

Article

# The Composite Nature of *Andreas*

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**Abstract:** Scholars of the Old English poem *Andreas* have long debated its dating and authorship, as the poem shares affinities both with *Beowulf* and the signed poems of Cynewulf. Although this debate hinges on poetic style and other internal evidence, the stylistic uniformity of *Andreas* has not been suitably demonstrated. This paper investigates this question by examining the distribution of oral-formulaic data within the poem, which is then correlated to word frequency and orthographic profiles generated with lexomic techniques. The analysis identifies an earlier version of the poem, which has been expanded by a later poet.

**Keywords:** Anglo-Saxon literature; Old English language; philology; digital humanities; medieval studies; *Andreas*; Cynewulf; *Beowulf*; lexomics

## 1. Introduction

Cynewulf has received scrutiny as one of the few named poets in the Anglo-Saxon vernacular due to the existence of four poems—*Elene*, *Juliana*, *Christ II*, and *The Fates of the Apostles*—that contain rune signatures bearing his name. The modern expectation is for an author to sign his work, but because manuscript collections of Anglo-Saxon poetry appear to have been intended for local audiences this was not the norm in medieval England (Bredehoft 2009, p. 45). Cynewulf signed these poems to solicit prayers on his behalf, not due to an expectation of publication (p. 46). Due to the anonymous nature of the Old English poetic corpus, unsigned poems authored by Cynewulf may exist, but because we know so little about his biography, “the whole question of Cynewulf’s authorship is intimately tied up with the issue of style” (Orchard 2003, p. 271). Scholars have categorized various poems that may share stylistic resemblance to the signed poems into a broader “Cynewulfian group” with some claim to authorship by Cynewulf or a subsequent school of devotees. Foremost among the Cynewulfian group is *Andreas*. Found in the Vercelli Book along with *Elene* and immediately followed by *The Fates of the Apostles*, *Andreas* tells the story of God’s calling of the disciple Andrew to rescue Matthew from bloodthirsty cannibals. The poem’s mix of heroic diction (evocative of *Beowulf*) and didactic sermonizing (in the style of Cynewulf) is its most striking quality.

Scholars in the early nineteenth century were inclined to attribute the poem to Cynewulf due to stylistic similarities, such as similar formulaic language (Bjork 2001, p. xvi). Later scholars have argued against this possibility based on grammatical and metrical differences, as well as its shared diction with *Beowulf* (Fulk 2001, pp. 7–8; Greenfield and Calder 1986, p. 165). Although, a recent study of the style of Old English verse found a strong correlation in the use of compound words between *Andreas* and the signed poems, leading the authors to entertain the possibility of Cynewulfian authorship as an area warranting further exploration (Neidorf et al. 2019, p. 564). It is worth noting that *The Fates of the Apostles* was once thought to be a part of *Andreas*. If both poems were authored by Cynewulf, then the rune signature of *Fates* could be applied to the set (p. 565).

Stylistic data have been used to support or refute a Cynewulfian attribution for *Andreas*, but interrogating these data for what they might tell us about the structure and composition of the poem

itself has not been of primary concern. In order to accurately assess the style of a work, the critic must demonstrate its stylistic uniformity, because it would be inappropriate to generate a single authorial profile by conflating the contributions of multiple authors; however, such a demonstration has not been made with *Andreas*. The new critical edition edited by North and Bintley in 2016, for instance, makes no mention of the possibility of a composite nature despite recognizing the poem's unusual fusion of Beowulfian and Cynewulfian traits.

The practice of repurposing poetic material is not without precedent in the Old English poetic corpus. Within the Cynewulfian group, the *Christ* and *Guthlac* poems found in the Exeter book are considered five independent poems rather than two long works (Fulk 2001, pp. 5–9). Several other poems have also been shown to have a composite nature. In 1875, Eduard Sievers noted a stylistic division within the poem *Genesis*, applying philological principles to identify a section of lines (now called *Genesis B*), which were translated from Old Saxon (Greenfield and Calder 1986, pp. 209–10). Drout and Chauvet use lexomic techniques to show that the “Song of the Three Youths” poem embedded within *Daniel* is derived from an Old English version rather than Latin as supposed by Paul Remley (pp. 298–99). Most recently, Leonard Neidorf has marshalled compelling metrical and lexical evidence to demonstrate that *The Dream of the Rood*, a poem from the same manuscript as *Andreas*, can be divided into two components. The author of the first 77 lines of *Dream* exhibits a superior command of Old English poetics to that demonstrated in the latter half, who may have been motivated to restore a damaged copy of the poem (pp. 68–70).

This paper re-examines the distribution of stylistic features within *Andreas* to determine to what extent they are uniform and employs statistical analysis to describe and explain any observed variance. Such an investigation is a prerequisite for any endeavor dependent on identifying an author's style. The critic should consider to what extent the observed variance may indicate composite authorship rather than deliberate intent of a single author. The discovery of unusual distributions of differentiated markers of style can be a hallmark of a composite work. “If sections of a work exhibit linguistic distinctions that cannot reasonably be attributed to chance or to the deliberation of a single author, credence in a theory of composite authorship appears warranted” (Neidorf 2017, p. 53). Identifying a poem's composite nature may also shed new light on dating the work, locate its place of composition, provide new historical information about editorial and poetic composition practices, and recover the outline of an earlier lost work. This analysis suggests that *Andreas* is a composite work that can be divided loosely into two components: a shorter, earlier version which is plot-driven and typified by heroic diction in the style of *Beowulf* and a set of later expansions, which is characterized by its affinity with Cynewulf.

## 2. Methodology

Scholars such as George Krapp have compiled lists of similarities and differences in terms of grammar and diction between *Andreas* and the signed poems. More recently, Andy Orchard has identified distinctive formulaic parallels and word compounds among these, as well as between *Andreas* and *Beowulf*. However, neither Krapp nor Orchard considered whether such stylistic elements are uniformly or heterogeneously distributed within the poem, and both scholars neglected to include a visual component, which, as Franco Moretti puts it, “shows us that there is something that needs to be explained” (p. 39). By plotting such data as a function of line number, it is possible to visualize and interpret the distribution of specific elements. Having done so, the data can be further correlated with other quantitative techniques, such as rolling window analysis and hierarchical, agglomerative cluster analysis as applied to Anglo-Saxon studies by the Lexomics Research Group at Wheaton College. Moretti also notes that quantitative analysis presupposes a formalism that “makes quantification possible in the first place” (p. 25). As such, it is important that the feature selected for quantification be grounded in a solid theoretical basis. The features quantified here—oral-formulaic phrases, word choice, and orthographic preferences—have long been cited by scholars as aspects of literary style, which, for the purpose of this analysis, are limited to an author's choice of lexemes and, to a lesser degree, the way in which they are deployed within the context of Old English poetic metrics.

Whereas the oral-formulaic analysis works on the level of phrases, cluster analysis quantifies the frequency of individual words. Cluster analysis generates a statistical profile of an author's style by measuring the frequency with which an author uses each word in a sample. Similar techniques—such as John Burrow's Delta procedure—have been used to investigate questions of authorship in other domains, but these methods presuppose that the critic has access to a corpus of known works from a "closed" field of possible authorial candidates (Burrows 2003, pp. 8–10; Hoover 2004). The Delta procedure collapses an author's statistical profile into a single "delta-score" defined as "the mean of the absolute differences between z-scores for a set of word-variables" (Burrows 2002, p. 271). Burrows limited his analysis to the top 150 words in order to avoid the effects of domain-specific content words (p. 469).<sup>1</sup> Cluster analysis replaces the delta-score calculation with dendrogramming, the visual representation of relative affinity between texts, which allows word frequency profiles to be applied more efficaciously to "open" fields of largely unknown authors (e.g., the Old English poetic corpus), as well as within a single work, to investigate questions of internal structure (Drout et al. 2011, p. 305; 2016, pp. 7–8). Because cluster analysis does not use z-scores, the contribution of content words to the difference calculation is attenuated naturally by the effect of Zipf's law and the fact that every text is directly compared to every other text, rather than against an average baseline.

One limitation of cluster analysis, especially when applied to questions of internal structure, is that it requires texts to be divided into "segments" that are compared relative to each other. The size and placement of the divisions can affect outcomes of the analysis, such as muting the effect of a particular feature or creating segments that are too small to measure word frequency with sufficient resolution (Drout et al. 2016, pp. 11–12).<sup>2</sup> Rolling window analysis is a complementary technique, which overcomes this problem by generating a running calculation within a continuously shifting window of fixed size (Drout and Chauvet 2015, p. 291). The sensitivity of the indicator is adjusted by changing the size of the window used. Grammatical, stylistic, metrical, or orthographic features of a text can be analyzed in this way. Drout and Chauvet have applied this technique to Old English texts by calculating a moving ratio of þ to ð. Because the two characters were often used interchangeably, changes in the trend of this ratio can correlate with differences in source, author, or scribal hand (pp. 315–16). Because rolling window analysis can be applied to orthographic data, it can be used to extract a line of evidence independent of word choice, syntax, and morphology. Because orthography can only exist in written texts, the cause of observed changes in orthography within a text is also more likely to be due to a written source.

As each methodological approach uses a different quantitative basis—the phrase, the word, the symbol—correlation between them can be a strong indication that a finding is present in the text under scrutiny rather than an artifact of the analysis tool. Each of these methods present data in a way that allows "'emerging' qualities, which were not visible at the lower level" to be discovered (Moretti 2007, p. 53). When used in conjunction with more traditional qualitative approaches, quantitative tools provide new and complementary methods of interpretation that could lead to fresh insights.

### 3. The Distribution of Formulaic Language in *Andreas*

In his summary of the state of Cynewulf criticism, Fulk notes that "parallel passages [...] carry little weight now that oral-formulaic theory has shown the pervasiveness of formulae and their public, conventional nature" (Fulk 2001, p. 5). However, Orchard asserts that "the 'white noise' of traditional and inherited formulae" can be filtered out by limiting one's scope to specific formulaic

<sup>1</sup> The use of z-scores ensures that each word is considered of equal weight even though word frequency declines geometrically according to Zipf's law (Pierce 1997, p. 294). Hoover demonstrated that the Delta procedure can be extended to the top 600–700 most frequent words with larger sample sizes.

