\underline{\mathfrak{z}}:\sim\Sigma$ .  $\therefore$   $\underline{\quad}$  is another non-alphabetic graph, all occurrences of which constitute another non-alphabetic allograph,  $\underline{\mathfrak{z}}:\Sigma$ . If  $\underline{\mathfrak{z}}:\sim\Sigma$  and  $\underline{\mathfrak{z}}:\Sigma$  are determined to be in non-contrastive distribution with each other, they are said to constitute together a non-alphabetic allographic set.

4.63 The Graphemic Status of Non-alphabetic Allographs and Allographic Sets. If, in a particular text, a non-alphabetic allograph or allographic set occurs in alternation (free variation) with an alphabetic allograph, it will be defined as having no graphemic status.<sup>1</sup> Thus, replacive allographs, by definition (4.3213), are said to have no graphemic status. Furthermore, if a non-alphabetic allograph is found not to occur in significant contrast with all other allographs or with  $\emptyset$ , it too will be defined as having no graphemic status. Thus  $\underline{f}$  is a diacritic graph; all such graphs are members of the same allograph,  $\underline{\mathfrak{z}}'\Sigma$ . If  $\underline{\mathfrak{z}}'\Sigma$  does not occur in significant contrast with all other allographs or with  $\emptyset$ , it will be said to have no graphemic status.

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<sup>1</sup>Pogoni, p. 13. A non-alphabetic allograph may occur in alternation with two or more alphabetic allographs. This is often the case with the tilde, for example, which may alternate with  $\underline{\mathfrak{z}}m\Sigma$ ,  $\underline{\mathfrak{z}}n\Sigma$ , and other letters as well. It would not be in accordance with general linguistic theory to consider  $\underline{\mathfrak{z}}:\sim\Sigma$  as constituting an allographic set with both  $\underline{\mathfrak{z}}m\Sigma$  and  $\underline{\mathfrak{z}}n\Sigma$ , and the other letters with which it alternates. McLaughlin attempts to solve this problem by considering the tilde as a non-alphabetic archigrapheme. Because the tilde may alternate with both  $\underline{\mathfrak{z}}m\Sigma$  and  $\underline{\mathfrak{z}}n\Sigma$ , it is responsible for the suppression of a graphemic contrast (between  $\underline{\mathfrak{z}}m\Sigma$  and  $\underline{\mathfrak{z}}n\Sigma$ ).

Pogoni's method of dealing with this problem seems to me logical and more efficient. Of course, with this method, a non-alphabetic allograph of this type is neither accorded graphemic status of its own nor assigned as a member of an allographic set. Similar problems, however, often arise in phonemic analysis. For example, it is difficult to determine whether the glottal stop, [ʔ], which occurs in English

To state the case in a positive manner, a non-alphabetic allograph will be considered a non-alphabetic grapheme if (1) it is not found to occur in alternation with one or more alphabetic allographs; (2) if it is in significant contrast with all other allographs or with  $\emptyset$ .

4.7 The Punctuation and Juncture Graphemes. The graphemic status of a punctuation or juncture allograph is related to alphabetic allographs and to the entire alphabetic structure of a written text in much the same way that the phonemic status of the suprasegmental phonemes is related to the phonemic structure of the spoken segment of the language. That is, normally, punctuation and juncture allographs do not occur in contrastive or non-contrastive distribution with alphabetic allographs and other types of non-alphabetic allographs. Their graphemic status depends on whether they contrast significantly with  $\emptyset$  and with all other punctuation and juncture allographs in order to affect significantly the meaning in a sequence of alphabetic allographs.

In phonology, the suprasegmental phonemes are considered phonemic because they effect significant distinctions in spoken language. Stress, for example, determines the difference between words and word-compounds, such as bláckbòard and bláck bóard. All three

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should be considered as an allophone of /t/ or /k/. It is usually not even mentioned, much less classified. It may also be pointed out that McLaughlin does not state precisely the graphemic status of non-alphabetic allographs. Three are determined as archigraphemes; the rest are discussed only as allographs and their relationship to alphabetic allographs is described.



suprasegmental phonemes distinguish spoken grammatical units. For example, falling pitch and # juncture determine sentence boundaries.

Comparable distinctions in a written text, if they exist, depend upon the graphemic status of juncture and punctuation allographs.

Thus,  $\text{:}\sim$  is a punctuation graph; all such graphs are members of the same punctuation allograph,  $\Sigma\text{:}\sim\Sigma$ . If  $\Sigma\text{:}\sim\Sigma$ , in a particular text, occurs in contrast with all other punctuation allographs and with  $\emptyset$ , it will be considered a punctuation grapheme,  $\langle\text{:}\sim\rangle$ .

4.8 The Graphic Phoneme. This term is necessary on the level of sound representation in order to describe the relationship or fit between the graphemic and phonemic systems. A graphic phoneme is a class of signs, each member of which has the same phonemic referent(s). The members of the class are referred to as graphic allophones. When each member of a graphic phoneme may represent more than one phoneme, such a graphic phoneme is considered a multi-valued graphic phoneme.

4.9 The Morphographeme. In a written text, meaningful units are formed by the occurrence of a single graph or of a series of graphs. Such a unit which cannot be further subdivided into meaningful units, is a morphograph. All "graphemically and semantically identical"<sup>1</sup> morphographs are said to constitute a morpho-allograph. One or more

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<sup>1</sup>McLaughlin, p. 24. This criterion and the terms morphograph and morphographeme are borrowed from McLaughlin.

semantically similar morpho-allographs in non-contrastive distribution is considered a morphographeme.

In modern English, for example, -er-, as in the word lover, is a morphograph meaning "that which performs the action"<sup>1</sup> of the word stem. All such morphographs constitute a morpho-allograph,  $\zeta\text{-er-}\Sigma$ . -or-, as in the word procrastinator, is another morphograph also meaning "that which performs the action" of the word stem. All such morphographs constitute another morpho-allograph,  $\zeta\text{-or-}\Sigma$ .  $\zeta\text{-er-}\Sigma$  and  $\zeta\text{-or-}\Sigma$  are considered as constituting together a morphographeme,  $\langle\text{-er-}\rangle$ . Each morpho-allograph, in this case, is morphographically conditioned. That is,  $\zeta\text{-er-}\Sigma$  occurs only with those stems that require  $\zeta\text{-er-}\Sigma$ .  $\zeta\text{-or-}\Sigma$  occurs only with those stems that require  $\zeta\text{-or-}\Sigma$ .

#### 4.10 Grammatical Units.

4.101 The Graphic Word. A graphic word is one or a series of morphographemes bounded by significant juncture. Significant juncture, in the Parker Manuscript, refers to the allographs of  $\langle//\rangle$  and/or the manifestations of the allograph  $\zeta\#\Sigma$ .

