2014-07-03

# A Statistical Approach to Syllabic Alliteration in the Odyssean Aeneid

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A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of

Master of Arts

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July 2014

ABSTRACT

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William Clarke (1976) and Nathan Greenberg (1980) offer an objective framework for the study of alliteration in Latin poetry. However, their definition of alliteration as word initial sound repetition in a verse is inconsistent with the syllabic nature both of the device itself and also of the metrical structure. The present study reconciles this disparity in the first half of the *Aeneid* by applying a similar method to syllable initial sound repetition. A chi-square test for goodness-of-fit reveals that the distributions of the voiceless obstruents [p], [t], [k], [$k^w$], [f], and [s] and the sonorants [m], [n], [l], and [r] differ significantly from a Poisson model. These sounds generally occur twice per verse more often than expected, and three or more times per verse less often than expected. This finding is largely consistent with existing observations about Vergil's style (e.g. Clarke, 1976; Greenberg, 1980; Wilkinson, 1963). The regular association of phonetic features with differences in distribution suggests phonetic motivation for the practice.

Keywords: *Aeneid*, alliteration, dactylic hexameter, Latin, onset maximization, phonetics, phonology, poetry, syllabification, syllable structure, transcription, Vergil

ACKNOWLEDGEMENTS

No accomplishment can be attributed to the efforts of a single person, and it would be unfitting for me not to thank those who have assisted in this effort. I am particularly indebted to Dr. Chapman, my committee chair, for his patience, insight, and encouragement. I would also like to thank Dr. Elzinga and Dr. Macfarlane for the time and expertise they have imparted to this endeavor. I am likewise grateful to other members of the Linguistics and English Language Department, the College of Humanities, and the BYU community for the help they have provided. Dr. Melby merits particular mention for his constant concern and encouragement. Finally, I would like to thank my family and friends for their support, particularly my parents and my sister.

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# CHAPTER 1. INTRODUCTION

As an artistic portrayal of language, the value of poetry lies in both familiar and unfamiliar elements. Patterns of rhythm and sound provide a context for the poet's creativity. They allow words to be framed in a manner which the audience can understand. Geoffrey Leech (1969) explains that this concept is known as foregrounding, because "the artistic deviation 'sticks out' from its background, the automatic system, like a figure in the foreground of a visual field" (p. 57). The familiar scene provides perspective for what the poet wishes to emphasize. This does not discount the value of alternate interpretations. Some variation is surely expected. However, an understanding of stylistic and linguistic limits is necessary when approaching a poem from the poet's perspective.

## 1.1. Foregrounding in Roman Poetry

This principle is often at work in analyses of Roman poetry. The pattern of dactylic and spondaic feet within the meter, the division of the verse at caesurae and diereses, and the placement of words in chiasm and synchysis all depend on the contrast of familiar and unfamiliar features (Wilkinson, 1963, p. xi). In these cases, both elements are also relatively easy to identify. The position and quantity of syllables in the metrical structure must fit a known and consistent pattern (Allen, 1973, pp. 104-106; Raven, 1965, p. 22). The semantic, morphemic, and syntactic relationships of the words are also well established (Glare, 2012; Kühner, 1976/1989). Consider, for example, the synchysis in the following verse:

ui superum, saeuae memorem Iunonis ob iram,
*Aeneid*, 1.004

The morphological endings clearly show that the adjective *memorem* 'unforgotten' modifies the noun *iram* 'wrath,' and that *saeuae* 'fierce' modifies *Iunonis* 'of Juno.' There is no

need to reference other parts of the poem in drawing these connections, and they make it obvious that the words are arranged in an interlocking pattern. A great deal of work has been dedicated to the study of these aspects of poetic style (e.g. Marouzeau, 1946; Norden, 1958; Wilkinson, 1963).

Foregrounding may also mark intentional use of sound in Roman poetry. This is especially likely, considering that it is designed for oral recitation (Deutsch, 1939/1978, pp. 1-3). However, it is more difficult to be certain of the background in the case of phonetic effects, because the limits of interpretation are less restricted. The sounds themselves are only loosely bound by metrical requirements (Allen, 1978/1989, pp. 89-94; Kühner, 1976/1989, pp. 223-229, 249-252), and the phonetic inventory is much less diverse than the lexical inventory in terms of frequency and internal relationships (Glare, 2012; Kühner, 1976/1989).

Hence, the work done on phonetic devices tends to be much more subjective. Claims often rest on structures which are more easily identified, but which do not bear a clear relationship to the sounds themselves. For example, the semantic content of a passage may be taken as evidence that the use of a sound is intentional. A more direct method of measuring repetitive patterns such as rhyme and alliteration is their relative frequency. In the citation above, both *s* and *u* are repeated twice in the first two words, and *r* is repeated three times in the entire verse. However, establishing such relationships on a large scale is extremely tedious, and most claims of this type are based on an extremely limited context (e.g. Wilkinson, 1963, pp. 25-27). Of course, none of this is to say that such claims are false, but rather that they are not falsifiable in the context provided.

