The appendices

The original version of this text of *Beowulf* was published with three appendices. Appendix I abstracted and sorted text with the manuscript spacing that occurs at other than a morpheme boundary. Appendices II and III abstracted and sorted text with spacing that separates root and prebase morphemes within compound and derivational word structures. All three of these are retained here, based on the revised text, and presented in revised format; they are given, though, only in representative excerpts, each about one-fifth of its full length. Appendix IV is new; it illustrates other straightforward abstractings and sortings of patterns in the text.

Together these sample analyses illustrate some of the fundamental regularities in the writing of the manuscript text which have not yet been studied as they should be for the textual information which they represent. For example, syllabification of Old English is documented by the patterns displayed in Appendix I with clear and copious citations. In turn, the habits of writing which they specifically illustrate shed some light on some textual problems. A very simple pair of examples may be found in *gryre* 1282 and *scêata* 752. Each word is divided at the end of a manuscript line. The scribe first wrote *gryr*; subsequently he wrote re on the next line and scraped away (imperfectly) the r at the end of *gryr*. Kemp Malone’s explanation of the error occurring “by dittography” is probably not right. Rather, when he had written as far as *gryr*, the scribe apparently decided not to complete the form, since to do so would extend the writing beyond the ruled margin. His principle of dividing words called for a full syllable (or more) on the new line, hence the writing of re and the erasure. At 752 the same kind of thing apparently happened, except that the scribe neglected to erase the t at the end of *scêat*. The error, recognizable on linguistic grounds, is readily explicable by one of the scribe’s principles of dividing strings of letters.

The manuscript reading *merewiogiingas* 2921 has been for a long time (as Malone termed it) a “bone of contention.” That the scribe intended that reading—and not, say, *merewicinga*—is the inference supported by spacing characteristics. There are reasons to believe that the final s was added as a correction by the scribe after he had written subsequent letters. While the s looks normal (in the printed facsimiles), its presence leaves the text without space between the compound noun or name and the following word *milts*. This zero-space at the boundary between forms of these types is contrary to the principle of leaving space between verse halflines, and it produces a string of ten letters very unusual in both its length and structure.

The morphotactics of derivative and compound words is documented by the patterns displayed in Appendices II and III. The citations again are ample, and they fall into distinct patterns. If, for example, the first root morpheme in a compound has two syllables, only about one time in fifty is it not separated from the following morpheme (if the name *Hygelac* is excepted), and in most instances by “some” or “much” space, in contrast to “little” (see “The measure of spacing,”
above): nearo-\textsuperscript{3}-pearfe 422, heapo-\textsuperscript{3}-ræs 557, gryre-\textsuperscript{4}-geatwum 324, gealo-\textsuperscript{2}-rand 438, etc.

The first three appendices concern patterns within words. Appendix IV gathers citations for some of the larger patterns—among words rather than within them—together with some brief commentary. The longest set focuses on two coordinate constructions: $X$ ond $Y$ first where $X$ and $Y$ are constituents of a single halfline, second where they are the halfline constructions within one metrical line. Some shorter ones focus on a single form such as genitive plural gēata; or “semi-adverbial” þæs; or on a recurring phrase such as preposition + sele þam hēan, and so on. These will illustrate in quite another way the range of textual evidence—long overlooked or disdained—that cannot safely be left out of account in the study of the meter, the syntax, and the prosody of Beowulf.

Beyond the regularities of spacing patterns in repeating formulas or syntactic frames, there are many ostensible irregularities appearing in the first three appendices as well as elsewhere in the full text. The clearest examples are in the spacings between root morphemes in compounds: the same word may occur with “little” space there, or “much,” or “some.” It is in the full analysis of these differing spacings that most of them will resolve into regular patterns in the writing of verse. (And it is in this fuller analysis that the epiphenomenal foundation of the reigning theories of Old English meter may become evident.)