4.102 The Graphic Sentence. A graphic sentence is one or a series of graphic words bounded by punctuation graphemes. In the Parker Manuscript, for example, punctuation graphemes which determine sentence boundaries are  $\langle.\rangle$  —————  $\langle.\rangle$  or  $\langle:-\rangle$  —————  $\langle.\rangle$ .

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<sup>1</sup> Norman C. Stageberg, An Introduction to English Grammar (New York: Holt, Rinehart and Winston, Inc., 1966), p. 113.



4.103 The Graphic Paragraph. In the Parker Manuscript a graphic paragraph may be defined as one or a series of graphic sentences bounded by the punctuation graphemes, <:->—————<:->.

## CHAPTER V

### ANALYSIS OF THE GRAPHEMIC SYSTEM:

#### THE LAWS OF ALFRED AND INE

##### 5.1 The Alphabetic System.

##### 5.11 The Graphs.<sup>1</sup>

5.111 Letter Graphs: a, æ,<sup>2</sup> b, c, d, e, f, g, h, i, k, l, m,  
n, o, p, r, s, ſ, t, ð, þ, u, ƿ, x, y.

5.112 Capital Graphs: A, Æ, B, C, E, G, H, I, L, M, N, O,  
P, R, S, T, D, F, P, Y.

5.1121 d, f, k, u and x are not realized in capital form in  
this text.

##### 5.12 Non-contrastive Distribution.

5.121 Between Letter Allographs and Capital Allographs of the  
Same Alphabetic Order. Capital allographs and letter allographs are

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<sup>1</sup>The alphabetic graphs, as indicated in Chapter III, were adopted by Anglo-Saxon scribes from the Roman alphabet, via the Irish, with the exception of the three symbols, ƿ (wen), þ (thorn), and ð (crossed d). ƿ and þ were taken from the runic alphabet. ƿ was used for the form uu; both forms were later supplanted by w. þ took the place of the earlier used digraph, th. ð was also used in place of th. The Roman letters j, q and v, were not employed by Anglo-Saxon scribes. z and k were rarely used. The Anglo-Saxon form, ȝ (yogh), is considered in this study as a stylistic variant of g.

<sup>2</sup>Although æ is a ligature-combination of a and e, it is considered a unit graph on the basis of its occurrence in capital form, Æ.



distributed in the following manner: (1) Capital allographs occur at the beginning of sentences and paragraphs; (2) letter allographs occur elsewhere, although a letter allograph may, at times, occur at the beginning of a sentence. Furthermore, capitalization is not used for proper names and places; thus, there are no instances of word pairs in which a capital allograph and a letter allograph are in contrast. In addition, the following alternations occur:

a/A	ara / Ara
æ/Æ	æt / Æt
b/B	borges / Borges
c/C	cyninges / Cyninges
e/E	eac / Eac
g/G	gif / Gif
h/H	heafod / Heafod
i/I	ic / Ic
l/L	lease / Lease
m/M	monnes / Monnes
n/N	ne / Ne
o/O	oxan / Oxan
p/P	--- <sup>1</sup>
r/R	---
s/S	se / Se

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<sup>1</sup>P, R, Ʒ, and Y occur only once, in medial position, in the first line of the Preface to Alfred's Laws.

t/T	to / To
ð/D	ðonne / Donne
þ/P	þon / P on
ƿ/P	---
y/Y	---

Evidence thus indicates that capital allographs and letter allographs of the same alphabetic order occur in non-contrastive distribution.

Therefore, in each case, they constitute an allographic set and are allographs of the same grapheme.

#### 5.122 Non-contrastive Distribution Between Letter Allographs

5.1221  $\mathfrak{z}\mathfrak{s}\Sigma$  and  $\mathfrak{z}\mathfrak{s}\Sigma$  are considered members of the same allographic set on the basis of non-contrastive distribution. In a morpho-grapheme initial position, before c,  $\mathfrak{z}\mathfrak{s}\Sigma$  and  $\mathfrak{z}\mathfrak{s}\Sigma$  occur in free variation: scill/scill, bescire/bescire, scaft/scaft, scire/scire, etc. In other environments, the two graphs are in complementary distribution.  $\mathfrak{z}\mathfrak{s}\Sigma$  occurs in morpho-grapheme initial and medial position before t and ƿ; s occurs elsewhere. There is one regular exception: In the sequences est and est, the allograph  $\mathfrak{z}\mathfrak{s}\Sigma$  is employed.

5.1222  $\mathfrak{z}\mathfrak{ð}\Sigma$  and  $\mathfrak{z}\mathfrak{þ}\Sigma$  are determined as members of the same allographic set, occurring in free variation: gecyðan/gecyþan, ðy/þy, ðyrel/þyrel, etc. However,  $\mathfrak{z}\mathfrak{þ}\Sigma$  may not occur in final position.



5.13 The Allographs and Graphemes.

$\zeta a \Sigma$ , $\zeta A \Sigma$	of	<a>
$\zeta \alpha \Sigma$ , $\zeta \text{Æ} \Sigma$	of	<\(\alpha\)>
$\zeta b \Sigma$ , $\zeta B \Sigma$	of	<b>
$\zeta c \Sigma$ , $\zeta C \Sigma$	of	<c>
$\zeta d \Sigma$	of	<d>
$\zeta e \Sigma$ , $\zeta E \Sigma$	of	<e>
$\zeta f \Sigma$	of	<f>
$\zeta g \Sigma$ , $\zeta G \Sigma$	of	<g>
$\zeta h \Sigma$ , $\zeta H \Sigma$	of	<h>
$\zeta i \Sigma$ , $\zeta I \Sigma$	of	<i>
$\zeta l \Sigma$ , $\zeta L \Sigma$	of	<l>
$\zeta m \Sigma$ , $\zeta M \Sigma$	of	<m>
$\zeta n \Sigma$ , $\zeta N \Sigma$	of	<n>
$\zeta o \Sigma$ , $\zeta O \Sigma$	of	<o>
$\zeta p \Sigma$ , $\zeta P \Sigma$	of	<p>
$\zeta r \Sigma$ , $\zeta R \Sigma$	of	<r>
$\zeta s \Sigma$ , $\zeta S \Sigma$ , $\zeta \text{ʃ} \Sigma$	of	<s>
$\zeta t \Sigma$ , $\zeta T \Sigma$	of	<t>
$\zeta \text{ð} \Sigma$ , $\zeta \text{D} \Sigma$ , $\zeta \text{ʒ} \Sigma$ , $\zeta \text{ʝ} \Sigma$	of	<\(\text{ð}\)>
$\zeta u \Sigma$	of	<u>
$\zeta \text{v} \Sigma$ , $\zeta \text{V} \Sigma$	of	<v>
$\zeta x \Sigma$	of	<x>
$\zeta y \Sigma$ , $\zeta Y \Sigma$	of	<y>

5.131  $\text{Ʒk}\Sigma$  occurs in the text only a few times, always in the word, kyninges. It will be considered as constituting a marginal grapheme.