William Clarke (1976) and Nathan Greenberg (1980) have both responded to this problem by providing large-scale, objective analyses of alliteration in the works of prominent

Roman poets, namely the *Aeneid* of Vergil, and the *Metamorphoses* of Ovid, and the *De Rerum Natura* of Lucretius. By comparing the frequency and type of sounds repeated in certain metrical and lexical positions, they are able to show that some instances of alliteration are unexpected and may be considered intentional on the part of the poets (Clarke, 1976, p. 300; Greenberg, 1980, pp. 610-611). However, the definition of alliteration used in these studies is far from ideal. Both authors define the device as repetition of a word initial sound within a single verse (Clarke, 1976, p. 278; Greenberg, 1980, p. 585). Although it is certainly possible for words to be selected because they begin with the same letter, this approach to alliteration neglects the fact that both the structure of the device itself and the structure of the meter are inherently syllabic (Raven, 1965, p. 22; Wilkinson, 1963, p. 25). This study seeks to improve our understanding of the intentional use of alliteration in Latin poetry by applying an objective analysis to syllable initial repetition within the verse.

### 1.2. The Odyssean *Aeneid*

The text for the analysis is taken from the first half of the *Aeneid*, because the poem is a prominent example of Latin poetry and a subject of previous studies. The *Aeneid* was written by Publius Vergilius Maro, commonly known as Vergil, who was a Roman poet of the first century B.C. His skill and popularity were such that he recited some of his work to the emperor Augustus Caesar in person, and he authored two other great works of poetry, the *Bucolics* and the *Georgics*, before even starting on the *Aeneid*. The composition of this last poem, Vergil's third and final masterpiece, continued for the last ten years of his life. In fact, the poem was never actually finished, as evidenced by short verses scattered throughout (Conte, 1994/1999, pp. 262-263; Fantham, 2013, pp. 85-86).

The poem tells the story of Aeneas, a Trojan who escapes the sack of his city with a few companions. It recounts their journey through the Mediterranean and their struggle to establish a new home in Italy. It is clear from the contents of the poem that the first six books are patterned after the *Odyssey*, and the second six books after the *Iliad*. Hence, the first half of the poem may also be referred to as the Odyssean *Aeneid* (Conte, 1994/1999, p. 277). By following the style of Homer, Vergil is able to establish the legitimacy of the Roman state and the emperor himself in the same heroic legacy. The Trojans are among few historical equals of the Greeks, and the emperor belongs to the *gens* named after the Trojan, Iulus (Conte, 1994/1999, pp. 276-279).

The poem is naturally written according to the metrical structure of Greek epic verse, otherwise known as dactylic hexameter. In this metrical form, each verse is divided into six feet which conform to a dactylic pattern of a heavy syllable followed by two light syllables. The two light syllables may also be replaced with a single heavy syllable, resulting in a spondaic foot. The last foot of each verse is regularly restricted to two syllables, of which the latter may be either light or heavy (Raven, 1965, pp. 90-91).

Differences in syllable quantity are a matter of duration. Heavy syllables take about twice as long to pronounce as light syllables do. The two-way division is an oversimplification of the actual length of time required for pronunciation, but it suffices for purposes of composition (Kühner, 1976/1989, p. 223). The quantity of a syllable is determined by the rhyme of the syllable or, in other words, the vowel and any following consonants. A long vowel or diphthong always results in a heavy syllable, but a short vowel only results in a heavy syllable when followed by at least one consonant in the coda (Allen, 1973, p. 203; Kühner, 1976/1989, pp. 223-227; Raven, 1965, pp. 23-25). Hence, a knowledge of syllable boundaries is necessary for composition in this poetic style. For consonants which occur between vowels, one is usually

reckoned to the following syllable and the remainder to the preceding syllable (Kühner, 1976/1989, pp. 249-252).

**Purpose of the Study**

The purpose of the study is to provide an objective framework for subjective interpretations of alliteration as intentional repetition of a syllable initial sound in a verse, by comparing the distribution of syllable initial sounds per verse in the first half of the *Aeneid* against a Poisson model via a chi-square test for goodness-of-fit.

**Research Question**

1. For which sounds is syllable initial repetition within a verse unexpected, in the sense that it is unlikely to follow a Poisson model at random?

**Delimitations**

This study does not attempt to prove that alliteration is used in the Odyssean *Aeneid*, either in a particular instance or more generally, nor does it implicate Vergil's other works or those of other Latin poets. In addition, this study does not attempt to evaluate alliteration outside the context of syllable initial repetition with a single verse.

Further, this study does not attempt to account for the fact that sounds are not fully independent from other linguistic variables, but assumes that they are sufficiently independent for purposes of the statistical evaluation. The value of different statistical approaches in providing an objective framework is also excluded from consideration.

## CHAPTER 2. LITERATURE REVIEW

The study of alliteration in Roman poetry has suffered from a lack of comprehensive and objective treatment. The work of Rosamund Deutsch (1939/1978) on sound repetition in Lucretius' *De Rerum Natura*, which Clarke (1976) singles out as one of the most comprehensive studies (p. 277), is still incomplete. In fact, Deutsch (1939/1978) herself admits that a full account of sound repetition in the poem is too difficult to attempt, and that she restricts her analysis to the second book with notable examples from the others (pp. 6-7). Deutsch's (1939/1978) work is also fairly subjective. Numerous examples of alliteration are described, but little effort is made to demonstrate that they are intentional, perhaps because she considers this to be obvious (Deutsch, 1939/1978, pp. 4, 9). The following verse is briefly mentioned as one of three examples, in which more than one sound is alliterated (Deutsch, 1939/1978, pp. 12-13).

principio caeli clarum purumque colorem,
*De Rerum Natura*, 2.1030

Similar problems exist in the work of Patrick Wilkinson (1963), whose examples of alliteration are limited in both quantity and context (pp. 25-28). However, he does not view this as a problem. An objective account of the device is not only impractical but impossible, and he explicitly states that "in a matter that does not admit of statistical analysis one must keep constantly in mind the overwhelming preponderance of non-occurrence" (p. 26). This sentiment reflects the approach of most other work, in which alliteration is addressed merely as an accessory to some other endeavor, such as in the footnotes of a textual edition or in a few pages of a stylistic analysis (Clarke, 1976, pp. 276-277).