<sup>2</sup> Zipf's law is again the enemy here. A segment of size  $n$  cannot measure accurately the frequency of words that occur with probability less than  $1/n$ . As segment size increases, so does the resolution available for measuring word frequency. This enables the frequency of more words to be measured, and therefore, the percentage of the segment quantified increases.

language unique to the works under inquiry (Orchard 2003, p. 273). One must refrain from absolute pronouncements for or against the usefulness of formulaic language per se. Some formulae considered distinctive today by Orchard's system were probably widespread at the time, while others only seem commonplace now due to selection bias—our sample size is constrained to the manuscripts that survived. Nevertheless, if certain formulae were unevenly distributed throughout a literary or oral tradition by region, time period, or “school”, then Orchard's approach should capture these tendencies in the aggregate, despite uncertainty regarding any formula on its own. Furthermore, the efficacy of this approach can be confirmed when correlated with other independent methods.

Having quantified a large number of shared formulae between *Andreas* and the signed poems, Orchard concludes that his “figures strongly suggest either unity of authorship or conscious literary borrowing”, opting for the latter on the basis of Fulk's evidence (which extended Krapp's original argument) of divergent diction (p. 287). However, Orchard's data can be applied to more than just the authorship question.<sup>3</sup> When plotted by line number, it becomes apparent that Cynewulfian parallels are not evenly distributed throughout the poem (Figure 1). Figure 1 shows four sections of *Andreas* where no such parallels have been found. It is important to note that this does not mean that formulaic language is wholly absent from these sections but, rather, that distinctively Cynewulfian formulae are missing. The vertical scale represents an arbitrary identification number assigned to each formula by Orchard, so the linearly increasing pattern of the *Andreas* plot is not significant. The horizontal distribution is what is of concern here.

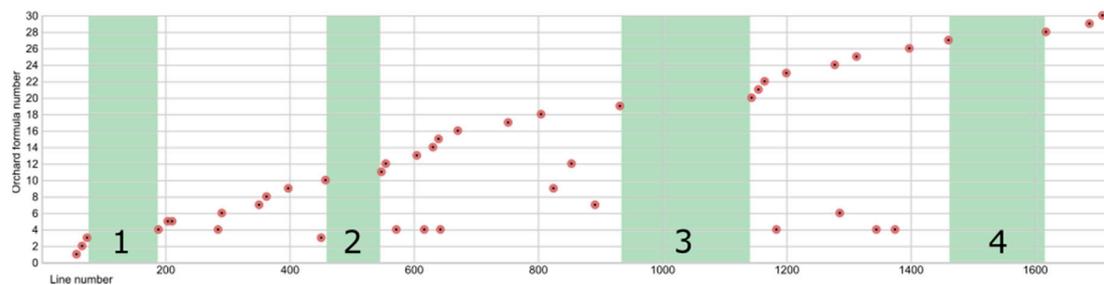


Figure 1. The distribution of Cynewulfian formulae in *Andreas*.

As a comparison, Figure 2 plots the Cynewulfian formulae from *Elene*. *Elene* is an ideal control for comparison, as it is signed by Cynewulf, of similar length, and from the same manuscript as *Andreas*. The distribution of Cynewulfian formulae is tighter, with the largest distance between formulae being 87 lines (or 6.5% of the poem); the length in lines of three of the four *Andreas* sections identified exceed this distance.<sup>4</sup>

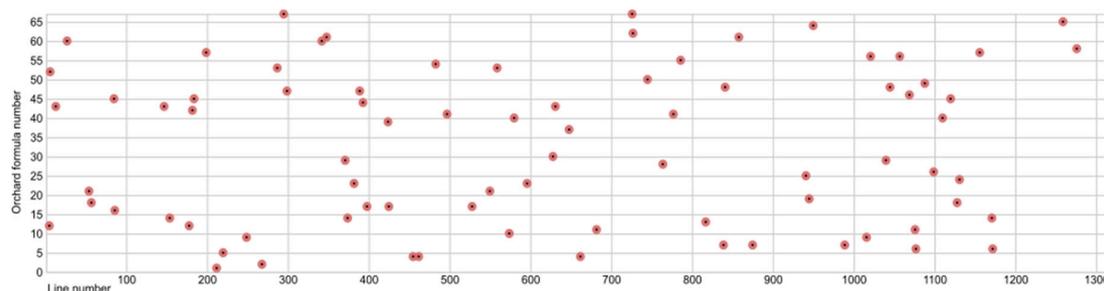


Figure 2. The distribution of Cynewulfian formulae in *Elene*.

<sup>3</sup> There remains a plethora of formulaic data compiled within the Cynewulfian group, which can be analyzed as this paper describes and which might shed more light on the nuances of Cynewulf's style, his methods of composition, and how the rest of the group may relate to Cynewulf and each other.

<sup>4</sup> The shortest *Andreas* section (2) is 90 lines, which, although larger in absolute count, is smaller in percentage (5.2%) relative to the size of the poem.

This difference in distribution between the two poems can be quantified by comparing histograms of the distances between each formula (Figures 3 and 4). In *Andreas*, the average distance between formulae is 39 lines (2.2%) to *Elene's* 16 (1.2%). *Andreas's* histogram also has a distinctive “long tail”, which is absent from *Elene's*. The frequency of *Elene's* formulae does vary throughout the poem, but there are few long stretches without such language—a pattern indicative of stylistic consistency. If the bounds of the *Elene* histogram are applied to *Andreas* to denote sections of consistent formulaic style, then those sections that fall outside this area can be interpreted as discontinuous—the style starts and stops. In other words, in *Elene*, the Cynewulfian formulaic language ebbs and flows; in *Andreas*, it stutters.

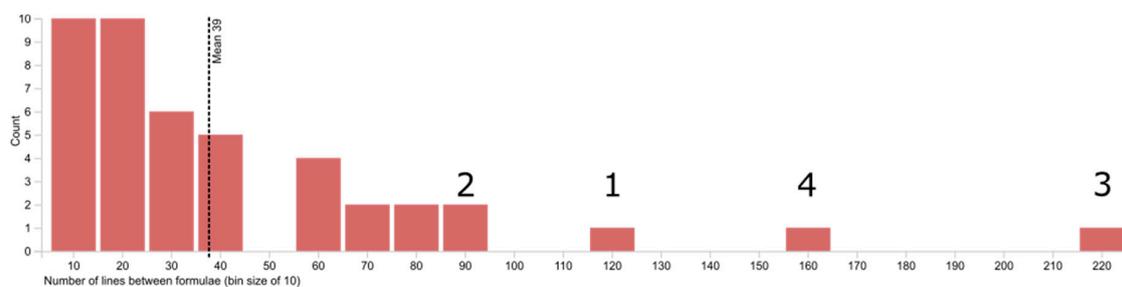


Figure 3. Histogram of formula spacing in *Andreas*.

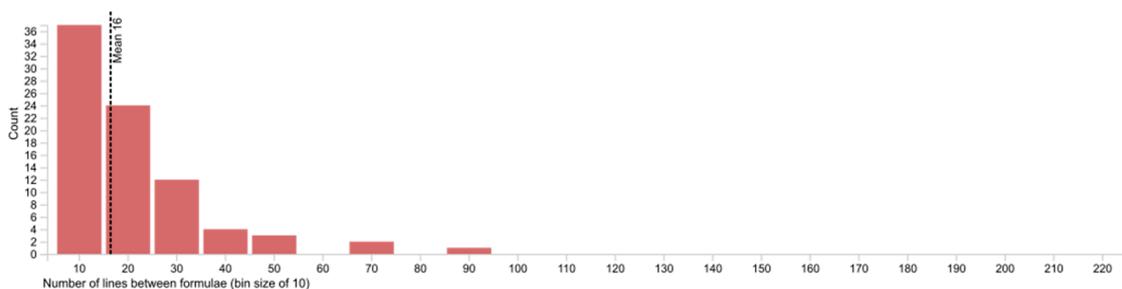


Figure 4. Histogram of formula spacing in *Elene*.

Scholars generally agree that Cynewulf used a Latin prose exemplar when composing *Elene*, and yet, *Elene* does not exhibit a similar pattern in its formula distribution where Latin source influence is detected (Anderson 1983, p. 103). Likewise, an analysis of where *Andreas* differs from its closest Latin exemplar in the Casanatensis manuscript does not show any clear correlation with the discontinuities in Cynewulfian formulaic distribution (Friesen 2009, pp. 301–7). This difference in distribution pattern suggests that these sections lacking Cynewulfian formulae in *Andreas* have a distinctly non-Cynewulfian bias. The fact that the formulaic language is discontinuous rather than relatively less frequent suggests that the source was not merely a reference—such as a Latin prose narrative like the *Vita Cyriaci* or the Casanatensis prose exemplar—but an Old English poem, which could be incorporated into a larger poem with little editorial work.

#### 4. The Narrative Content of *Andreas A* and *B*

For the purpose of analysis, the four sections that show no distinctive Cynewulfian formulae as described above are called *Andreas B*, whereas the parts in between the *B* sections are called *Andreas A*. This divides the poem into nine parts, as outlined in Table 1. Six of these breaks appear in the middle of a sentence or thought, but the boundaries have not been modified to coincide with syntactical hints to preserve the quantitative basis for the divisions.

**Table 1.** The *A* and *B* sections in *Andreas*.

	Start Line	End Line	Summary
<b>Intro</b>	1	74	The Mermedonian situation and how Matthew came to be imprisoned is explained.
<b>B1</b>	75	188	Matthew prays for deliverance. God responds and then calls Andrew to rescue him.
<b>A1</b>	189	458	Andrew responds to God skeptically and is rebuked. Andrew finds a boat piloted by God in disguise. After discussing terms of payment, they set off only to encounter a storm. Andrew calms his men by explaining God's power over weather.
<b>B2</b>	459	547	The storm abates. Andrew complements the skill of the captain. The captain affirms God's power over the weather, attributing the storm's passing to Andrew's piety. Andrew prays in thanksgiving.
<b>A2–3</b> <sup>1</sup>	548	932	The captain asks Andrew why the Jews did not recognize Jesus as the Messiah; Andrew responds. They discuss the miracles of Jesus, including the story of a stone angel brought to life and the resurrection of patriarchs, who proclaimed Jesus, yet their hearers did not believe. Andrew sleeps. Upon waking, Andrew and his crew find themselves in Mermedonia and realize they had encountered the divine. Christ appears again, reminding Andrew of his earlier skepticism.
<b>B3</b>	933	1143	Christ reminds Andrew of his mission and explains Andrew's coming suffering. Christ departs. Andrew rescues Matthew and frees the prisoners, killing several guards in the process. <sup>2</sup> Matthew and the prisoners escape the city while Andrew remains. Discovering the empty prison, the Mermedons eat the corpses of the guards. Casting lots for the next meal, the lot falls to a general who gives his innocent son instead. Andrew is outraged.
<b>A4</b>	1144	1461	God protects the boy; famine ensues. The devil appears and incites the crowd to find and eat Andrew. They find Andrew and bind and imprison him. He is tortured for three days, but no one can kill him because of the sign of the cross on his forehead. Andrew prays for death. God responds, showing how flowers have grown where Andrew's blood was spilled.
<b>B4</b>	1462	1617	God restores Andrew's body. The poet interjects to express humility and reference "fyrnsægen" (old saying, ancient tradition). Andrew commands a flood to appear out of a stone pillar. Flood and fire kill many and convince the people of their wrongdoing. Andrew calms the flood. The worst heathens were killed. The survivors recognize God's power.
<b>End</b>	1618	1722	The city converts to Christianity. A church is built on the site of the pillar. Andrew is induced to remain seven days before sailing home.