Spacing almost never occurs except at syllable boundaries and/or morpheme junctures (Appendices I, II, III). Spacing at syllable junctures within morphemes is nearly always minimal (Appendix I). On the other hand, spacing between morphemes within words is sometimes minimal (“little” or “none”), but far more often—especially between root morphemes—it is “some” or “much” (Appendices II, III). For example, there are four verses in Beowulf containing the compound noun bœorsele. One is written bœor-\textsuperscript{1}-sele (482), one is written bœor-\textsuperscript{1}-sele (1094), one is written bœor-\textsuperscript{3}-sele (2536), and one is divided at the end of a line of writing (492). On the basis of word-stress analysis, they should all be written alike, and their verses should be classified typically as variants of a single verse type, as they have been by A. J. Bliss (among others):

\begin{verbatim}
d3c  þæt hie on bœor-sele  482
d3a             on bœor-sele  492, 1094, 2635
\end{verbatim}

From this perspective, the differences in spacings do appear to be arbitrary.

From the point of view of phrase structure, though, the longer verse can be seen to divide into two main constituents, Subject and Locative Phrase (after relative þæt). In speech, phrase accent (on the model of modern Germanic languages) is appropriate exactly twice to help keep the subject phrase and the locative phrase from running together, and to help signal separation of the LocP from the predicate construction following it. Phrase accent will fall on the head of each of these phrases, on hie and on bœorsele; and that in turn means that the phrase accent falls specifically on the syllable of each word that its lexical stress-pattern stipulates, that is, on hie and on bœor-. The shorter verse, a minimal prepositional phrase, does not divide into two phrasal constituents at the syntactic level, leaving
only the morphology of the noun to guide the normative division into two, that is, between beor- and -sele. The spacing patterns are these:

0482 ūh 4 in 0 beor-1-sele 7 bidan 3 wol2dan 3
0492 on 1 beor-/-sele 7 benc 1 ge-1-rýned 4
1094 on 1 beor-4-sele 5 byl1dan 4 wolde. 7
2635 in 1 bior-3-sele / Es 1 ûs 1 ëas 3 bëagas 3 geaf 5

From this perspective the differences in spacing appear to match differences in speech patterns that are predictable from the differing synactic structures.

Appendices I–III have been derived from the electronic text by sort-programs in a current version of SnOBOL4 (plain vanilla), the same programming language, then quite new, that was used to generate the appendices which accompanied the original version of this text.

When a line of text is read in, the first six characters are made the current value of count, and the remainder are made the current value of citation. Then citation is scanned for “arb”—any string of characters—preceding a succession of blank numeral blank which in turn is not preceded by a hyphen: the resulting string is made the current value of word. Subsequently, each word is scanned for specific features fitting the following set of definitions. (Literals are enclosed in single quotation marks, alternates are separated by — marking.)

Definitions of Graphological Elements

Letter = any('abcdefghijklmnopqrstuvwxyz
ABCDEFGHIJKLMNOPQRSTUVWXYZ')
Numeral = any('0123456789')
Abbreviation = any('=7b')
Pointing = ' - ' , ' - ','Lostgraph = ' ' a'
Versemark = '/ /'
Vowelgraph = any('aeiouyaeiouyaeiouyaeiouyAEIOUYAEIOUYAEIOUY')
Vnucleus = span('aeiouyaeiouyaeiouyAEIOUYAEIOUYAEIOUY')
Longvowel = any('aeiouyaeiouyAEIOUY')
Longthong = 'ea' — 'eo' — 'ie' — 'io' — 'EO' — 'EA' — 'IE' — 'IO'
Shortvowel = any('aeiouyAEIOUY')
Shortthong = 'ea' — 'eo' — 'ie' — 'io' — 'EO' — 'EA' — 'IE' — 'IO'
Nasal = any('mnMN')
Liquid = any('lrLR')
Resonant = Nasal — Liquid
Spirant1 = any('phpfDF')
Spirant2 = any('ssS')
Spirant = Spirant1 — Spirant2
Stopcon = any('ptckbdPTCKBD')
Ambicon = any('gxwhGXWH')
Consonant = Resonant — Spirant — Stopcon — Ambicon