Of course, subjective treatment is not entirely problematic. The poet would use alliteration knowing that his audience could not interpret it in the context of the entire poem, and he would probably rely on features such as frequency, proximity, stress, metrical position, and

semantic content to emphasize his intent. However, there are limits by which even the poet is bound, and a knowledge of these limits can enhance interpretation. This is particularly true in the case of alliteration. The phonological inventory of a language is extremely limited in comparison with the lexical inventory, and it is inherently dependent on other linguistic features (Allen, 1978/1989, pp. 9, 47-50; Glare, 2012; Kühner, 1976/1989). The poet must use the same sound over and over again, and the meaning of the poem restricts the options even further. A good deal of repetition is bound to occur, whether the poet intends it or not. Hence, the weakness in subjective approaches to alliteration does not necessarily lie in the type of relationships drawn, but rather in their quantity. The power of a claim is only equal to its context.

### 2.1. Contributions of William Clarke (1976)

William Clarke (1972, 1976) is the first to publish comprehensive and objective analyses of intentional sound repetition in Latin poetry. His efforts are focused on the most extensive works of two well known Roman poets: the *Aeneid* of Vergil and the *Metamorphoses* of Ovid (Clarke, 1976, p. 278). After a successful description of rhyme in these poems (Clarke 1972), he turns his attention to alliteration (Clarke 1976). Clarke (1976) believes that alliteration is extensively used to mark major divisions both within verses (a.k.a. caesura and diereses) and between them, noting that the use of structure for sound based patterns has already found wide support in studies on Vergil's style (p. 278). He seeks to demonstrate this by comparing alliteration in these positions against alliteration in an entire poem. Significant differences in usage between these contexts may be taken as evidence of intention (Clarke, 1976, p. 278-279, 287-288).

*2.1.1. Methodology*

Clarke's (1976) analysis rests on the following resources and assumptions. The text is taken from the Mynors (1969) edition of the *Aeneid* and the Magnus (1914) edition of the *Metamorphoses* (Clarke, 1976, p. 279). Alliteration is defined as word initial repetition in the context of a single verse. Clarke (1976) acknowledges that other definitions of alliteration are possible, including word medial alliteration, but he does not account for them due to the complexity of the task (p. 278). The phonetic assumptions of his analysis are based on an earlier edition of Allen (1978/1989). Short vowels, long vowels, diphthongs, and consonants are all treated as distinct sounds, except for aspirated plosives, which are grouped with their unaspirated counterparts. Other phonetic relationships and ambiguities are neglected (Clarke, 1976, p. 279). In order to reference major verse divisions, Clarke (1976) assigns a number to every half foot except the last, giving a total of eleven metrical positions (p. 288).

Few details are provided about the procedure itself. The use of repetition at major verse boundaries is investigated in the context of an entire poem (Clarke, 1976, p. 279). This comparison rests on differences in the frequency and type of sounds used in the most common pattern of repetition, in which a word initial sound occurs twice per verse. These features are then used to establish meaningful differences within and between the two poems (Clarke, 1976, pp. 287-288, 297).

*2.1.2. Results*

The overall nature of repetition in each poem is accounted for first. Clarke (1976) claims that approximately sixty percent of all verses in each poem contain at least one instance of alliteration (pp. 279-280). He notes that there is a rough correlation between the frequency with