<sup>1</sup> The sub-division of this section into *A2* and *A3* is explained later. <sup>2</sup> Note that there are lost pages in the manuscript here. Stevick estimates the lacuna comprises 78 missing lines (Stevick 1975, p. 109). The assumption that the lost lines would be contiguous with the *B* sections appears reasonable but is, of course, speculation.

A close reading of the *B* sections shows that a coherent outline of Andrew's story is described therein. Taken on its own, it tells the story of Andrew's calling by God, the rescue of Matthew from the Mermedons, and the cleansing of the city with almost all the key plot points included. It does so using only 33% of the extant lines. However, there are two notable plot holes in *Andreas B*. First, the reader is unsure how Andrew finds himself amid a storm at sea without section *A1*. Second, the actual capture

of Andrew by the Mermedons is missing without section *A4*. How these components of *Andreas B* may be recovered is discussed in the next section.

The *A* sections do not significantly advance the plot. These parts are preoccupied with the events of Andrew's journey and his torture in prison. Despite the absence of major plot points, they comprise 56% of the extant lines. (As literal edge cases, the two pieces containing the introduction and epilogue are set aside for now.) Nevertheless, *Andreas A* has its own exclusive themes. The topic of Andrew's skepticism is treated only in *Andreas A* and frames stories of unbelief in the face of miraculous signs. The explicit identification of the helmsman as God is found almost entirely in *Andreas A* as is Andrew's torture in simulation of Christ's passion.

*Andreas A* adds several aspects to the sea voyage passage, which change the whole character of the episode. For instance, the conflict in *Andreas B*'s sea voyage is the storm not the distance. There is no mention in *Andreas B* that a three-day voyage to Mermedonia from Achaia would require miraculous intervention; this is an *Andreas A* concern. Moreover, if not for the poet's use of "ece dryhten" (eternal Lord) in reference to the captain in line 510, section *B2* would read like an exchange between pious mortals, which may or may not intend to imply that the helmsman is God. A later editor wishing to make that implication explicit might include material such as that found in *Andreas A*.

The *A* sections also create problems that do not exist for *Andreas B* when it stands on its own. The famine and subsequent torture of Andrew make the poem less coherent. In *Andreas B* alone, the precise capture of Andrew is unclear—perhaps it is the result of an attempt to rescue the innocent boy—but there are no obvious inconsistencies present. Andrew "thought [the boy's plight] miserable" (*earnlic puhte*) but takes no action as the poem crosses over to *Andreas A* where God's perfunctory rescue of the boy renders the whole episode rather pointless (lines 1135; 1143b–44). Furthermore, it sets off a period of famine predicated on the notion that cannibals, who have been shown to be capable of eating their own kind, no longer do so (lines 1155–62a). During this time the reader must presume that Andrew is living voluntarily in a famine-wracked city when he could have left with Matthew or any time thereafter. In addition, once captured, the starving citizens show little interest in actually eating him (lines 1249–50a). From a narrative perspective, section *A4* can be interpreted as a justification to extend the story with a passion scene.

Nevertheless, these events are not the invention of the *Andreas A* poet, as they also appear in the prose retelling of the Casanatensis manuscript (Friesen 2009, pp. 301–7; Greenfield and Calder 1986, p. 159). It is likely then that the *Andreas A* poet knew or referenced a source such as Casanatensis. Likewise, the absence of these features in *Andreas B* suggests that the *Andreas B* poet did not learn the story from such a written source. In fact, a desire to harmonize the *Andreas B* poem with a Latin prose exemplar may be the reason the project of revising *Andreas B* was taken up.

Both the *A* and *B* sections are internally consistent, but several plot problems manifest when they are read together. The *Andreas B* material contains the core of Matthew's rescue narrative and is characterized by an absence of distinctive Cynewulfian formulae. However, the *Andreas A* material constitutes asides or digressions of a homiletic or didactic nature and is highly correlated with such formulae. This dichotomy suggests that *Andreas B* represents a non-Cynewulfian source, which has been expanded upon.

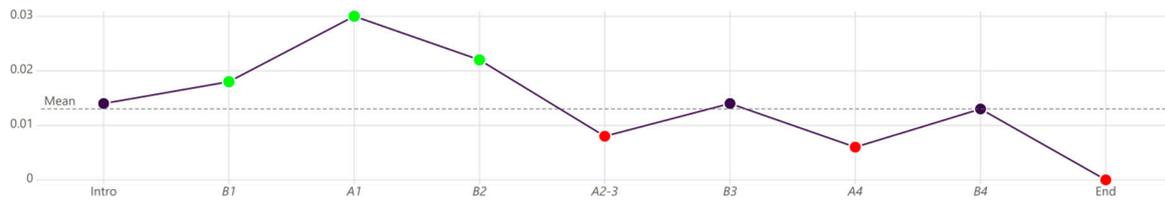
## 5. Affinities with *Beowulf* in *Andreas B*

In "The Originality of *Andreas*", Orchard compiles a list of parallel passages and distinctive compound words used between *Andreas* and *Beowulf*. A third dataset enumerates the uniquely shared compounds between *Andreas* and the signed Cynewulf poems. A fourth lists compounds unique to *Andreas* alone. By close investigation of these lists, Orchard argues that the *Andreas* poet innovates new compounds in dialogue with language borrowed from *Beowulf* and the signed poems (Orchard 2016, p. 333). Table 2 tabulates these occurrences against the *A* and *B* sections described above. Each absolute count is corrected for the size of the section, resulting in an "occurrence per line" score. Figures 5–8

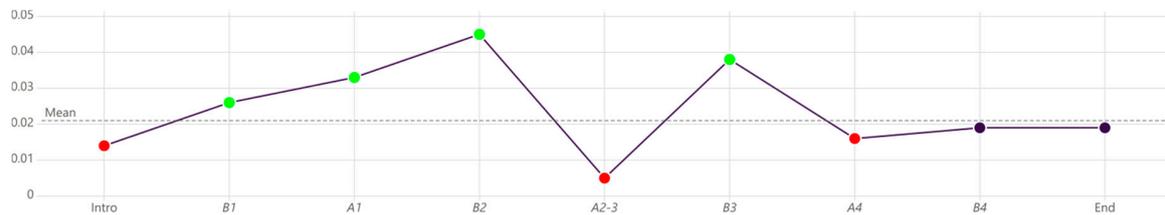
plot the “occurrence per line” scores from Table 2 against the mean for each metric. Scores deviating more than 20% from the mean for their group are flagged green (if above) or red (if below).

**Table 2.** Distribution of word compounds in *Andreas* by section.

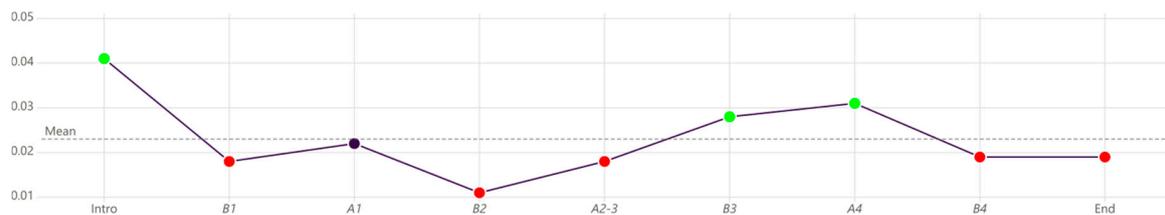
	<i>Beowulf</i> Parallels	Per Line	<i>Beowulf</i> Compounds	Per Line	<i>Cynewulf</i> Compounds	Per Line	Unique Compounds	Per Line
<b>Intro</b>	1	0.014	1	0.014	3	0.041	6	0.081
<b>B1</b>	2	0.018	3	0.026	2	0.018	22	0.193
<b>A1</b>	8	0.030	9	0.033	6	0.022	32	0.119
<b>B2</b>	2	0.022	4	0.045	1	0.011	16	0.180
<b>A2–3</b>	3	0.008	2	0.005	7	0.018	26	0.068
<b>B3</b>	3	0.014	8	0.038	6	0.028	26	0.123
<b>A4</b>	2	0.006	5	0.016	10	0.031	29	0.091
<b>B4</b>	2	0.013	3	0.019	3	0.019	23	0.147
<b>End</b>	0	0.000	2	0.019	2	0.019	7	0.067
<b>Mean</b>		0.013	<b>Mean</b>	0.021	<b>Mean</b>	0.023	<b>Mean</b>	0.109



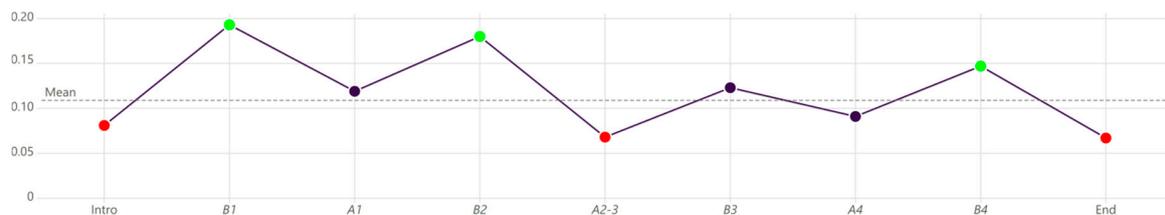
**Figure 5.** Beowulfian parallels per section.