5.14 Gemination. All letter allographs of consonant graphemes occur doubled except those of <k>, <x>, <Ʒ>, and the allograph  $\text{Ʒ}\Sigma$  of <s>. There are only two letter allographs of vowel graphemes which occur doubled in this text:  $\text{Ʒu}\Sigma$  and  $\text{Ʒe}\Sigma$ . There is only one instance of each: cuuhorn and gees.

#### 5.15 Grapheme Clusters

5.151 There is only one initial cluster containing three consonant graphemes: scr. Initial clusters containing two consonant graphemes are the following: br, Ʒp, cr, cn, fr, hƷ, hl, hr, pr, sc, sl, tƷ, tr, Ʒr, sp, st, sm.

5.152 The following vowel clusters occur: eo, ea, ie, io.

### 5.2 The Non-alphabetic System

#### 5.21 The Graphs

Juncture graphs: ⸗ ⸘ ⸚ // #

Punctuation graphs: . ⸘ ⸚ ⸗ ⸘ ⸚ ⸗

Replacive graphs: ⸗ ⸘

Diacritic graph: ⸗

Word sign graph: ?

#### 5.22 The Allographs and Graphemes



5.221 Juncture Allographs and Graphemes

$\text{ZO}\Sigma$  of <O>

$\text{Z}\|\Sigma$  of <||>

$\text{Z}\#\Sigma$

5.2211 The first three types of juncture-- $\text{ZO}\Sigma$ (narrow space),  $\text{Z}\sim\Sigma$  (fine line), and  $\text{Z}^{\circ}\Sigma$  (ligature)--are members of an allographic set in partial complementary distribution.<sup>1</sup> Joined in ligature, within graphic word boundaries, are e and most following graphs; a and e; t and following r, a, o, and occasionally e. a, l, r, and t (except in cases of ligature) are usually joined to following graphs with a fine line; also, t and g are normally joined to preceding graphs with a fine line. b, c, d, f, g, h, i, m, n, o, p, r, s, u, v, x, y, z, þ are usually followed by  $\text{ZO}\Sigma$ .

5.2212  $\text{Z}\|\Sigma$ , or space, has two main characteristics. First of all, spacing is not based entirely upon a lexical principle. Although  $\text{Z}\|\Sigma$  frequently encloses lexical items, the sequence of graphs between  $\text{Z}\|\Sigma$  may be only one morpheme; compounds, for example, are frequently separated by  $\text{Z}\|\Sigma$ , as is the verbal prefix -ge-. (Inflectional morphemes, however, are not separated from their bases by  $\text{Z}\|\Sigma$ .) On the other

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<sup>1</sup>The insular hand, as indicated in Chapter III, developed from the Roman semi-uncial or half-uncial book hand (a script in which the letters are written separately, not joined together), rather than from the cursive miniscule. The prevalence of ligatures and the joining of some letters with a fine line are generally considered evidence of "some cursive influence or cursive experience" on the part of Anglo-Saxon scribes. (Ullman, p. 86.)

hand, determiners, pronouns, prepositions, and conjunctions are usually written contiguously with the next following word.

Secondly, spacing is irregular. As indicated in Chapter IV,  $\Sigma/\Sigma$  varies from space only a little wider than  $\Sigma 0 \Sigma$  to space wide enough for m. This is perhaps the most surprising feature of the writing system. As Robert Stevick points out, ". . . in its irregularity the spacing stands out sharply beside the regularity of letter shapes."<sup>1</sup> It seems at least a reasonable assumption that spacing may not be as haphazard as it appears, that a pattern may exist to account for the variations.

To discuss spacing, it is necessary to have some sort of scale for measurement in order to determine those spacings which are alike and those which are different. The regularity in the shape of alphabetic allographs provides a norm for rather accurate measurement of space.

That there is extreme regularity in the shapes of alphabetic graphs is apparent: All occurrences of a particular allograph--  $\Sigma a \Sigma$ , for example--are nearly identical. There is, in fact, an almost mathematical precision in the formation of alphabetic graphs, as noted by Stevick:

. . . the dimension measured along the line is remarkably equal (on any folio) for all letters made with two vertical strokes (r, h, n, u, etc.); the width of m, i, l, x, z, Δ.

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<sup>1</sup>Robert D. Stevick, "Scribal Notation of Prosodic Features in The Parker Chronicle, Anno 894 893," Journal of English Linguistics, I (March, 1967), 57-66.



and the like hardly changes among the occurrences of the respective letters; and letters having different general configurations--as different as o, t, i, n, m, æ--normally are no different in their juxtaposition to other letters.<sup>1</sup>

Space may thus be measured according to the amount of space required for a single downstroke of the pen. Space may be described as follows:

- 0+ - space slightly greater than  $\Sigma$ , but not sufficient for one downstroke.
- 1 - space sufficient for one downstroke, e.g., enough for l.
- 2 - space sufficient for two downstrokes, e.g., enough for n.
- 3 - space sufficient for three downstrokes, e.g., enough for m.

Pluses and minuses provide for more accurate measurement.<sup>2</sup> Thus the spacing in the first two lines of fol. 40a (see Appendix A) may be described as follows: (0 is indicated when it occurs between lexical items; the hyphen also indicates spacing in the manuscript):

<sup>1</sup>Ibid., p. 58.

<sup>2</sup>Actually, the way this is done, trivial though it may seem, is simply to extend the lines of an m or n several times on the edge of a piece of plain paper:  $\begin{array}{c} | | | | \\ 0 / 2 3 \end{array}$ . A space less than that between the first two marks is  $\Sigma$ . A space which extends from the first to the third marks is wide enough for one downstroke; from the first to the fourth marks, it is wide enough for two downstrokes; from the first to the fifth marks is sufficient space for three downstrokes.

Also, it is important to consider the normal configuration of a graph when measuring. For example, e, before space, is sometimes written e. The measurement is not taken from the end of the serif, but rather from the end point at the bottom of the graph, since e normally occurs in ligature with a following graph.

mid<sup>0</sup> minra<sup>1</sup> wite<sup>0+</sup>na<sup>0+</sup> geðeahte<sup>1+7</sup> on<sup>0</sup> oðre  
 1-wisan<sup>0+</sup> bebead<sup>1+</sup> to<sup>0</sup> heal # danne<sup>3</sup>. Forðam  
 0+ic<sup>0</sup> ne<sup>0</sup> dorste<sup>2-</sup> geðrist-læcan<sup>0+</sup> 1ðara<sup>0+</sup> minra #

According to Stevick, "variations in spacing . . . would not be linguistically interesting unless distribution of the variations formed recurrent patterns and unless those patterns corresponded in some way to linguistic features predictable for Old English."<sup>1</sup> Stevick's analysis of a Chronicle entry of the Parker Manuscript (fol. 16b, l. 18 - fol. 17b) reveals that spacing is patterned and is correlated with phonotactic and syntactic features. His conclusions are based upon a study of compounds, verb form sequences, and larger (4-5 line) groups which reveal the correlation of spacing with syntax.