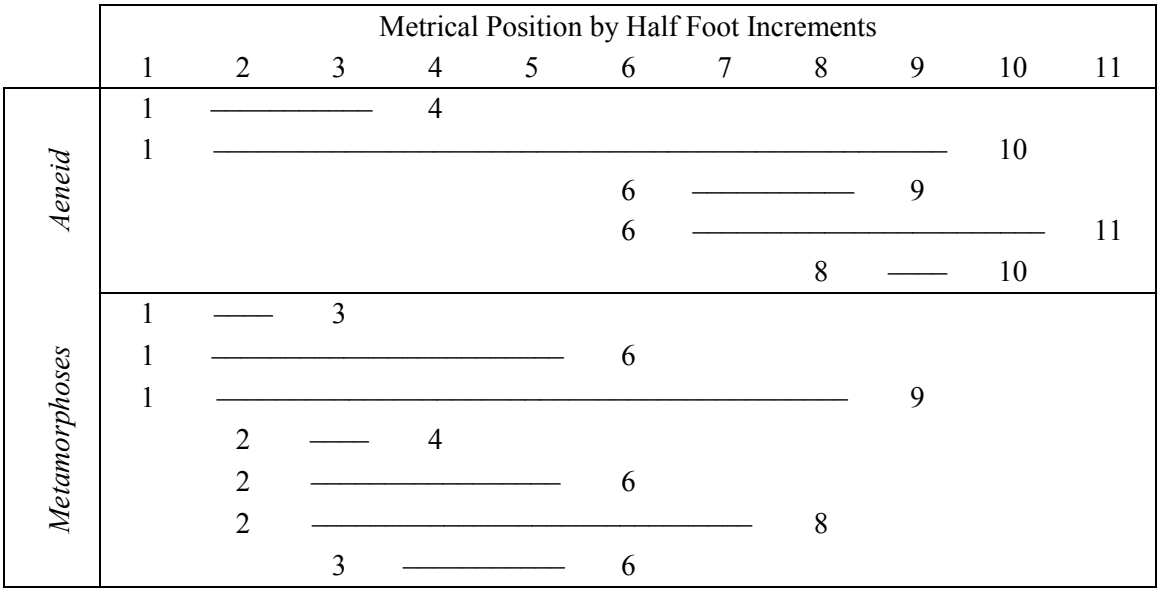
which a sound is repeated and the frequency with which it occurs in word initial position in Latin words (Clarke, 1976, pp. 280-283). Repetition is also accounted for in terms of the relative frequency and position of unique sounds involved. Unsurprisingly, the most common pattern is the occurrence of the single word initial sound twice per verse, which is illustrated with the following example (Clarke, 1976, pp. 284-286).

Dumque ea Cephenum medio Danaeius heros
*Metamorphoses*, 5.001

About sixty percent of all instances of this pattern occur at major verse divisions (Clarke, 1976, pp. 287-288). However, since most words begin at these positions anyway, the observation must be bolstered by additional evidence. Clarke (1976) claims that this evidence may be taken from the positions and sounds preferred in each poem (pp. 287-288). Although this pattern may occur at all possible pairs of positions in the verse, it is most frequent in relatively few of them. Specifically, Clarke (1976) claims that over half of the instances of this pattern are concentrated in less than a fifth of the pairs available, and that these pairs are associated with major verse divisions (pp. 288). He gives a detailed account of pairs which are used at least fifteen times per book in each poem, accompanied by explicit examples and graphic illustrations (pp. 288-294).

Clarke (1976) also points out that there are significant differences in the use and frequency of certain pairs of positions between the two poems (p. 291). A detailed summary of these differences and accompanying illustrations show that Vergil prefers to mark boundaries later in the verse, whereas Ovid prefers to mark those near the beginning (pp. 295-296). Since these differences are also consistent with the poets' preferences for verse division, it is unlikely that such a stark contrast would occur by chance (pp. 296-297). These trends are shown in Figure 2.1. below (Clarke, 1976, p. 296).

Figure 2.1. Preferred Metrical Positions for Two-Word Repetition




There are also a few other differences in usage at these positions. Clarke (1976) claims that certain vowels are repeated less frequently, because they provide less of a contrast than consonants do (pp. 298-299). In addition, the overall frequency of complex alliterative patterns at these positions is increased, reinforcing the notion that the repetition here is intentional (Clarke, 1976, p. 299).

Clarke (1976) summarizes by pointing out that this use of repetition reinforces the claims of literary critics of the classical period, who believe that sound repetition ought to reinforce the structure of the poem (p. 299). The increased frequency of sound repetition at major verse breaks, especially with stronger sounds, serves as a sort of poetic punctuation to these divisions. This is also supported by the fact that differences in the use of repetition by Vergil and Ovid correlate with their metrical preferences. This evidence leads Clarke (1976) to conclude that repetition in these positions is intentional (pp. 299-300).

## 2.2. Contributions of Nathan Greenberg (1980)

Nathan Greenberg (1980) raises three main objections to Clarke's (1976) analysis. First, he claims that Clarke (1976) makes no effort to account for the frequency of word initial boundaries at certain metrical positions. Repetition may occur more frequently at certain places in the verse, simply because word boundaries are more common in these places. Naturally, more word initial repetition will occur where more words begin. Second, the distribution of word initial vowels can be accounted for in a more general context. There is no need to refer to major verse divisions, in order to explain their distribution. Lastly, the disregard for relationships between word boundaries and metrical positions detracts from the claim that Vergil and Ovid differ significantly in their use of repetition. Here too the differences could simply be the result of word placement (Greenberg, 1980, p. 585).

Though Greenberg (1980) only explicitly states that his work is intended to be "more complete and informative than hitherto available" (p. 585), he seeks to improve upon Clarke's (1976) analysis in three ways. First, whereas Clarke (1976) compares data against an existing context, Greenberg (1980) demonstrates intention through comparison with a random model (pp. 586-590). Second, Greenberg (1980) uses statistical analyses to evaluate the magnitude of differences between observed and expected values (pp. 586-588). Third, his analysis consists of two primary methods instead of one (Greenberg, 1980, p. 585).

### *2.2.1. Methodology*

Greenberg (1980) restricts his analysis of alliteration to word initial repetition in a single verse, which he admits is similar to the approach adopted by Clarke (1976). He also acknowledges the possibility of other definitions, but accepts this one because of its popularity

and convenience. However, his approach differs from that of Clarke (1976) in that each letter is considered to be a different sound. (Greenberg, 1980, p. 585).