**Figure 6.** Beowulfian compounds per section.



**Figure 7.** Cynewulfian compounds per section.



**Figure 8.** Andrean compounds per section.

The Beowulfian parallels and compound words are present particularly in the sea voyage episode (sections *B1/A1/B2*). Section *B3* is also heavily weighted with Beowulfian compound words. Except for section *A1*, the *A* sections exhibit low affinity to *Beowulf* by this metric. Despite its high Beowulfian scores, section *A1* has the highest Cynewulfian affinity as measured by word compounds among the sea voyage triad. The Cynewulfian word compounds are distributed more broadly throughout the poem, but three of the four *B* sections have scores below the mean—also supporting the interpretation that *Andreas B* has a non-Cynewulfian bias. Despite lacking distinct Cynewulfian formulae, section *B3* registers high on the Cynewulfian compounds metric. This may indicate that this section has been reworked more by the *Andreas A* poet than the rest of the *Andreas B* material. The dataset was intended to capture the most innovative word compounds—those compounds unique to *Andreas*—which also disproportionately occur in the *B* sections (p. 340). Nevertheless, innovative compounds are also well attested in the *A* sections, which implies that these phenomena are not original to the *Andreas B* material. Therefore, the originality in word coinage Orchard identified as a stylistic hallmark of *Andreas* can be interpreted as an editorial technique used by the *Andreas A* poet to retouch the Beowulfian sections.

A closer look at section *A1* reveals that most of the flagged Beowulfian content is contained in *fitt iv*—the portion adjacent to section *B2*. If section *A1* is subdivided into two parts—*fitt iv* and the remainder, which we will call section *A1'*—then the Beowulfian occurrence per line score decreases by 30% for section *A1'*, whereas *fitt iv* scores the highest of all the segments investigated (Table 3).

**Table 3.** Distribution of word compounds in the section *A1* sub-divisions.

	<i>Beowulf</i> Parallels	Per Line	<i>Beowulf</i> Compounds	Per Line	Cynewulf Compounds	Per Line	Unique Compounds	Per Line
<i>A1</i>	8	0.030	9	0.033	6	0.022	32	0.119
<i>A1'</i>	3	0.020	3	0.020	1	0.007	16	0.105
<i>fitt iv</i>	5	0.043	6	0.051	5	0.043	16	0.137
Lines 359–376	3	0.167	2	0.111	0	0.000	1	0.056

Half of the Beowulfian markers in *fitt iv* are found between lines 359 and 376, which also contain no Cynewulfian compounds:

The holy one sat himself near the helmsman, noble one by noble one. I had never heard of a more beautiful ship laden with splendid treasure. The warriors sat there—lords full of glory, beautiful thanes. Then spoke the mighty king, eternal Almighty, ordering his angel—glorious young retainer—to go and give meat to comfort the poor ones over flood’s whelming, that they might more easily endure their condition over the waves’ throng. Then it became disturbed, that shaken sea. The whale frolicked, glided through the ocean, and the gray gull roamed eager to prey on the dead. The weather-candle faded, winds waxed, waves crashed, currents stirred, ropes snapped, and garments were soaked through. Dreadful waters stood, pressing with force. The thanes became terrified (lines 359–76a).<sup>5</sup>

<sup>5</sup> The translation is my own. The original reads as follows with Beowulfian parallels underlined and compound words bolded.

Gesæt him þa se halga helmwearde neah,  
 æðele be æðelum. Æfre ic ne hyrde  
 þon cymlicor ceol gehladenne  
 heahgestreonum. Hæleð in sæton,  
 þeodnas þrymfulle, þegnas wlitige.  
 Ða reordode rice þeoden,  
 ece ælmihtig, heht his engel gan,  
mærne maguþegn, ond mete syllan,

This particularly Beowulfian passage embedded within section *A1* fills the first of the narrative gaps observed in *Andreas B* above—Andrew’s boarding of the boat and the beginning of the storm. Without the *Andreas A* context, God’s command to the attending angel in lines 364–66 need not be interpreted as a reference to the boat’s crew. This supports the hypothesis that the original poem did not include a divine helmsman, making the device a later addition by the *Andreas A* poet.

One might argue that the sea voyage exhibits high affinity with *Beowulf*, not because of divergent textual history, but because the *Andreas* poet intentionally referenced *Beowulf* during composition considering the common content. This argument does not well explain the high Beowulfian affinity in section *B3*, which has fewer themes and motifs in common with *Beowulf*, nor the extremely low scores for sections *A2–4*. It would be striking that so few Beowulfian parallels and formulae exist in *Andreas A* if the poet had access to such a resource. Such an interpretation is further weakened if the *Andreas A* and *B* types can be shown to have distinctive affinity for their own type, which would further support the hypothesis of a composite nature. This possibility is investigated below using cluster analysis.

Finally, there is the question of how Andrew was captured in the original *Andreas B* poem. Similar to the passage discussed above from *fitt iv*, one would expect Beowulfian characteristics to be correlated with those events in section *A4*, because they would be more likely to have been adapted from the *Andreas B* poem. In section *A4*, two short passages are correlated with both Beowulfian parallels and compounds. Beowulfian parallels are underlined and compound words are bolded. The first describes Andrew’s capture:

Drogon deormodne      æfter dunscreafum,  
ymb stanhleoðo,      stærcedferþne,  
efne swa wide swa      wegas to lagon,  
enta ærgeweorc,      innan burgum,  
stræte **stanfage**.      (lines 1232–36a)

[The brave-minded one was dragged by the cruel-hearted along mountain caves, around rocky slopes, even so far as the sea-way, by the ancient work of the giants, within the cities with stone-cobbled streets.]  
The second passage begins Andrew’s lament:

Næfre ic geferde      mid frean willan  
under heofonhwealfe      heardran drohtnoð,  
þær ic dryhtnes æ      deman sceolde.  
Sint me leoðu tolocen,      lic sare gebrocen,  
banhus **blodfag**,      benne weallað,  
seonodolg swatige.      (lines 1401–6a)

---

frefran feasceafte ofer flodes wylm,  
þæt hie þe eað mihton ofer yða geþring  
drohtaþ adreogan. Þa gedrefed wearð,  
onhrered hwælmere. **Hornfisc** plegode,  
glad geond garsecg, ond se græga mæw  
wælgifre wand. Wedercandel swearc,  
windas weoxon, wægas grundon,  
streamas styredon, strengas gurron,  
wædo gewætte. **Wæterege**sa stod  
þreata þryðum. Þegnas wurdon  
acolmode. (lines 359–76a)

[Never have I born by the Lord's will such a sore living under the vault of heaven where I must deem life the Lord's. My limbs are separated, my body sorely broken, bone-house blood-stained, wounds welling up, sinew-wounds sweaty.]

It is hard to say how much of the surrounding lines might go back to the earlier version of the poem, but one can see how these lines might encourage expansion into a longer passion set piece.

## 6. Evidence from the Moving Ratio of þ to ð

If the *Andreas* A/B hypothesis is accurate, then the distinction should be detectable via other methods sensitive to differences in textual history. Drout and Chauvet have shown that by calculating the moving ratio of þ to ð in Anglo-Saxon poetry and noting discrepancies in its variation—such as a change in trend direction—one can generate “evidence of differences in textual history for particular segments of Old English poems”, as the orthographic tendencies of an exemplar leak into the copied text (pp. 315–16).

By counting the number of þ characters in a segment of text and dividing the result by the combined number of þ and ð in the same segment, one can calculate the relative percentage of þ characters in the text. If one does this calculation with a segment size—called the “window”—that is a fraction of the size of the text of interest, then the window can be moved along the text, generating a value at each offset. Such a calculation is called a moving ratio and can be plotted as a graph with the offset in the X axis and the value in the Y axis. One can, in principle, calculate a moving ratio of any quantifiable feature. In the case of þ/ð, their ratio will visualize where in the poem the scribe uses more þ than ð, and vice versa. As noted above, changes in the direction of the trend of the ratio suggest that something prompted the scribe to alter the frequency with which he used one or the other symbol.

Figure 9 plots the moving ratio of þ to ð for *Andreas* using a window of 1000 words, overlaid with manuscript fitt demarcations and B section boundaries. Each B section correlates to a change in trend of the ratio. The initial downtrend stops temporarily at the end of section B1. The end of section B2 begins a new uptrend that reverses with the start of section B3. Finally, the beginning of section B4 correlates with the last uptrend in the ratio.

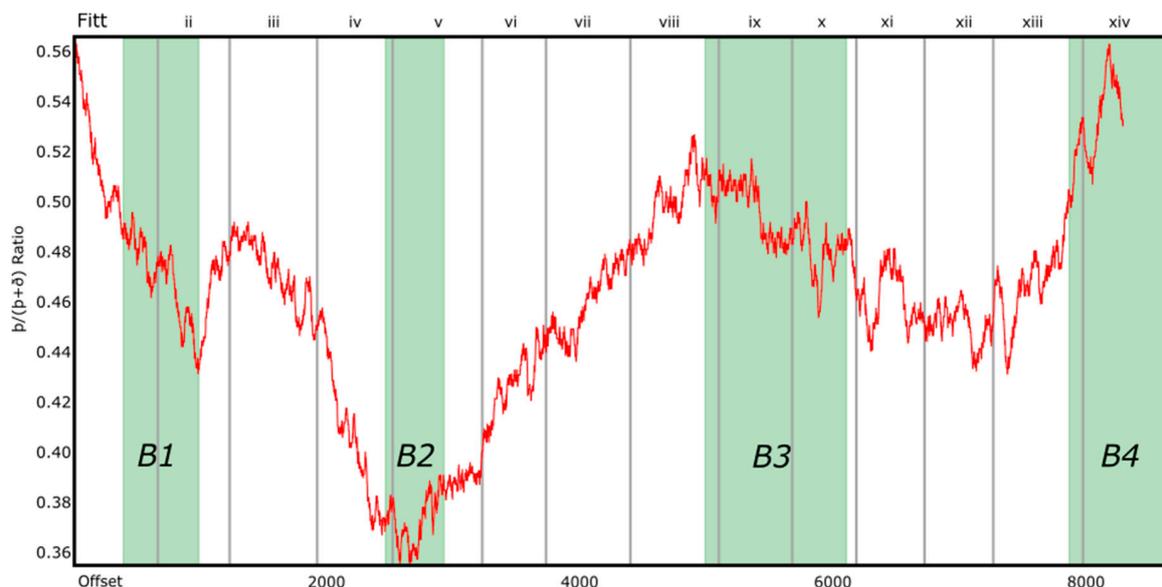


Figure 9. The moving ratio of þ to ð in *Andreas*, 1000-word window.