Examination of sections from The Laws of Alfred and Ine supports Stevick's theory that there is correlation between spacing and syntax. The following two passages are given with the spacings indicated in superscript numerals. The first passage is the first sentence of cap. 2 (fol. 40a, ll. 12-13). The second passage is from the same cap. and folio, ll. 20-24. (see Appendix A) w is used for the Anglo-Saxon grapheme, <ƿ> ; all instances of þ are rewritten as ð. 7 represents and; # means line-end.

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<sup>1</sup> Stevick, p. 59.



- 1 (1) # Æt<sup>0+</sup> ærestan<sup>1</sup> we<sup>0</sup> lærað<sup>1</sup> ðæt<sup>0+</sup> mæst<sup>0+</sup> ðearf<sup>0</sup>
- 2 is<sup>1+</sup> ðæt<sup>0+</sup> æghwelc # mon<sup>1-</sup> his<sup>0+</sup> að<sup>0+</sup> 7<sup>0</sup> his<sup>0+</sup>
- 3 wed<sup>1</sup> wærllice<sup>1</sup> healde<sup>2</sup>.
- 4 (2) .<sup>3</sup>Gif<sup>0</sup> he<sup>1</sup> mægas<sup>1+</sup> næb # be<sup>2+</sup> oððe<sup>1-</sup> ðone<sup>1-</sup>
- 5 mete<sup>1+</sup> næbbe<sup>3</sup> fede<sup>1-</sup> cyninges<sup>1</sup> gerefa # hine<sup>3+</sup>.
- 6 Gif<sup>0</sup> hine<sup>1-</sup> mon<sup>0</sup> to<sup>0+</sup> ge-nedan<sup>1-</sup> scyle<sup>2+</sup> 7<sup>0</sup> he<sup>0+</sup>
- 7 elles<sup>1-</sup> nylle # gif<sup>0</sup> hine<sup>1-</sup> mon<sup>1-</sup> gebinde<sup>3</sup> wolige<sup>1-</sup>
- 8 his<sup>1-</sup> wæpna<sup>1</sup> 7<sup>0</sup> his<sup>0+</sup> ierfes<sup>1+</sup> gif # hine<sup>0+</sup>
- 9 mon<sup>1-</sup> ofslea<sup>1+</sup> licgge<sup>0+</sup> he<sup>1-</sup> orgilde<sup>3</sup>.

1

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<sup>1</sup>Free translation of (2): "If he has no relatives, and [if he] has not the [necessary] food, the king's reeve shall provide him with it. If he will not submit unless force is used against him, [i. e.] if he has to be bound, he shall forfeit his weapons and his property. If he is slain, no wergeld shall be paid for him." (Attenborough, pp. 64-65).

It is immediately apparent that the point,  $\Sigma$ , which marks sentence boundaries, is accompanied by a high range of spacing. The only exception is in line 8 (of the transcription) where the space 1+ may be accounted for by the fact that the following word gif is crowded onto the end of the line. The average range of space at sentence boundaries is about 3-. Very low ranges of spacing occur following prepositions, possessive pronouns and conjunctions. The average is about 0+.

It is of further significance that the higher ranges of spacing within a sentence are correlated with the divisions that result from an immediate constituent analysis.<sup>1</sup> In the first passage, the highest spacing, 1+, occurs exactly where the first cut should be made. Successive cuts in the first constituent should occur after ærestan and lærað; in the second constituent, after mon and wed. After all these words, there is a markedly higher range of spacing. The space (1) after wærlíce does not fit in with this pattern.

In the second passage, the first sentence exhibits the same type of pattern: Spacing is correlated with syntactic structure points. In the following analysis, cuts are marked with the accompanying space indicated by superscript numerals:

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<sup>1</sup>This is Stevick's idea which the present analysis intends to support. The methods used here are not as detailed or exact as Stevick's.



- 1st analysis - first cut: . . . næbbe<sup>3</sup> / fede . . . (l. 5)
- 2nd analysis - Gif he mæg as næbbe<sup>2+</sup> / oððe ðone mete næbbe (l. 4)
- 3rd analysis - Gif he mæg as<sup>1+</sup> / næbbe oððe ðone mete<sup>1+</sup> / næbbe (ll. 4 and 5)
- 4th analysis - fede cyninges<sup>1</sup> / gerefa hine (l. 5)

The second sentence of this passage is too unwieldy to lend itself to immediate constituent analysis. However, the pattern of high ranges of spacing occurring at major syntactic structure points is still evident. The highest space, 3, occurs where the first cut should probably be made: . . . gebinde / wolige . . . (l. 7). The second cut in the first constituent should probably occur after scyle (l. 6) which is followed by a spacing of 2+. The second major constituent contains an apparent inconsistency in that the pattern requires a higher range of spacing after wolige (l. 7) than that which occurs. The spacing after wæpna (l. 8) is consistent, however.

In the third sentence of the second passage, the first cut, . . . ofslea / licgge. . . is clearly marked by a higher range of spacing.

The above analysis indicates that the spacing of the passages examined is correlated to a great extent with syntax. It is not likely, however, that the scribe intended to space his writing according to syntax. Stevick comments: "It is unlikely that the spacings in the manuscript were determined directly by syntactic features: it is difficult to believe that a scribe who apparently was a native speaker

of English would have parsed his text and then spaced his writing accordingly."<sup>1</sup>

Stevick's opinion is that "within the linguistic features that may be plausibly hypothesized for Old English, only prosodic--or supra-segmental--features could directly condition spacings and distribute them as they appear in this text."<sup>2</sup> He explains further: "Since the variation in spacing is in linear measure, and since the greater measures of space occur at boundaries of larger constructions, it may be inferred that spacings are primarily a record of timing features in the speech being represented."<sup>3</sup> Thus, "given the syntax of the text as it progresses, a reader of Old English can immediately interpret the spacing variations as prosodic cues."<sup>4</sup>

$\Sigma 0 \Sigma$  and  $\Sigma // \Sigma$  are thus determined as juncture graphemes,  $\langle 0 \rangle$  and  $\langle // \rangle$ , in significant contrast with each other and with  $\emptyset$ .  $\langle 0 \rangle$  determines the normal juxtaposition of alphabetic graphs in the linear script; the variations of  $\langle // \rangle$  are correlated with syntactic structures and may be considered as representative of prosodic features in the spoken language which the writing system represents.