The context for "surprising or unexpected" alliteration is based on outcomes from a random selection of words (Greenberg, 1980, pp. 586-587). Repetition not created through conscious effort may be considered independent of other linguistic factors and assumed to take on a random distribution (Greenberg, 1980, p. 589). Greenberg (1980) acknowledges that this is not entirely true, since a poet could retain as much fortuitous alliteration as he could reject considered alliteration (pp. 589-590). He gives three reasons for pursuing a random model in spite of this fact: first, a non-random result can still provide some evidence of intention, second, it is better than any method yet attempted and, third, it can inform subjective impressions by establishing a degree of likelihood in different contexts (Greenberg, 1980, p. 590). In working with a random model, Greenberg (1980) also draws attention to the importance of restricting the sample to verses which meet the assumptions of the test (pp. 586-587). For example, it would be inappropriate to include six word verses in a sample, from which only five words were drawn at a time. Probabilities less than 0.050 are considered to be significant (Greenberg, 1980, p. 592).

Greenberg's (1980) actual process is somewhat complex, but the underlying structure remains the same throughout. First, he calculates the probability of repetition in a single verse. This step involves one of two methods of measurement, which Greenberg (1980) refers to as multiple analysis and positional analysis (pp. 594, 596). In multiple analysis, repetition is measured as the number of words beginning with a given sound relative to the total number of words per verse. An example of the notation for such repetition is *5-M-2*, which represents two words beginning with *m* in a verse five words long. Also frequent is notation such as *5-M-4+*,

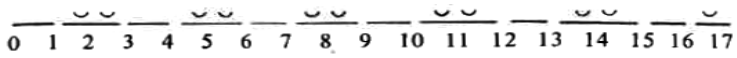
which represents four or more words beginning with *m* in a verse five words long, as shown in the example below (Greenberg, 1980, pp. 586-587, 591, 598).

Maeonia mentum mitra crinemque madentem
*Aeneid*, 4.216

To apply multiple analysis, the sample is first restricted to verses, which are the same number of words in length. The probability that a given number of words beginning with a sound would randomly occur in a single verse of the sample is determined using a binomial experiment. The formula $p(k) = \frac{n!}{k!(n-k)!}\, p^k q^{n-k}$ gives the probability of *k*, where *k* is the number of words beginning with the sound in the verse, *n* is the total number of words in the verse, *p* is the ratio of words beginning with the sound in the sample over the total number of words in the sample, and *q* is the ratio of words not beginning with the sound in the sample over the total number of words in the sample. Individual probabilities derived through this process may be combined to determine the probability that the number of words beginning with a sound will be equal to or greater than a given frequency. However, Greenberg usually applies this technique by subtracting the probabilities of non-qualifying values from one (Greenberg, 1980, pp. 591-592).

In positional analysis, on the other hand, repetition is measured as two words beginning with a sound in a given pair of metrical positions within the verse. Greenberg (1980) gives credit to Clarke (1976) for the idea of measuring against metrical position, but prefers the notation of Wilhelm Ott (1973, pp. 50-57), which accounts not only for every half foot, but also for the possibility of division within the second half of a foot. Greenberg (1980) then adds 0 and 17 to account for the beginning and end of the verse, as shown in Figure 2.2 below (pp. 594-596).

Figure 2.2. Metrical Positions in Greenberg (1980)



Positional repetition is abbreviated through notation such as *M(1, 4)*, which represents a word beginning with *m* at both position 1 and position 4. The following verse is an example of this type (Greenberg, 1980, p. 598).

si modo quod memoras factum fortuna sequatur.
*Aeneid*, 4.109

To apply positional analysis, the sample is first restricted to verses with word initial boundaries at a given pair of metrical positions. The probability that two words beginning with a sound would randomly occur at a given pair of positions in a single verse of the sample is determined via the product of their independent probabilities. The formula $p = p_1 p_2$ gives the probability, where $p_1$ is the ratio of words beginning with the sound at the first position in the sample over the total number of words at the first position in the sample, and $p_2$ is the ratio of words beginning with the sound at the second position in the sample over the total number of words at the second position in the sample (Greenberg, 1980, pp. 595-596).

After determining the probability of repetition in a single verse with either multiple analysis or positional analysis, the probability of having a given number of such verses is determined via a binomial experiment. The formula $p(k) = \frac{n!}{k!(n-k)!}\, p^k q^{n-k}$ gives the probability of *k*, where *k* is the number of such verses in the sample, *n* is the total number of verses in the sample, *p* is the probability derived in the first step, and *q* is one minus *p* (Greenberg, 1980, pp. 592, 596). Greenberg (1980) sometimes proceeds beyond this point to give the expected number of such verses. Though he does not describe this step, it is fairly certain that it involves simple multiplication of the probability and the total number of verses in the sample. A chi-square statistic is also provided for most sets of observed and expected values, though they are seldom accompanied by a p-value (Greenberg, 1980, pp. 602-609).