The size of the rolling window used to calculate a moving ratio affects the sensitivity of the indicator. Larger windows can filter noise from the time series but can also obscure effects due to more complex textual structures (Drout and Chauvet 2015, pp. 291–92). A smaller window can be more responsive to changes in the feature being measured and therefore be able resolve smaller features,

but this comes at the expense of additional noise as each instance carries greater statistical weight in smaller windows. It is, thus, good practice to deploy larger windows for identifying major trends and then apply smaller windows to “zoom in” on areas of interest where the presence of smaller features is suspected.

One such area is section *A1*, as the analysis of oral-formulaic data above suggests that this section contains a mix of Cynewulfian and Beowulfian content. The major downtrend shown in the ratio between fitts iii and iv in Figure 9 corresponds to this section. Calculating the ratio with a window of 500 words brings out a feature at the break between fitts iii and iv. The downward trend appears contiguous with a window of 1000 words, but at a window of 500 words, the trend of fitt iii is reversed, correlating to the anomalous Beowulfian features in fitt iv described above (Figure 10). Likewise, the once-contiguous upward trend between fitts vi and vii with a 1000-word window is flipped to a downward trend in fitt vii with a 500-word window, which marks a possible milestone for segmenting this large *Andreas A* section for cluster analysis. Fitt vii marks the beginning of the story of the stone angel come to life.

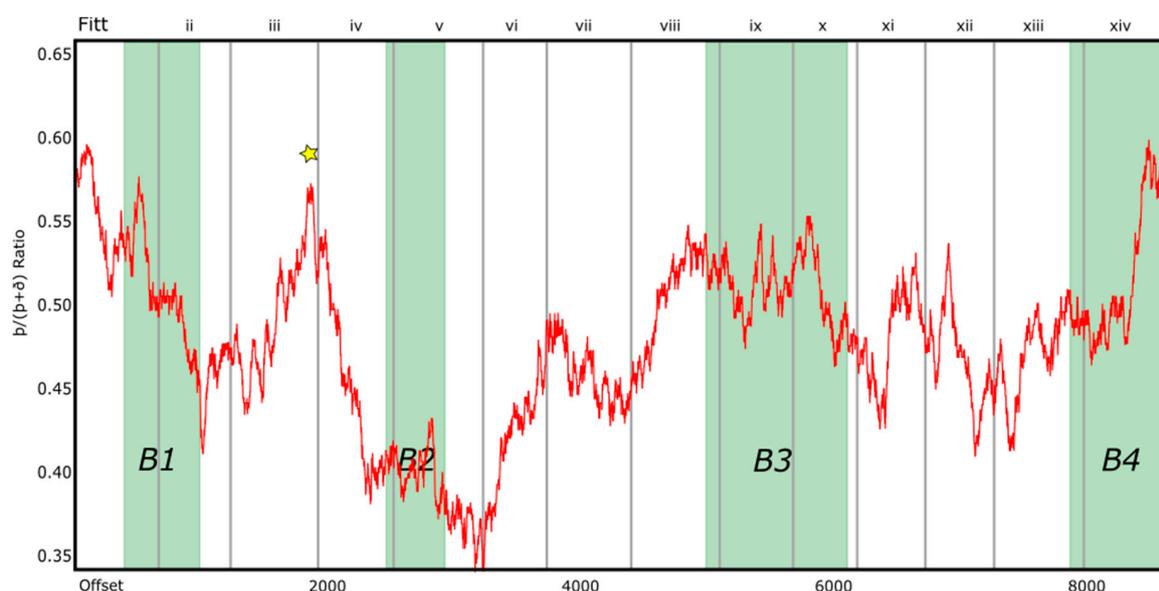


Figure 10. The moving ratio of þ to ð in *Andreas*, 500-word window.

Drout and Chauvet also tentatively hypothesize that a low level of þ (or equivalently, a higher percentage of ð) could indicate older provenance, as ð may have entered Old English orthography first (p. 295). Three of the four *B* sections occur during downtrends in the ratio, which indicates lower þ counts. In particular, the sea voyage passage records an extremely low þ percentage. This result also holds for fitts iii and iv—fitt iv contains more Beowulfian content and exhibits lower þ counts than fitt iii.

This moving ratio quantifies orthographic tendencies, not stylistic language. Therefore, it can be considered an independent line of evidence in favor of the *Andreas A/B* hypothesis. Passages with *Beowulf* affinity are correlated with a decrease in the proportion of þ, which suggests that they may be relatively older than passages with Cynewulfian affinity.

## 7. Other Orthographic Evidence

*Andreas A* and *B* can also be distinguished by their differing use of the acute accent. North and Bintley note that “the text of *Andreas* is distinguished from that of all other items in the Vercelli Book by the use of an acute accent to mark stress in ten instances of the short-vowelled OE word for ‘God’, as *gód*”, which they conclude is a “harbinger of later practice” (North and Bintley 2016, p. 22). As a later practice, one should expect accented *gód* to be more correlated with *Andreas A*. Note that this

hypothesis need not rest on the premise that the orthography itself originates with the *Andreas A* poet but only that the particular use of stress in the poem, which prompted the scribe to use the accent mark, does. Table 4 tabulates these occurrences against the *Andreas A/B* division.

**Table 4.** Distribution of accented *gód* in *Andreas*.

	Intro	B1	A1	B2	A2–3	B3	A4	B4	End
<b>Count</b>	0	0	0	0	6	1	1	1	1
<b>Occurrences per line</b>	0.000	0.000	0.000	0.000	0.016	0.005	0.003	0.006	0.001

The absence of accented *gód* prior to section *A2* is a clear distinction between the sea voyage episode and the rest of the poem. In addition, over half of the occurrences are found in the *A2–3* segment, which is the passage most aligned with the identified concerns of the *Andreas A* poet. The small amount of accented *gód* found in the later *Andreas B* segments is consonant with the earlier inference of more editorial reworking of these *Andreas B* sections by the *Andreas A* poet.

Unfortunately, North and Bintley do not apply these data to the task of stylistic analysis of *Andreas*. They argue that this is evidence of the production of folios 39 recto to 46 verso of the Vercelli Book by a scribe in Wilton associated with St. Edith, whose name may appear in a half-erased colophon (pp. 21–26). Perhaps it is so, although this interpretation does not explain why the half dozen instances of *god* (meaning ‘God’) in the first third of the poem remain unmarked.

### 8. Evidence for the *Andreas A/B* Division from Cluster Analysis

Having established a quantitative basis for the *Andreas A/B* division in *Andreas*, hierarchical, agglomerative cluster analysis can be used to establish whether the sections of each type show greater affinity for their own type. This technique has been used to detect internal structure in *Guthlac A* and its Latin exemplar, *Genesis A* and *B*; *Beowulf*; and the Christ poems (Downey et al. 2012; Drout et al. 2011, 2016). By dividing the text of *Andreas* into segments and comparing their word frequency profiles with each other, cluster analysis will group more similar segments closer together on the tree diagram. If *Andreas A* and *B* each have a consistent word frequency profile within themselves, then their segments should cluster together.

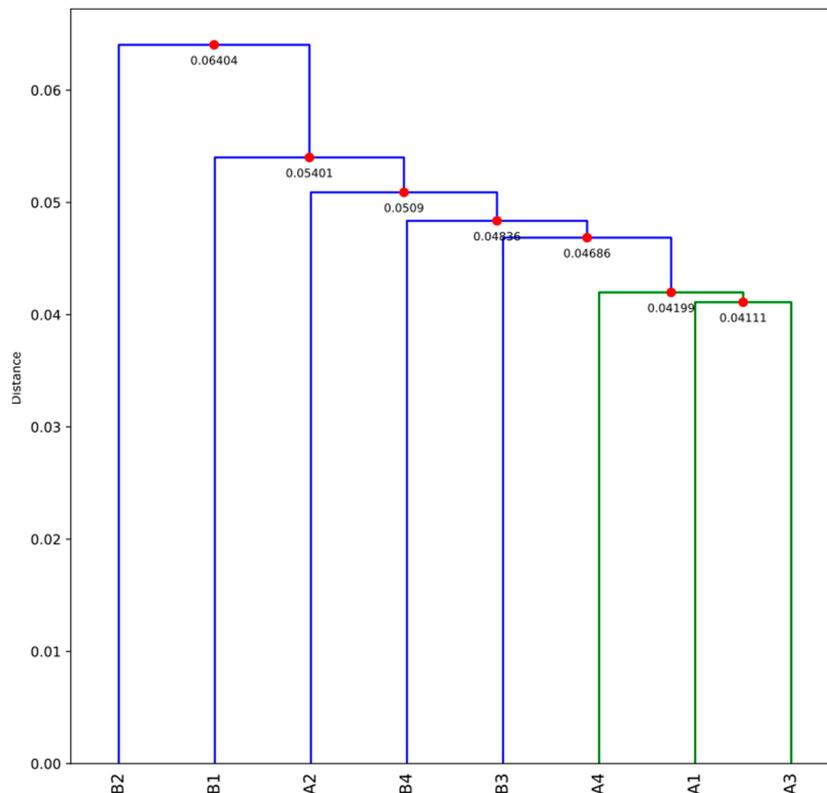
Cluster analysis calculates the frequency of every word used for each segment. The relative “distance” between each segment can then be measured as the sum of the differences of their word frequencies. A diagram, called a dendrogram, is constructed from these data to visualize the relative affinity between segments. Each segment is a terminal “leaf”. Leaves are grouped together into clades. The relative distance is displayed at the nodes where leaves and clades meet. The size of the vertical bars are also determined by relative distance. To put it simply, the farther away two segments are from each other, the less they have in common.

Manuscript *fitt* and *B* section boundaries were used to divide the poem into 10 segments. Table 5 lists the segments and word count contained in each. Experimental evidence has shown that cluster analysis is efficacious when segments are between 400 and 1500 words (Drout et al. 2011, p. 313). *A* sections showing affinity to *Beowulf* have been subdivided in order to facilitate the possible blending strategies described below.