5.2213 The allograph  $\Sigma \# \Sigma$  is said to have no graphemic status because it is not in significant contrast with the other juncture

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<sup>1</sup> Stevick, p. 65

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid., p. 66.



graphemes. It alternates freely with both 0 and //, as in the following sets:

<sup>0</sup>  
næbbe / næb # be

<sup>0</sup>  
gebete / ge # bete

<sup>0</sup>  
hine / hi # ne

<sup>1</sup>  
ðara ðe / ðara # ðe

<sup>2</sup>  
oððe on / oððe # on

#### 5.222 Punctuation Allographs and Graphemes

$\Sigma \cdot \Sigma$  of  $\langle \cdot \rangle$

$\Sigma : \sim \Sigma$ ,  $\Sigma : \Sigma$ ,  $\Sigma ; \Sigma$ ,  $\Sigma ; \Sigma$  of  $\langle : \sim \rangle$

$\Sigma \sim \Sigma$ ,  $\Sigma \cdot \Sigma$

5.2221 The point,  $\Sigma \cdot \Sigma$ , is the most frequently used punctuation allograph in the text. It occurs (1) centered between words, as "næbbe · Gif he"; (2) before and after roman numerals in headings and within the text; (3) sometimes after abbreviations.

5.22211 In its occurrence between words,  $\Sigma \cdot \Sigma$  is determined as a punctuation grapheme,  $\langle \cdot \rangle$ , defining the graphic sentence. It occurs in significant contrast with all other punctuation allographs and with  $\emptyset$ . Omission of the point results in ambiguity, if not alteration, in meaning:

Gif mon cierliscne mon gebinde unsynnigne gebete mid  
 . x . sciff . gif hine mon beswinge mid . xx . sciff .  
 gebete . gif he hine on hengenalecgge mid . xxx .  
 sciff . gebete . gif he hine on bismor to homolan bescire  
 mid . x . sciff . gebete . gif he hine to preoste bescire  
 unbundenne mid . xxx . sciff . gebete . gif he one beard  
 ofascire mid . xx . sciff . gebete . gif he hine gebinde 7  
 þon to preoste bescire mid . lx . sciff . gebete :~

If anyone lays bonds on an unoffending commoner, he shall pay 10 shillings compensation. If anyone scourges him, he shall pay 20 shillings compensation. If he places him in the stocks, he shall pay 30 shillings compensation. If he cuts his hair to insult him, in such a way as to spoil his appearance, he shall pay 10 shillings compensation. If he cuts his hair after the fashion of a priest's without binding him, he shall pay 30 shillings compensation. If he cuts his beard, he shall pay 20 shillings compensation. If he lays bonds on him, and then cuts his hair after the fashion of a priest's, he shall pay 60 shillings compensation. <sup>2</sup>

In this passage, omission of the point makes it difficult to determine which fine is connected with which crime. It may also be noted that, in this passage, capital letters do not begin the sentences, as they usually do.

5.22212 Although the point is consistently used, seemingly to distinguish roman numerals from other alphabetic allographs, roman numerals are considered as alphabetic word signs identifiable in their own right. Abbreviations are also identifiable by other means, e.g., by replacive allographs, as in sciff. The use of the point in these functions, therefore, is not considered significant.

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<sup>1</sup>Laws of Alfred, cap. 32, fol. 44a.

<sup>2</sup>Attenborough, p. 79.



5.2222  $\Sigma\text{:}\Sigma$  ,  $\Sigma\text{:}\Sigma$  ,  $\Sigma\text{;}\Sigma$  ,  $\Sigma\text{:}\Sigma$  are punctuation allographs occurring in free variation after a word and before  $\Sigma\#\Sigma$ ; they are thus determined as constituting an allographic set. This set is considered a punctuation grapheme,  $\langle\text{:}\sim\rangle$  in that it contrasts significantly with all other punctuation allographs and with  $\emptyset$  in defining a linguistic unit, the paragraph.

5.2223  $\Sigma\sim\Sigma$  and  $\Sigma.\Sigma$  are punctuation allographs used only in the "Table of Contents" at the end of an item. They occur in free variation and may be determined as constituting an allographic set. The set, however, is not accorded graphemic status because it does not contrast significantly with  $\emptyset$ . The allographs are frequently not used.

5.224 It must be emphasized that the significant pattern of punctuation which this analysis has revealed is not in accord with the general view expressed in most Old English grammars that "marks . . . in the OE period did not constitute a coherent or meaningful system of punctuation in manuscripts written in English. They appeared at the ends of sentences, and they also marked various prosodical and rhetorical divisions, but their use was unsystematic and frequently meaningless."<sup>1</sup>

In the text under study, the point, as used to define sentences, is used inconsistently in some instances. However, the over-all

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<sup>1</sup>Peters, p. 299.

pattern shows that the point does have a definable distribution and functions in significant contrast with  $\emptyset$  to define a unit of grammatical structure. The grapheme determining paragraph units,  $\langle : \sim \rangle$  is very consistently used. In fact, there are only three instances where the pattern requires  $\langle : \sim \rangle$  and it is not used.<sup>1</sup>

Concerning this text, at least, it can hardly be said that punctuation is used haphazardly. The pattern is clear, and any inconsistencies in this text may be considered scribal errors or, in some cases, faulty reduplication of the manuscript.<sup>2</sup>

#### 5.223 Replacive Allographs

$\text{Z} \sim \Sigma$  , occurring directly above a consonant or vowel.

$\text{Z} \sim \Sigma$  , a linear stroke through one or more letters.

The function of both allographs is to indicate the absence of one or more alphabetic allographs.

<sup>1</sup>Laws of Alfred, cap. 11 and 14, fol. 42a; cap. 31, fol. 44a. There is also one instance of superfluous usage in cap. 41, fol. 45b.

<sup>2</sup>Although this manuscript is exceptionally legible compared with other Old English manuscripts, there are some blemishes. For example, the margins on every page contain marks which resemble ink splatterings. Sometimes what appear to be punctuation dots are only blemishes of this type occurring within the text. Also, some pages in the "Table of Contents" contain a vertical row of regularly spaced dots in the far right-hand margin. These marks were used as guides for ruling the parchment.

True inconsistencies in the use of  $\langle \cdot \rangle$  , usually omissions, are most frequently found in particularly crowded stretches of the text.



5.2231  $\Sigma\sim$  is used most frequently in alternation with nasals,

as in:

frō / from

hī / him

ƿā / ƿam

ciricū / ciricum

ƿon̄ / ƿonne

It occasionally replaces other letters as well:

scš / sanctus (L.)

scē / sancte (L.)

scā / sancta (L.)

ƿon̄ / ƿonne

ḡselle / geselle

ḡfehð / gefehð

bisč / biscepes

5.2232  $\Sigma/\Sigma$  is frequently used in this text in alternation with part of two words:

sciŋ / scilling

ƿ / ƿæt

5.224 Diacritic Allograph. The text contains one diacritic allograph,  $\Sigma'/\Sigma$ , which occurs directly above vowel allographs and seems to indicate stress, rather than length. Sometimes it seems that  $\Sigma'/\Sigma$  is used over long vowels where ambiguity may be likely to arise, e.g., gód "good" and god "God." However, where  $\Sigma'/\Sigma$  seems to

indicate long vowels, "this is probably only because such vowels were often heavily stressed. It was, in fact, probably as a means of indicating stress and intonation that the accents were used in so far as such use was deliberate."<sup>1</sup>

5.225 Word Sign Allograph

37Σ of <7>

37Σ represents the word and; the word and does not occur in the text. Since 37Σ does not alternate with alphabetic allographs, it is considered a word sign grapheme, <7> .