*2.2.2. Results*

The results of Greenberg's (1980) study are divided into three major sections, each encompassing a slightly different approach to the data. In the first section, both methods of measurement are applied to repetition of *m* and *f* in the fourth book of the *Aeneid* and the third book of the *De Rerum Natura*. Significant results from multiple analysis in the fourth book of the *Aeneid* include three verses of *5-M-3+* at p = 0.004, one verse of *5-M-4+* at p = 0.011, three verses of *5-F-3+* at p = 0.001, and three verses of *6-F-3+* at p = 0.016. Significant results from positional analysis in the same book include four verses of *M(1, 4)* at p = 0.013, two verses of *F(5, 9)* at p = 0.034, and three verses of *F(7, 10)* at p = 0.009 (Greenberg, 1980, p. 598). In the *De Rerum Natura*, significant results for multiple analysis include only four verses of *8-M-3+* at p = 0.012, whereas significant results for positional analysis include two verses of *M(0, 5)* at p = 0.047, three verses of *M(5, 7)* at p = 0.019, and one verse of *F(4, 8)* at p = 0.034 (Greenberg, 1980, pp. 598, 602). The two verses cited above are included in these findings. They are summarized in Table 2.1. below.

Table 2.1. Results of Greenberg's (1980) First Analysis

| | *Aeneid* 4 | | | *De Rerum Natura* 3 | | |
|---|---|---|---|---|---|---|
| | Pattern | Verses | P-Value | Pattern | Verses | P-Value |
| Multiple Analysis | 5-M-3+ | 3 | 0.004 | 8-M-3+ | 4 | 0.012 |
| | 5-M-4+ | 1 | 0.011 | | | |
| | 5-F-3+ | 3 | 0.001 | | | |
| | 6-F-3+ | 3 | 0.016 | | | |
| Positional Analysis | M(1, 4) | 4 | 0.013 | M(0, 5) | 2 | 0.047 |
| | F(5, 9) | 2 | 0.034 | M(5, 7) | 3 | 0.019 |
| | F(7, 10) | 3 | 0.009 | F(4, 8) | 1 | 0.034 |

For example, in the fourth book of the *Aeneid*, a random distribution of words would not likely generate a verse with word initial *m* four or more times (p = 0.011), or two verses with

word initial *f* at positions five and nine ($p = 0.034$). This illustrates the difference between the two methods: multiple analysis shows whether alliteration of a given number of words is unexpected, whereas positional analysis shows whether alliteration at a given pair of positions is unexpected.

In the second section, probabilities obtained through positional analysis are used to determine expected values and chi-square statistics for repetition in the entirety of each book (Greenberg, 1980, pp. 602-604). The letters *m* and *f* are analyzed first. Observed and expected instances of repetition at every possible pair of positions are summed for each letter. In the fourth book of the *Aeneid*, 62 observed instances of repetition with *m* exceed the 51.8 expected instances by a chi-square statistic of 1.62. A greater difference is observed in the third book of the *De Rerum Natura* with a chi-square statistic of 5.00 from 90 observed instances of repetition with *m* versus 70.2 expected instances. However, the reverse is true in case of the other letter. The third book of the *De Rerum Natura* shows no appreciable difference with a chi-square statistic of 0.0 for 25 observed instances of repetition with *f* compared to 24.3 expected instances. The fourth book of the *Aeneid*, however, has 43 observed instances of repetition with *f* exceeding the 35.1 expected instances by a chi-square statistic of 1.34 (Greenberg, 1980, pp. 602-603). These findings are summarized in the table below.

Table. 2.2. Results of Greenberg's (1980) Second Analysis: Part One

| | *Aeneid* 4 | | | *De Rerum Natura* 3 | | |
|---|---|---|---|---|---|---|
| | Observed | Expected | $\chi^2$ | Observed | Expected | $\chi^2$ |
| *m* | 62 | 51.8 | 1.62 | 90 | 70.2 | 5.00 |
| *f* | 43 | 35.1 | 1.34 | 25 | 24.3 | 0.00 |

The second section continues by extending this approach to other sounds. The most significant difference in the fourth book of the *Aeneid* consists of 11 observed instances of repetition at positions 9 and 14, which are set against only 5.47 expected instances. Greenberg (1980) provides a more complete analysis in this case with a chi-square statistic of 5.58, 1 degree of freedom, and a p-value under 0.025 (p. 603). Also significant in the book is repetition at positions 2 and 4, for which 11 observed instances contrast with 5.52 expected instances for a chi-square statistic over 5.00 (Greenberg, 1980, p. 603). The only equally significant finding in the third book of the *De Rerum Natura* occurs at positions 9 and 12, in which there are 30 observed instances of repetition, but only 15.14 expected. Greenberg (1980) claims this last result as the most significant finding of positional analysis (pp. 603-604).

The second section ends with totals for observed and expected repetition of all sounds at all pairs of positions. In the fourth book of the *Aeneid*, there are 886 observed instances of repetition, which contrast with the 806.46 expected instances by a chi-square statistic of 7.84. In the third book of the *De Rerum Natura*, the observed instances of repetition total 1,443 and differ from the 1,427.71 expected instances by a chi-square statistic of 0.16. Greenberg (1980) concludes that this method makes the fourth book of the *Aeneid* a more alliterative work than the third book of the *De Rerum Natura* (p. 604).