**Table 5.** Chunk sizes by line count.

Intro	B1	A1 and B2			A2 and A3		B3	A4	B4	End
		A1'	fitt iv	B2	A2	A3				
400	597	920	560	484	762	1284	1100	1761	852	568
		1480		1044	2046					

Performing a basic cluster analysis, excluding the introduction and epilogue, the *B* sections tend to cluster separately from the *A* sections, with the shortest *A* segment as the exception (Figure 11). The shortest segment, section *B2*, is least alike of all, clustering as a simplici-foliosus clade. In fact, the stepwise nature of the dendrogram suggests that several segments may be too small to quantify their word frequency profiles sufficiently.



**Figure 11.** Dendrogram of the unblended *A/B* segments.

In *Beowulf Unlocked*, Drout suggests blending as one possible strategy for dealing with subsections, which are too short or interleaved (p. 12). Blending is the act of combining two or more non-contiguous segments together to create a sufficiently large segment of uniform content. The justification for blending two segments should not be predicated on their affinity in a cluster analysis to avoid circular reasoning. Several possible blending strategies are evident from the analysis thus far:

1. Blend sections *B1* and *B2*, as both are short *B* sections.
2. Blend *fitt iv* from section *A1* with section *B2* considering its *Beowulf* affinity.
3. Blend sections *A2* and *B2*, as both contain conversations with Jesus.
4. Blend sections *A2* and *A3*, because the þ/ð and Cynewulfian formulaic trends are continuous.
5. Blend the introduction with section *B1* and section *B4* with the epilogue, because formulae are sparse on the edges.
6. Blend the introduction and epilogue.

The techniques of incrementation and truncation<sup>6</sup> were used to observe how each blending strategy affected the dendrogram (p. 13). Across blending strategies, the *A* sections tend to cluster together in a clade, whereas the *B* sections either cluster on their own or as a stepwise pattern separate

<sup>6</sup> Incrementation builds up a dendrogram one segment at a time, whereas truncation is the opposite. This allows the critic to isolate how a single segment affects the dendrogram geometry.

from the *A* clade. When section *B2* is blended with either section *B1* or section *A2*, the resulting segment will cluster within the *A* clade. If section *B2* is blended with *fitt iv*, then it pulls section *A1'* out of the *A* clade and they combine to create a clade of especially Beowulfian material (Figure 12). Note also that the position of the Beowulfian clade shows more affinity to the *B* sections than the *A* sections. This result indicates that *Andreas A* and *B* each have a word frequency profile distinct from the other and that significant portions of section *A1*—*fitt iv* in particular—are also likely to contain remnants of *Andreas B*.

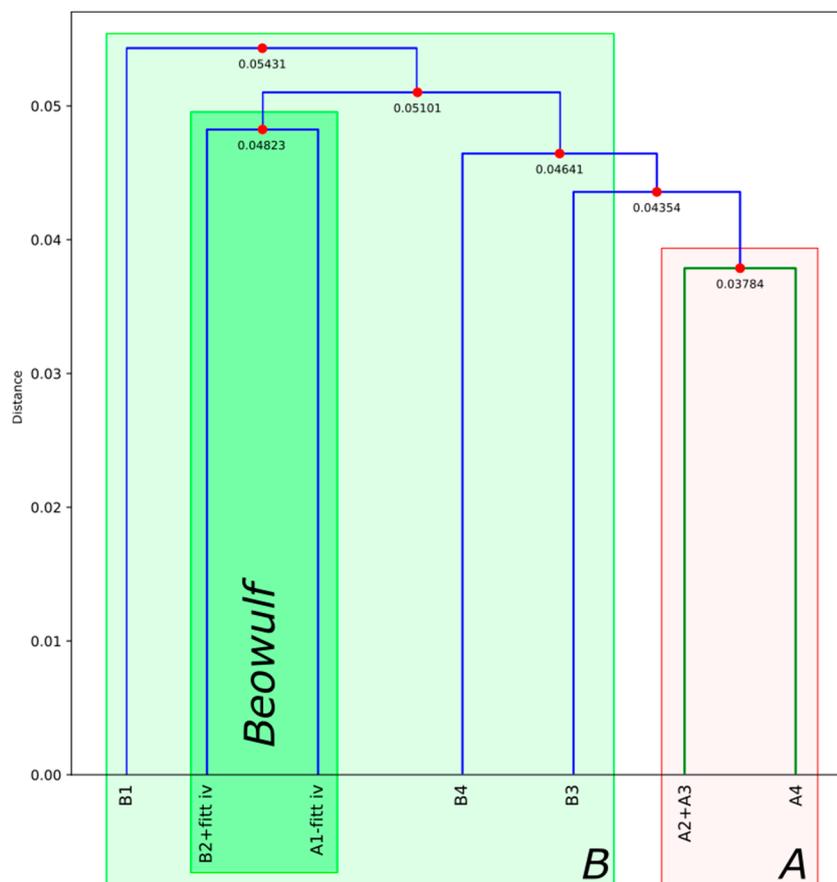


Figure 12. Dendrogram of the blended sections.

When the edge segments are introduced on their own, blended together, or blended with their adjacent *B* sections, the edge segments tend to show an affinity with the *B* sections. However, when the epilogue is blended with section *B4*, it clusters in the *A* clade, suggesting that the epilogue has more affinity with the *A* sections than does the introduction (Figure 13). It is worth noting that although the edge segments have the same number of Cynewulfian formulae, they are more evenly distributed in the epilogue; the formulae in the introduction are bunched up near the *B1* boundary.

Cluster analysis supports the view that the *A* and *B* sections have an affinity within themselves and that there exists a Beowulfian affinity between sections *A1* and *B2*. It also shows that although the edge segments have a general affinity to the *B* sections, the end exhibits relatively more affinity to the *A* sections than the beginning.

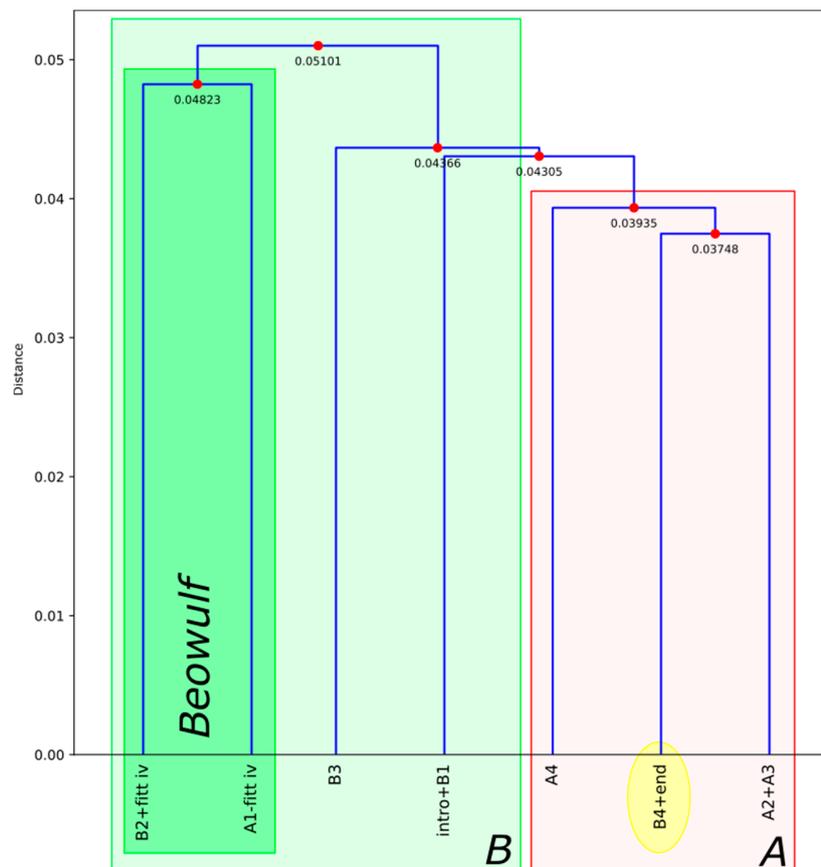


Figure 13. Dendrogram with edge sections.

## 9. Cluster Analysis within the Cynewulfian Group

Thus far, cluster analysis has been deployed for the purpose of investigating the internal structure of the poem, but it can also be used to compare relative affinity within a set of texts (Drouot et al. 2011, pp. 323–25). When doing so, one must be careful to account for possible orthographic differences, such as spelling variation or  $\beta/\delta$  tendencies of different scribes, which could bias the results (Drouot et al. 2016, pp. 17–18). For the following cluster analysis, common variances were consolidated, and the top 50 most frequent words were manually checked for spelling variation.<sup>7</sup>

The A and B sections were injected into a dendrogram made up of the wider Cynewulfian group of poems as described by Drouot et al. in “Of Dendrogrammatology” (p. 325).<sup>8</sup> Signed poems by Cynewulf form their own clade<sup>9</sup> along with *Guthlac B*, which has a strong claim to Cynewulfian authorship itself (Fulk 2001, p. 5). If both the A and B sections are injected at the same time, all of *Andreas* will collapse into its own clade, but, taken separately, one can see how they each have a different level of affinity for the signed Cynewulf works. *Andreas A* clusters within the innermost Cynewulfian clade along with the majority of *Elene*, demonstrating its high Cynewulfian affinity (Figure 14). However, when *Andreas B* is injected, only section B3 clusters within the *Elene* sub-clade, whereas the rest is relegated to the fringe of the larger Cynewulfian clade (Figure 15). This result indicates that most of *Andreas B* is only minimally similar to signed Cynewulfian work, although section B3 has a more Cynewulfian bias than the rest.

<sup>7</sup> *And, ond*, and tironian notes were consolidated as were all thorn and eth characters.

<sup>8</sup> The naming convention used is E—*Elene*, J—*Juliana*, F—*The Fates of the Apostles*, CII—*Christ II*, GA—*Guthlac A*, GB—*Guthlac B*. Chunks are roughly 1000 words each with boundaries adjusted for known divisions.

<sup>9</sup> Most of *Juliana* does not cluster within the Cynewulfian clade. Drouot speculates that this is due to influence from its Latin source (Drouot et al. 2011, p. 333).