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<sup>1</sup> Randolph Quirk and C. L. Wrenn, An Old English Grammar (New York: Holt, Rinehart and Winston, Inc., 1957), p. 9.



## CHAPTER VI

### THE GRAPHEMIC-PHONEMIC SYSTEM

6.1 The Old English phonemic system assumed for the purpose of graphemic-phonemic comparison is based primarily upon the phonological systems presented by Joseph and Elizabeth Wright, and Thomas Pyles.<sup>1</sup>

#### 6.2 The Phonemic System

##### 6.21 Consonants

		Bilabial	Labiodental	Dental	Alveolar	Alveopalatal	Palatal
<u>Stops</u>	vl.	/p/			/t/		/k/
	vd.	/b/			/d/		/g/
<u>Affricated Stops</u>	vl.					/tʃ/	
	vd.					/dʒ/	
<u>Fricatives</u>			/f/	/θ/	/s/	/ʃ/	/h/
<u>Nasals</u>		/m/			/n/		
<u>Lateral</u>					/l/		
<u>Trill</u>					/r/		
<u>Glides</u>		/w/					/j/ <sup>2</sup>

<sup>1</sup> Joseph Wright and Elizabeth Mary Wright, Old English Grammar (London: Oxford University Press, 1925) and Thomas Pyles, The Origins and Development of the English Language (New York: Harcourt, Brace and World, Inc., 1964).

<sup>2</sup> This symbol is often written /y/ in other systems. /y/ is used here, however, to represent the high, front, rounded vowel.

6.211 In addition to the consonant phonemes presented on the chart, consonant length is generally considered to have been phonemic in Old English, and is represented by doubled consonants occurring between vowels. (See 5.14.) Thus, "the t's of sittan indicated the medial single consonant sound frequently heard in hot tamalé, which is of longer duration than the medial consonant of Modern English sitting; similarly ll in fyllan indicated the lengthened medial l of full-length, in contrast to the short l of holy; cc as in racca 'part of a ship's rigging' was a long k as in bookkeeper, in contrast to beekeeper, and hence racca was distinguished from raca 'rake'; and so on."<sup>1</sup>

6.212 /g/ had two allophones, palatal [g] and velar [ɣ], in complementary distribution. [g] occurred before consonants, initially before back vowels and before front vowels which were the result of mutation, and medially and finally in the sequence, [ŋg]; [ɣ] occurred elsewhere.

The fricatives, /f/, /θ/, and /s/ each had two allophones: [f], [v]; [θ], [ð]; [s], [z]. In each case the allophones were in complementary distribution, the voiced allophone occurring between voiced sounds; the voiceless allophone occurring elsewhere. The allophones of /h/ were [h] and [x]. [h] occurred initially; [x] occurred elsewhere.

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<sup>1</sup>Pyles, p. 109.



/n/ also had two allophones, [n] and [ŋ], with the following distribution: [ŋ] occurred before the palatal stops; [n] occurred elsewhere.

## 6.22 Vowels

### 6.221 Simple Vowels

	<u>Front</u> (Unrounded)	(Rounded)	<u>Back</u>
<u>High</u>	/i:/	/y:/ <sup>1</sup>	/u:/
	/ɪ/	/ʏ/	/ʊ/
<u>Mid</u>	/e:/		/o:/
	/ɛ/		/ɔ/
<u>Low</u>	/æ:/		/ɑ:/
	/æ/		/ɑ/

6.2211 Vowels marked with the colon are long; the others are short. The difference between long and short vowels is, in some cases a difference of length only, as /æ:/, /æ/; /ɑ:/, /ɑ/. In the other pairs the difference is in length and quality.

### 6.222 Diphthongs

/æ:ə/	/e:ə/	/i:ə/	/i:ɔ/
/æə/	/eə/	/ɪə/	/ɪɔ/

## 6.3 The Representation of Consonant Phonemes

### 6.31 Stops

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<sup>1</sup>These symbols, in other systems, are often written /u:/ and /ʊ/.

6.311 Voiceless

6.3111 /p/ is represented in all environments by the allographs of <p> as in spere /spɛrɛ/ "spear."

6.3112 /t/ is represented in all environments by the allographs of <t> as in to /to:/ "to."

6.3113 /k/ is represented by the allographs of <c> as in cwædon /kwæ:dɔn/ "declared"; and by the marginal grapheme <k> as kyning /kynɪŋ/ "king."

6.312 Voiced

6.3121 /b/ is represented in all environments by the allographs of <b> as in borg /bɔrg/ "pledge."

6.3122 /d/ is represented in all environments by the allographs of <d> as in deaf /dæ:ɸ/ "deaf."

6.3123 /g/ is represented in all environments by the allographs of <g> as in Godes /gɔðɛs/ [gɔðɛs] "God's" and dagas /dɑgɑs/ [dɑzɑs] "days."

6.32 Affricated Stops

6.321 /tʃ/ is represented by the allographs of <c> as in cirice /tʃɪrɪcɛ/ "church."

The representation of phonemes by <c> is somewhat complex and should be summarized at this point. In certain cases, graphic evidence alone cannot determine whether the allophones of <c> represent /k/ or /tʃ/ and historical evidence must be relied on. <c> represents /k/ in the following environments: ()C-, ()BV and their umlauts-; -BV().



<c> represents /ç/ in these environments: ( )FV which was not the result of umlaut-; -( )- when it was originally followed by <i> or <j>; -/I/ or /i:/( ). e.g., ic /iç/.

6.322 /j/ is represented by the graphic sequence <cg> as in brycg /bryj/ "bridge."

### 6.33 Fricatives

6.331 /f/ is represented by the allographs of <f> as in freond /fre:ond/ [fre:ond] "friend" and scife /ʃri:fε/ [ʃri:vε] "prescribes."

6.332 /θ/ is represented by the allographs of <ð> as in þas /θɑ:s/ [θɑ:s] "those," wið /wiθ/ [wiθ] "with," oðer /o:θεr/ [o:ðεr] "other," weorþe /weərθε/ [weərðε] "worth."

In Old English phonology, [ð], the voiced interdental fricative, and [θ], the voiceless counterpart, were allophones of the same phoneme, /θ/. [ð] occurred medially between vowels or between a vowel and a voiced consonant; [θ] occurred elsewhere. The phoneme, /θ/, was represented by two graphs, þ and ð. According to Francis, "it is possible that the scribes originally intended the two letters to represent each of these [the two allophones] individually--though writing systems seldom do indicate allophonic differences, which may go unperceived by native speakers. In any case, no surviving texts show this clear-cut separation. In late O.E. writing the practice

grew up of using  $\text{ȝ}$  in initial position and  $\text{ȝ}$  medially and finally, so that they came to be in complementary distribution instead of free variation."<sup>1</sup>

In the present text, the two graphs, as indicated in Chapter V, occur consistently in free variation in all environments except final position and are considered allographs of the same grapheme.