Table. 2.3. Results of Greenberg's (1980) Second Analysis: Part Two

| | *Aeneid* 4 | | | *De Rerum Natura* 3 | | |
|---|---|---|---|---|---|---|
| | Observed | Expected | $\chi^2$ | Observed | Expected | $\chi^2$ |
| All Sounds | 886 | 806.46 | 7.84 | 1,443 | 1,427.71 | 0.16 |

In the third and final section of the results, Greenberg (1980) applies multiple analysis to the repetition of all sounds in the entirety of each poem. After a somewhat extraneous comparison of the use of *s* in the two works, he provides observed values, expected values, and chi-square statistics for all two word repetition and three or more word repetition (Greenberg, 1980, p. 609). Differences associated with a chi-square statistic near or above 5.00 are assumed to be significant (Greenberg, 1980, p. 603). These are shown in Table 2.4. below.

Table 2.4. Results of Greenberg's (1980) Third Analysis

| | *Aeneid* 1-12 | | | | | | *De Rerum Natura* 1-6 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2 | | | 3+ | | | 2 | | | 3+ | | |
| | Obs. | Exp. | $\chi^2$ | Obs. | Exp. | $\chi^2$ | Obs. | Exp. | $\chi^2$ | Obs. | Exp. | $\chi^2$ |
| *a* | - | - | - | - | - | - | - | - | - | 160 | 115 | 14.10 |
| *b* | 16 | 8 | 6.50 | - | - | - | - | - | - | - | - | - |
| *e* | 550 | 632 | 10.40 | 52 | 93 | 17.37 | 502 | 557 | 5.18 | 56 | 95 | 15.34 |
| *i* | - | - | - | 94 | 128 | 8.41 | - | - | - | 63 | 85 | 5.09 |
| *l* | 195 | 165 | 5.24 | - | - | - | - | - | - | 8 | 3 | 4.94 |
| *m* | 521 | 433 | 18.06 | - | - | - | - | - | - | 69 | 29 | 57.55 |
| *n* | 314 | 253 | 14.20 | 38 | 23 | 8.65 | - | - | - | - | - | - |
| *q* | - | - | - | - | - | - | 360 | 418 | 8.13 | 46 | 64 | 4.97 |
| *r* | 175 | 146 | 5.44 | - | - | - | - | - | - | 23 | 11 | 11.10 |
| *t* | - | - | - | - | - | - | - | - | - | 26 | 16 | 4.77 |
| *v* | - | - | - | - | - | - | 305 | 251 | 11.17 | - | - | - |

Greenberg (1980) draws attention to several of the results. He notes a preference in the *Aeneid* for two word repetition of *b*, *l*, *m*, *n*, and *r*, as well as three or more word repetition of *n* and *r*. In the *De Rerum Natura*, repetition of two words is common for *r* and *v*, but repetition of three or more words is preferred for *a*, *l*, *m*, *r*, and *t*. Both poems show a tendency to avoid repetition of *e* in general and repetition of *i* in groups of three or more words. The *De Rerum Natura* also shows a tendency to avoid repetition of *q* (pp. 608-610). Greenberg (1980) concludes that the statistical evidence confirms intentional repetition in certain contexts, and that

it is useful in describing the overall style of these poems. However, the use of alliteration in a particular instance cannot rely on this evidence alone (pp. 610-611).

### 2.3. Limitations of Existing Work

Existing work is limited by its definition of alliteration. This problem originates from a lack of clarity in ancient accounts. Terminology used to refer to alliteration varies, and no author explicitly mentions the device with respect to poetry (Clarke, 1976, p. 276; Wilkinson, 1963, p. 25). This has led to various definitions by modern scholars. For example, Wilkinson (1963) claims that the term is restricted to word initial sounds, even though he acknowledges the effects of syllable initial repetition (p. 25). In her study, Deutsch (1939/1978) decides that, "*alliteration*, though often applied only to the initial consonants of words, will be used in a wider sense to include every recurrence of the consonant within the line," and her examples make it clear that this includes syllable initial repetition, as with the sound *t* in the following verse (pp. 7, 11-12).

nec mors nec luctus temptaret tempore talei
*De Rerum Natura*, 6.1251

Clarke (1976) and Greenberg (1980) do not attempt to reconcile different methods of defining alliteration. Clarke's (1976) work is only concerned with "that alliteration which consists of the repetition of the same sound(s) at the beginning of two or more words in a verse" (p. 278), and Greenberg (1980) restricts his definition to "the occurrence within a single hexameter verse of two or more words with the same initial letter" (p. 585). However, both authors acknowledge that their definitions are somewhat arbitrary and adopted, not only because they are fairly common, but also because they relieve difficulties in analysis. Clarke (1976) provides a reference to Opelt (1958) for "a number of definitions of alliteration offered by modern scholars," and acknowledges that "another type of alliteration, that found within words,

exists in Roman poetry, and many critics feel that this alliteration has been planned by the poets" but that "it is difficult to demonstrate *objectively* that it is intentional" (p. 278). Greenberg (1980) admits that "other definitions are, of course, possible and perhaps preferable. There is no intrinsic reason why alliteration should be limited to the confines of a single verse or to word-initials" (p. 585). Of course, this definition is somewhat understandable in the context of these studies. Greenberg (1980) himself describes his work as a mere "exploratory foray into the subject" (p. 585), and it would have been extremely difficult to account for syllable initial repetition without today's technology.