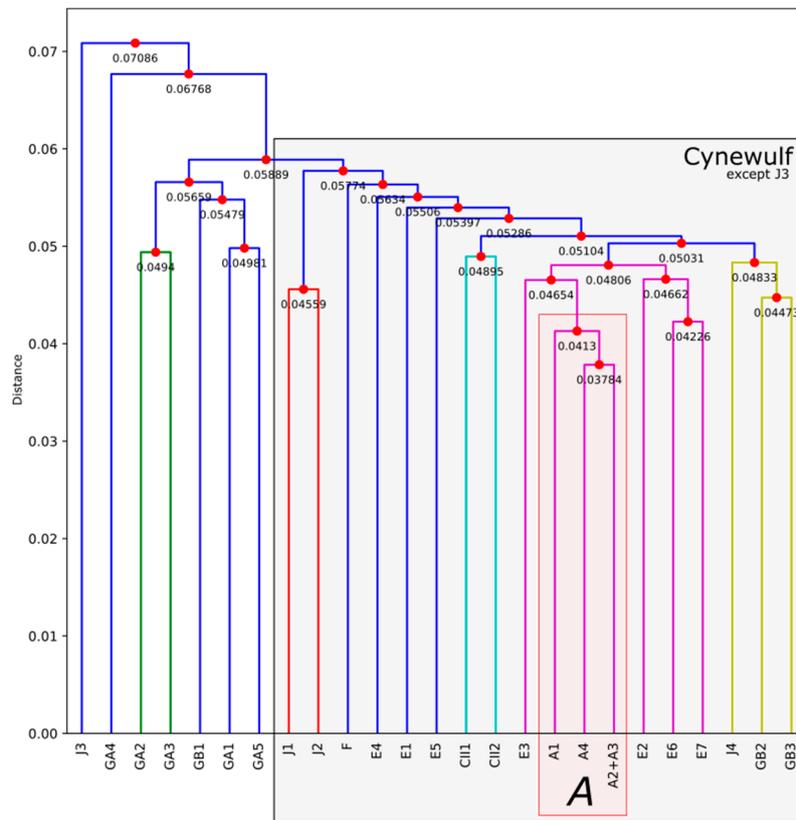


Figure 14. Andreas A with the Cynewulfian group.

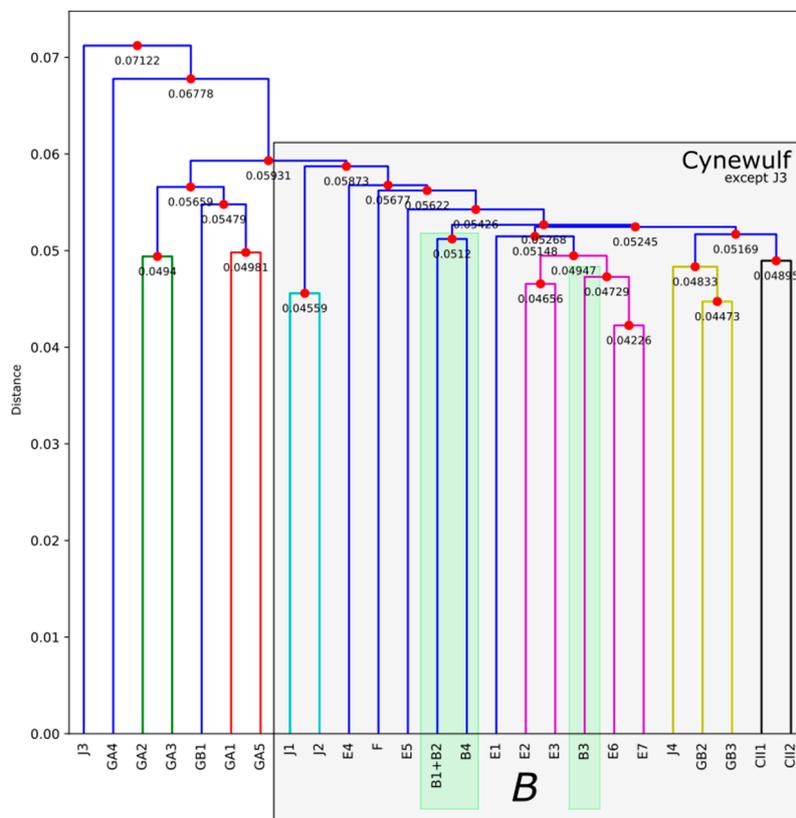


Figure 15. Andreas B with the Cynewulfian group.

Cluster analysis across the Cynewulfian group shows that the *A* sections have a stronger affinity with signed Cynewulf work than the *B* sections. The clustering of section *B3* within the *Elene* sub-clade accords with the evidence from the distribution of Cynewulfian word compounds. This evidence supports the view that the *B* sections were reworked by a later poet, who integrated them with the *A* sections, with section *B3* being the most heavily revised.

## 10. Arguments against Cynewulfian Authorship of *Andreas*

Several critics have noted grammatical and stylistic features that distinguish *Andreas* from the signed poems.<sup>10</sup> George Krapp outlined such a list of differences, to which R.D. Fulk added several metrical distinctions (Krapp 1905, pp. xlvi–xlix; Fulk 2001, pp. 7–8). These items can be divided into two types:

1. Features rare or non-existent in Cynewulf but that appear in *Andreas*;
2. Features often found in Cynewulf that are absent from or rare in *Andreas*.

The latter items are not quantifiable, because they do not appear in *Andreas*. However, the uncharacteristic lexemes in *Andreas* can be correlated to the *Andreas A/B* divisions previously described (Table 6). Fulk cites eight such differences taken from Krapp: *ondswarode*, dative *fæder*, *sin*, *æninga*, *becweðan*, *feorr*, *æfter þam/þyssum wordum*, and *wordum/worde cwæð*. These represent 51 instances. Almost 75% of these phrases are in the *A* sections even though the *A* section lines constitute only 57% of the poem.

**Table 6.** The distribution of stylistic anomalies.

	Intro	B	A	End
# of anomalies	2	11	38	0
% of anomalies	3.92%	21.57%	74.51%	0%
% of lines	4.36%	32.87%	56.68%	6.10%

Most of the additional differences listed by Krapp also predominantly appear in the *A* sections, including the phrases *ða gen/git*, *sum* + a genitive plural, *eft swa ær*, *lyt*, and an overuse of *siððan*. As the anomalies enumerated by Krapp and Fulk disproportionately apply to the *A* sections of the poem, this line of inquiry also supports the view that *Andreas A* and *B* have distinct styles. However, the implication inverts expectations—content that is unlike Cynewulf should not be predominantly found in *Andreas A*. One reasonable explanation is that these lexemes originated in *Andreas B*. In several cases (such as the uses of *sin* and *ondswarode*), Fulk notes that the *Andreas* tendencies are the more archaic forms (Fulk 2001, p. 7; Fulk 1992, p. 242). Almost all types mentioned (dative *fæder* is the exception) are also extant in *Andreas B*. Having examples in *Andreas B*, which he chooses to retain, the *Andreas A* poet uses the lexemes in his expansion as well.

Finally, Krapp concludes his list of anomalies by citing Fritzsche’s observation that, unlike signed poems, *Andreas* “nowhere alludes to any written sources” (p. xlix). However, in lines 1478–91 the poet breaks into the narrative by referring to himself in the first person. He expresses his humility as a poet and reminds the reader of the *fyrn-sægen* (ancient sayings) about Andrew’s story. Although this passage is contained in the *B4* segment, this may be an interpolation by the *Andreas A* poet referring to the original poem itself—a reference that may have been obvious to a contemporary audience familiar

<sup>10</sup> The question of whether these discrepancies constitute evidence of distinct authorship or different periods of activity or context for the same author bears further inquiry. Most cases enumerated by Krapp and Fulk are statistical arguments, not clear absolute distinctions. While working with his Delta procedure, Burrows noted that the “uncharacteristic” work of known authors can yield inaccurate statistical results, such as changes in style over the span of a long career or substantial change in genre or subject matter (Burrows 2002, p. 279; 2003, pp. 21–23).

with the earlier *Andreas B* poem. This passage has no parallels to *Beowulf*, as identified by Orchard, but does contain a Cynewulfian compound word and two compounds unique to *Andreas*, of which *fyrn-sægen* is one example.<sup>11</sup> Downey et al. found a similar practice in effect in the *Guthlac* poems. *Guthlac A* and *B* each contain references to *bec* (books) correlating with detectable changes in source (p. 23). Although one may grant that *bec* has a stronger implication of “written” sources than *fyrn-sægen*, the passage fills the same role as those found in *Guthlac* and the signed poems. Furthermore, if the *Andreas A* poet saw the *Andreas B* poem as divergent from his written Latin sources, then *fyrn-sægen* may have been a more accurate description of the source from his point of view.

### 11. The Distribution of Metrical Dating Criteria within *Andreas*

If *Andreas A* and *B* were composed at different times, then their divisions might also be detectable via aspects of poetic meter that have been correlated with language changes over time. In *A History of Old English Meter*, R.D. Fulk correlates diachronic changes in Old English morphology, diction, and phonology with the rules of alliterative poetic meter in order to build a chronology of composition for the primary texts in the Old English poetic corpus. He identifies several phenomena, which have value as dating criteria, including the following:

- Parasiting—the change of an earlier monosyllabic word to disyllabic through the addition of a vowel;
- Contraction—disyllabic words becoming monosyllabic;
- Lengthening (or shortening) of diphthongs or vowels;
- Adherence to Kaluza’s Law, which pertains to the metrical treatment of vowel quantity of inflexions;
- The treatment of ictus—that is, metrical stress—in relation to natural word stress.

Fulk counts passages of interest by noting where inconsistencies in the poems’ scansion can be resolved through application of the above linguistic principles. The occurrences can then be tabulated, and each poem’s score can be compared to the others to generate a relative chronology. Any criterion may hold little weight on its own, but correlation in the reconstructed chronology across criteria builds confidence in the statistical significance of the total collection of criteria observed. Fulk concludes that the metrical evidence divides the poetic corpus into three stages: an early period characterized by *Beowulf* and *Genesis A*, a Cynewulfian period including *Andreas*, and a later Alfredian period. Within the Cynewulfian period, metrical data show some distinctions between *Andreas* and the signed poems.

Table 7 summarizes Fulk’s metrical data for *Andreas*. Each criterion is divided into earlier and later forms<sup>12</sup>, and their occurrences are counted for *Andreas A* and *B*. The occurrence per line score is provided in parentheses.