6.333 /s/ is represented by the allographs of <s>, as in swa  
/swd:/ "so."

6.334 /ʃ/ is represented by the graphic sequence <sc> as in scyldig /ʃyldɪ/ "guilty."<sup>2</sup>

6.335 /h/ is represented by the allographs of <h> as in hus  
/hu:s/ [hu:s] "house," ryht /ryht/ [ryxt] "right" (n.).

#### 6.34 Nasals

6.341 /m/ is represented by the allographs of <m> as in modor  
/mo:dɔr/ "mother."

6.342 /n/ is represented by the allographs of <n> as in sunu  
/sʊnu/ [sʊnu] "son" and lenctenfæsten /lɛnktɛnfæstɛn/  
[lɛnktɛnfæstɛn] "Lent."

#### 6.35 Lateral

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<sup>1</sup>W. Nelson Francis, The English Language (New York: W. W. Norton and Co., 1965), p. 201.

<sup>2</sup>Originally, in O.E., <sc> represented two phonemes, /sk/. Through a "process of palatization and fusion" (Francis, The English Language, p. 202) the single phoneme /ʃ/ developed. <sc> had quite logically represented /sk/; when all cases of /sk/ underwent the change to /ʃ/, the spelling <sc> remained.



6.351 /l/ is represented by the allographs of <l> as in dæl  
/dæ:l/ "part" (n.).

6.36 Trill

6.361 /r/ is represented by the allographs of <r> as in hira  
/hɪra/ "her."

6.37 Glides

6.371 /w/ is represented by the allographs of <w> as in wæron  
/wæ:rɔn/ "were."

6.372 /j/ is represented by the allographs of <g> as in gif  
/jɪf/ "if."

The representation of <g> is somewhat complex; historical evidence must be relied on in some cases. <g> represents /g/ in these environments: ()C-, ()BV-, ()FV which is the result of mutation-, -B V()BV-, medially or finally in combination <ng>. <g> represents /j/ in the following environments: ()<i>, <e>-, -FV()FV-, -FV().

6.38 The Use of <i> and <e> as Diacritics to Indicate Palatization. <i> and <e> frequently serve as diacritics after <c>, <cg>, <sc>, and <g> to indicate the palatal nature of the sounds which these letters represent. Thus, medially before a back vowel, the sequences <ci> and <ce> represent /č/,<sup>1</sup> as secean /se:čɔn/ "to seek";

<sup>1</sup>The representation of the graphic sequences <ce> and <ci> is debated. One opinion is that in early O.E. /k/ had two allophones, palatal [k̟] as in "kick" and velar [k] as in "cook." /č/ developed as a separate phoneme from the palatal allophone of /k/ when, in certain environments, the two sounds became contrastive. Both allophones of /k/ had always been spelled <c>, but when the new phoneme came into

<cgi> and <cge> represent /j/,<sup>1</sup> as licgean /lɪjɔn/ "to lie down."

Initially and medially before a back vowel, <sci> and <sce> represent /ʃ/, as sceacan /ʃɔkɔn/ "to shake." Initially, before a back vowel the sequences <ge> and <gi> represent /j/, as geoc /jɔk/ "yoke."

However, in some cases where <i> and <e> may be interpreted as diacritics representing palatization, it is also possible to interpret them as representing one element of a diphthong. On this matter, Wright states, "In forms like gioc, geoc. . .<sup>2</sup> 'yoke'; giong, geong. . . 'young'; geōmor. . . 'sad,' the io, eo, eo may have been rising diphthongs, but it is difficult to determine how far they were diphthongs at all, and how far the i, e, were merely inserted to indicate the palatal

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existence, it was sometimes written, before a back vowel, with a following <e> or <i> to represent the new pronunciation. (Francis, The English Language, p. 202.)

According to Wright, however, the sequences <ce> and <ci> were not created for the purpose of representing a new phoneme. His opinion is that they simply distinguished the palatal and velar allophones of /k/ and that /ç/ came into existence much later toward the beginning of the M. E.

The position adopted in this study is that of Pyles and other recent O. E. grammarians, that /ç/ was a separate phoneme in O. E. and that the <e> and <i> following <c> before a back vowel served to distinguish the new sound from /k/.

<sup>1</sup>Just as /ç/ developed from [k], so /j/ developed as a separate phoneme from the palatal allophone of /g/. Francis conjectures that the spelling <cg> probably resulted from the scribes' awareness of the <c> spelling for the voiceless counterpart. As in the case of <c>, it seems likely that the <e> and <i> were added in medial position before back vowels to distinguish this new sound. (Wright, however, claims that <cg> represented, not the phoneme /j/, but only the palatal allophone of /g/ and that the spellings <cge> and <cgi> represented palatization only.)

<sup>2</sup>Omissions in this quote are etymologies and cross references.



nature of the g = Germanic j. . . . It is highly probable that in forms like sceacan, 'to shake,' sceaðu, 'shadow'. . . . sceolde, . . . 'should,' sceādan, 'to divide,' . . . the g was merely inserted to indicate the palatal nature of the sc. . . ." <sup>1</sup>

#### 6.4 The Representation of Vowel Phonemes

##### 6.41 Simple Vowels

6.411 /i:/ and /ɪ/ are represented by the allographs of <i> as in gifre /ji:frɛ/ "greedy" and ic /ɪç/ "I."

6.412 /e:/ and /ɛ/ are represented by the allographs of <e> as in mete /mɛtɛ/ "meat" and me /me:/ "me."

6.413 /æ:/ and /æ/ are represented by the allographs of <æ> as in wæpn /wæ:pn/ "weapon" and hæfde /hæfdɛ/ "had."

6.414 /y:/ and /y/ are represented by the allographs of <y> as in lytle /ly:tlɛ/ "little" and mynster /mynstɛr/ "monastery."

6.415 /u:/ and /ʊ/ are represented by the allographs of <u> as in hus /hu:s/ "house" and wudu /wʊdʊ/ "wood."

6.416 /o:/ and /ɔ/ are represented by the allographs of <o> as in oðer /o:ðɛr/ "other" and god /gɔd/ "God."

6.417 /ɑ:/ and /ɑ/ are represented by the allographs of <a> as in sawol /sɑ:wɔl/ "soul" and dagas /ddgɑs/ "days." Medially before nasals, /ɑ:/ and /ɑ/ are sometimes represented by the allograph  $\sum o \Sigma$  of <o> as in mon /mɑn/ "man."

<sup>1</sup>Wright, p. 37

6.42 Diphthongs

6.421 /e:ə/ and /ɛə/ are represented by the graphic sequence <eo> as in ðeof /ðe:əf/ "thief" and heorte /hɛərtɛ/ "heart."

6.422 /æ:ə/ and /æə/ are represented by the graphic sequence <ea> as in eac /æ:ək/ "also" and bearn /bæərn/ "child."

6.423 /i:ə/ and /ɪə/ are represented by the graphic sequence <ie> as in hieran /hi:ərn/ "to hear" and ierfa /ɪərfd/ "inheritance."

6.424 /i:o/ and /ɪo/ are represented by the graphic sequence <io> as in hio /hi:o/ "he" and fiorh /fɪorh/ "life."



6.5 A Summary of the Graphemic-Phonemic System

<u>Graphs and Graphic Sequences</u>	<u>Allographones</u>	<u>Phonemes</u>
<u>a</u> <u>A</u>	<a>	/d/  d:/
<u>æ</u> <u>Æ</u>	<æ>	/æ/  æ:/
<u>b</u> <u>B</u>	<b>	/b/
<u>c</u> <u>C</u>	<c>	/k/ ~ /ç/
<u>ci</u>	<ci>	/ç/
<u>ce</u>	<ce>	/ç/
<u>cg</u>	<cg>	/ʒ/
<u>cgi</u>	<cgi>	/ʒ/
<u>cge</u>	<cge>	/ʒ/
<u>d</u>	<d>	/d̄/
<u>e</u> <u>E</u>	<e>	/ɛ/ ~ /e:/
<u>eo</u> <u>Eo</u>	<eo>	/ɛə/ ~ /e:ə/
<u>ea</u> <u>Ea</u>	<ea>	/æə/ ~ /æ:ə/
<u>f</u>	<f>	/f/
<u>g</u> <u>G</u>	<g>	/g/ ~ /ʒ/
<u>ge</u> <u>Ge</u>	<ge>	/ʒ/
<u>gi</u> <u>Gi</u>	<gi>	/ʒ/
<u>h</u> <u>H</u>	<h>	/h/
<u>i</u> <u>I</u>	<i>	/i/ ~ /i:/
<u>ie</u> <u>Ie</u>	<ie>	/iə/ ~ /i:ə/
<u>io</u> <u>Io</u>	<io>	/iə/ ~ /i:ə/

Graphs and Graphic Sequences

Allographones

Phonemes

<u>l</u> <u>L</u>	<l>	/l/
<u>m</u> <u>M</u>	<m>	/m/
<u>n</u> <u>N</u>	<n>	/n/
<u>o</u> <u>O</u>	<o>	/ɔ/ ~ /o:/
<u>p</u> <u>P</u>	<p>	/p/
<u>r</u> <u>R</u>	<r>	/r/
<u>s</u> <u>S</u>	<s>	/s/
<u>sc</u> <u>Sc</u> <u>ſc</u>	<sc>	/ʃ/
<u>sci</u> <u>Sci</u> <u>ſci</u>	<sci>	/ʃi/
<u>sce</u> <u>Sce</u> <u>ſce</u>	<sce>	/ʃi/
<u>t</u> <u>T</u>	<t>	/t/
<u>ʒ</u> <u>D</u> <u>ʒ</u> <u>Ʒ</u>	<ʒ>	/θ/
<u>u</u>	<u>	/ʊ/ /u:/
<u>ʋ</u> <u>P</u>	<ʋ>	/w/
<u>x</u>	<x>	/ks/
<u>y</u> <u>Y</u>	<y>	/y/ ~ /y:/



<u>Graphic Phonemes</u>	<u>Allographones</u>	<u>Phonemes</u>
«b»	<b>	/b/
«ce»	<ce> <ci>	/ɛ/
«cg»	<cg> <cge> <cgi>	/j/
«d»	<d>	/d/
«f»	<f>	/f/
«ge»	<ge> <gi>	/j/
«h»	<h>	/h/
«l»	<l>	/l/
«m»	<m>	/m/
«n»	<n>	/n/
«p»	<p>	/p/
«r»	<r>	/r/
«s»	<s>	/s/
«sc»	<sc> <sce> <sci>	/ʃ/
«t»	<t>	/t/
«p»	<ɸ>	/w/
«x»	<x>	/ks/
<u>Multi-valued</u>		
«a»	<a>	/ɑ/ ~ /ɑː/
«æ»	<æ>	/æ/ ~ /æː/
«c»	<c>	/k/ ~ /k̄/
«e»	<e>	/ɛ/ ~ /eː/

Multi-valued

«eo»	<eo>	/ɛə/ ~ /e:ə/
«ea»	<ea>	/æə/ ~ /æ:ə/
«g»	<g>	/g/ ~ /j/
«i»	<i>	/ɪ/ ~ /i:/
«ie»	<ie>	/ɪə/ ~ /i:ə/
«io»	<io>	/ɪo/ ~ /i:o/
«o»	<o>	/ɔ/ ~ /o:/
«u»	<u>	/ʊ/ ~ /u:/
«y»	<y>	/y/ ~ /y:/



**APPENDIX A: SAMPLE PAGES OF THE TEXT**

andunne . . . . .  
danne . . . . .  
apultu . . . . .  
paf . . . . .  
m . . . . .  
offan . . . . .  
palluhtu . . . . .  
dultan . . . . .  
e . . . . .  
whaldanne . . . . .

**A**Tahtan pel . . . . .  
mon . . . . .  
lum . . . . .  
odde . . . . .  
w . . . . .  
danne . . . . .  
ane . . . . .  
hine . . . . .  
g . . . . .  
hine . . . . .  
h . . . . .



reapere spake of seolde giphelofige. prehe apin  
ned yre amansumod ofeallum cristen cruceu. Gif  
of donne ofen manise bonzre bete pone bonz bry  
e spalum polte ppre done ped bryce spahim hy  
cruceu ppre . . . . . III

**I**phra papa mynstes hama hpelene forhpelcige  
seolde gife becruntes flonin tobe limpe od  
de odqune pnone hihied seapryde re use he  
pntona mlta pihfo himtoge btonzanne butonhe  
dingum pille. Gifhine mon ondum pihste seplige  
moslege odde mid bryce odde paphunde bete  
papa atpale mid phtes dæd seipe semid phtes se  
mid pte ifam hysum hund trefas rest. cruce ppi  
de toboce mebbe hy agne for fonten . . .

.iiii.

**I**phra cruntes bonz abpice gebete pone ght  
salum polte ppre ifabonze bryce mid v. pundu  
magna psantiga ppre bryce bonz bryce odde  
hy mund brynd gebete mid dnum pundum. od pte bryce  
pht odde ealdon monne bonz bryce odde mund  
brynd gebete mid dnam pundum . . . V.

**I**phra rimb cruntes flonin pihpe duphine odde  
duph pntecna flonuntes odde hy manna pre  
hehy flonze seoldis tall. pht de he age. Gifhelme  
phtne quopan pille doht becruntes phtselde.

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