**Table 7.** Incidence of dating criteria in *Andreas A* and *B*<sup>13</sup>.

	Earlier		Later	
	<i>A</i>	<i>B</i>	<i>A</i>	<i>B</i>
<b>Parasiting</b>	5 (0.005)	0 (0.000)	13 (0.013)	8 (0.014)
<b>Contraction</b>	5 (0.005)	0 (0.000)	8 (0.008)	2 (0.004)
<b>Lengthening</b>	0 (0.000)	0 (0.000)	2 (0.002)	4 (0.007)
<b>Kaluza’s Law</b>	7 (0.007)	6 (0.011)	4 (0.004)	3 (0.005)
<b>Ictus (nonfinal)</b>	0 (0.000)	0 (0.000)	3 (0.003)	2 (0.004)

<sup>11</sup> *Leod-word* (poetic word) is the other. The resulting occurrence per line scores are 0.071 Cynewulfian and 0.143 Andrean. Both score greater than 20% above the mean for their respective metrics. The *Dictionary of Old English* confirms that this is the only instance of *fyrn-sægen* in poetry.

<sup>12</sup> One must keep in mind that the early/late distinction is a statistical one; there are few hard divisions with associated dates, and exceptions can be found in most cases.

*Andreas* has fewer early forms than the period typified by *Beowulf* and *Genesis A*. Although they are few, all instances of words without parasiting or contraction are found in *Andreas A*. One might interpret this as evidence against dating *Andreas B* earlier than *Andreas A*; however, *Andreas B* shows a greater adherence to Kaluza's Law, which suggests the reverse. It is unclear whether the differences observed in the early criteria between *Andreas A* and *B* indicate different style or date of composition, or whether they are simply within the bounds of statistical variance.<sup>14</sup> Beyond affirming that both *Andreas A* and *B* post-date the Beowulfian period, the earlier metrics are inconclusive. The differences between *Andreas A* and *B* among later forms are similarly disappointing. *Andreas A* exhibits a slightly greater preference for contracted forms, whereas *B* has more instances of "analogically induced shortening" per line (Fulk 1992, p. 141).

In sum, the metrical evidence does not show a strong distinction between *Andreas A* and *B*, although neither does it contradict the hypothesis that *Andreas B* was composed first. The metrics of *Andreas B* are similar to those of *Exodus*, which is commonly dated to the end of the first period (p. 348).

## 12. Metrical Dating Criteria in Relation to Cynewulf

Although *Andreas B* cannot be isolated from *Andreas A* solely on metrical grounds, its influence might be detected when comparing the metrics of the entirety of *Andreas* to the signed poems. Taken as a whole, parasited forms suggest to Fulk that "*Andreas* comes before Cynewulf rather than being contemporary with him" (p. 348). Likewise, contraction shows that *Andreas* "falls statistically between the earliest poems and Cynewulf" (p. 349). The above interpretations are complicated by the fact that all instances of non-parasited and uncontracted forms occur in the *A* sections. However, if the *Andreas A/B* hypothesis stands on other grounds, then these forms may be interpreted as influenced by *Andreas B*.

A more complicated matter is the treatment of the resolution of words "in which the second of the resolvable syllables is [long]", such as *sæcyningas* (p. 238). Fulk divides the corpus into three diachronic categories: those in which the syllable is always unresolved (the earliest), those with mixed resolution (including Cynewulf), and those that always resolve (the latest, in which he includes *Andreas*). Fulk's presentation of the data on this point presupposes that *Andreas* post-dates Cynewulf. In fact, two of the signed poems—*Christ II* and *Juliana*—always resolve and of the four signed poems, only *Elene* is truly "mixed". Furthermore, Fulk excludes four instances of *wuldorcyningas* in *Andreas* as ambiguous<sup>15</sup>, making his claim that "the *Andreas* poet always follows the latter pattern"—a rare overstatement (Fulk 1992; 2001, p. 8). Scholars are divided on the question of the chronological ordering of the signed poems, but both Ralph Elliott and Patrick Conner consider *Juliana* an early poem (Elliott 2001, p. 298; Conner 2001, p. 23). So, it is not inconsistent to include *Andreas* among the Cynewulfian corpus—including early in that period—despite the absence of non-resolution in this verse type.

In *Meter*, Fulk documents a consistent pattern in the deterioration of the observance of metrical rules over time: a period of proper use, followed by occasional violation of the rule, avoidance, and finally ignorance. *Andreas* exhibits an "intermediate" character in two more ways when this pattern is applied as an interpretive guide. First, it consistently follows the rule of the coda for the *sæcyningas* verse type discussed above, whereas Cynewulf occasionally violates the rule (Fulk 1992, p. 239). Likewise, the use of *andswarian* in *Andreas* violates the rule of the coda while Cynewulf appears to avoid the word altogether (p. 242). In both cases, *Andreas* sits between the earlier period and Cynewulfian usage.

<sup>13</sup> The source data can be found in (Fulk 1992, pp. 80–83, 100–3, 128, 133, 144, 151, 162, 212, 237).

<sup>14</sup> Given that *Andreas B* is almost half the length of *Andreas A*, one would expect to observe 2–3 instances each of non-parasiting and uncontracted forms in *Andreas A*. There are 21 ambiguous cases of contraction in *Andreas*, eight of which occur in *Andreas B*.

<sup>15</sup> All four appear in *Andreas A*.

To summarize, several metrical criteria point to an interpretation of *Andreas* as being earlier than the signed poems. The criterion that might suggest that *Andreas* is later than Cynewulf is also consistent with the interpretation that *Andreas* is at least contemporaneous with him. It is inconvenient that some of the metrical evidence in favor of an earlier date for *Andreas* is found in *Andreas A* rather than *Andreas B*, which the *Andreas A/B* hypothesis asserts is the older section. However, it is reasonable to expect remnants of *Andreas B* to be sprinkled in *Andreas A* due to the nature of the *Andreas A* poet's editorial activities—a possibility discussed above in the context of narrative content.

### 13. Conclusions

Modern quantitative techniques should not be wielded uncritically or in isolation, but combined with traditional qualitative analysis, they offer a new avenue by which to approach well-known texts. Quantitative data can also serve as an arbiter between incompatible qualitative assessments. *Andreas* has been interpreted widely by different scholars as an early poem with *Beowulf*-like characteristics, an unsigned product of Cynewulf, and a post-Cynewulfian homage.

Although it may be possible to explain the evidence of the *Andreas A/B* division as the product of textual influence from different reference texts on a singular poet, the conclusion that *Andreas* consists of an earlier core represented by *Andreas B*, which has been expanded upon, is more parsimonious with the quantitative data. Analysis of oral-formulaic language, word frequency, and orthographic tendencies point toward a new understanding of *Andreas* as a composite work, which is further supported by a close reading of the text.

*Ceteris paribus*, this interpretation of the evidence is more coherent than the possible alternatives:

1. That an earlier poet composed *Andreas*, and Cynewulf borrowed a striking amount of distinctive formulaic language from him;
2. That Cynewulf composed *Andreas* without an early source but used a more archaic style, which he does not deploy in the signed poems;
3. That a post-Cynewulfian poet used pre-Cynewulfian language and metrics, which are attested nowhere else in post-Cynewulfian poems.

In *Both Style and Substance*, Orchard concludes based on Fulk's analysis that the "notion [...] that *Andreas* and the four signed poems are the work of a single poet can be swiftly dismissed" due to "features of both meter and diction that clearly distinguish *Andreas* from the four signed poems" (Orchard 2003, p. 287). In his dismissal, Orchard selects option 3, saying that "the *Andreas*-poet is far the more likely borrower [from Cynewulf]" (p. 289). North and Bintley concur, saying the poem is "one of a generation influenced by Cynewulf, whose metre is demonstrably older" (North and Bintley 2016, p. 58). This conclusion minimizes the fact that the metrical evidence distinguishes *Andreas* from the signed poems, because the former is more conservative linguistically. Proponents of a post-Cynewulfian date might attribute these earlier metrical features to borrowing from *Beowulf*, but these features tend to be found in *Andreas A*, which is not where the bulk of *Beowulfian* diction resides. It is far simpler to conclude that these features are a result of influence from an earlier source—that of *Andreas B*—rather than the peculiar archaisms of a Cynewulf copycat.

Therefore, the textual history of *Andreas* can be reconstructed tentatively as follows. An early version of the poem still detectable as *Andreas B* was composed first, probably by a pre-Cynewulf poet. It relied heavily on heroic diction in the tradition of *Beowulf* and was more concerned with telling a heroic tale than teaching Christian doctrine. That certain features found in Latin sources are not present in *Andreas B* suggests that this poem represents an earlier form of the story or at least one with a particularly Anglo-Saxon flavor. In addition to the *B* sections, it likely included much of the introduction and *fitt iv*, especially lines 359–76. Remnants may also survive in section *A4* and the ending passage.

Taking this poem as a foundation, the *Andreas A* poet expanded the *Andreas B* poem with the material identified above as *Andreas A*, including overtly didactic, moralizing episodes, such as

the divine helmsman, the discursive stories of skeptical unbelievers, and Andrew's *imitatio Christi*. Harmonizing the *Andreas B* poem with a known Latin source may have been a primary motivation for the *Andreas A* revisions. Section *B3* and the ending passage appear to have been more heavily edited by the *Andreas A* poet than the first half of *Andreas B*. However, a favorite stylistic tic of the *Andreas A* poet was coining novel compound words, which he used throughout the *B* sections, even in areas where he preferred to retain Beowulfian phraseology. The *Andreas A* poet exhibits striking affinity with the signed poems, which suggests that he was either Cynewulf himself or someone very well acquainted with his work.

For *Andreas B*, much work remains to explore how it fits into the history of Old English poetry, who the author may have been, where and when it may have been written, and what new information it may provide us when considered as a newly re-discovered poem in its own right. In the case of *Andreas A*, the question of Cynewulfian authorship needs to be re-evaluated in light of the implications of the *Andreas A/B* division on the style of the *Andreas A* poet, both as the author of the *A* sections and as an editor of the *B* material.

Early critics of Old English poetry, and the Cynewulfian group in particular, were characterized by an eagerness to ascribe all manner of unsigned poems to a few known poets, such as Cædmon and Cynewulf. As later scholars adopted more conservative interpretations, the pendulum of scholarly consensus swung toward a minimal Cynewulfian canon. Quantitative analysis offers us a way to temper the swings and circumscribe the bounds wherein subjective interpretation applies. The composite nature of *Andreas* as identified above must be seen as one small nudge of the pendulum toward a more inclusive interpretation of Cynewulfian authorship.

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