### 2.4. Proposed Contribution

This study offers an objective analysis of alliteration under a syllable initial definition of the device. Syllabic structure provides a superior context to morphemic structure for the treatment of sound repetition. Sounds are not merely orthographic enhancements of Roman poetry, but fundamental aspects of its nature. Deutsch (1939/1978) spends the first part of her introduction explaining that Roman poetry was usually read aloud (pp. 1-3). The acoustic effect would certainly have been of concern to the poets. Of course, patterns may also be created out of morphemic elements, but this does not mean that phonetic patterns must be constructed in this context. This is particularly true in this poetic style. The underlying metrical structure is inherently syllabic (Raven, 1965, p. 22), and morpheme boundaries are regularly neglected in satisfaction of this structure. Sounds which are word initial are not necessarily syllable initial (Kühner, 1976/1989, pp. 223-229; Raven, 1965, pp. 23-25). Furthermore, alliteration is inherently phonemic in nature and, in its broadest sense, may incorporate any sound in syllable

initial position (Deutsch, 1939/1978, p. 7; Wilkinson, 1963, p. 25). A word initial definition of the device neglects its potential for use in other contexts.

Other aspects of the analysis are fairly consistent with the work of Clarke (1976) and Greenberg (1980). Relative frequency serves as the basis for measurement, because it bears a direct relationship to repetition. The verse, as a consistent and relatively short unit, provides an ideal context for such measurement. The statistical test used in the study, a chi-square test for goodness-of-fit against a Poisson distribution, is similar to the method used in Greenberg's (1980) final application of multiple analysis (pp. 608-610). Finally, assuming that the sounds are sufficiently independent for such a test, any significant differences in the distribution of sounds is taken as evidence of intention on the part of the poet.

# CHAPTER 3. METHODOLOGY

The methodology is organized into four sections. The first section describes the selection and preparation of the text. Sections two and three discuss the theory and practice underlying its transcription and syllabification. The assumptions and procedures of the statistical test are explained in the fourth section.

## 3.1. Preparation of the Text

The first step in the analysis involves acquisition and preparation of a suitable text. This text should fulfill three requirements: it should come from a scholarly edition, be in a digital format, and have markings for vowel length. A scholarly edition must be used, if the results are to be taken seriously. A digital copy is required by the extent of the analysis. The first half of the poem is nearly five thousand verses long. Given that each verse may contain between twelve and seventeen syllables, these verses contain approximately seventy thousand syllables. A computer assisted analysis not only saves time, but it also reduces the potential for errors.

Vowel length facilitates evaluation of the syllabification process by restricting the limits of metrical interpretation. Metrical structure provides an ideal means of evaluating syllabification, because it is syllabic in nature and consistent for all verses (at least at a moraic level). Verses which are incorrectly syllabified will not conform to the metrical structure, and may be identified thereby for correction. However, if vowel length is not marked, every open syllable with a long vowel will be incorrectly quantified as short. The number of errors will increase exponentially, and the metrical structure will be rendered useless as a means of evaluation.

*3.1.1. Sources*

The Oxford Classical Text of the *Aeneid* edited by Roger Mynors (1969) fulfills the need for a scholarly edition. However, it is not marked for vowel length, nor is it readily available in digital format. Since vowel length is not predictable (Marotta, 1999), it must be determined on a case by case basis or taken from an already marked text. The longest marked text available is the student edition of Clyde Pharr (1964/1998), which covers the first six books of the poem. Though it is a student edition, it is based on the Oxford Classical Text of Frederic Hirtzel (1900), which is the predecessor of the Mynors (1969) edition (Pharr, 1964/1998, pp. v-ix). Further, Pharr's (1964/1998) footnotes suggest that he does not mark vowels to proscribe a particular interpretation of the text, but to be consistent with the majority of evidence. When an otherwise light syllable is treated as a heavy syllable before a sense pause, the vowel remains short (e.g. pp. 123, 270, 357). Thus, the last syllable of the word *pectoribus* is considered heavy in the following verse.

pectoribus inhians spirantia consulit exta.
*Aeneid*, 4.064

A digital copy of the Pharr (1964/1998) edition is already available from an earlier stage of analysis. The text was originally copied into a Word document from a digital edition of Greenough (1900) available at the Perseus Digital Library of Tufts University (perseus.tufts.edu) and modified to be consistent with a print edition of Pharr (1964), including not only marks for vowel length, but also editorial differences, punctuation, indentation, and paragraph breaks. This text serves as a starting point for the analysis. In order to reconcile it with the Mynors (1969) edition and check it for accuracy, a digital version of the Hirtzel (1900) edition available at the Vergil Project of the University of Pennsylvania (vergil.classics.upenn.edu) is copied into a Word document and modified to be consistent with a print version of the Mynors (1969) edition.

*3.1.2. Preparation*

There are undoubtedly errors in the digital copy of Pharr (1964/1998) and the digital copy of Mynors (1969), but these are unlikely to overlap. Hence, a comparison of the two texts should draw attention not only to editorial differences, but also to typographical mistakes. Of course, typographical errors in transcribing vowel length cannot be evaluated in this process, since they are only marked in one of the two texts. However, such mistakes may be accounted for later during the syllabification evaluation, since they will likely disrupt the metrical structure. Errors not caught in either process are assumed to be insignificant.

Evaluation and correction proceeds as follows. Book and verse numbers are deleted from each text, as well as all punctuation and formatting symbols, except for a single whitespace character between words and a single hard line break at the end of each verse. Inconsequential orthographic differences are also reconciled. Specifically, *j* and *v* are replaced with *i* and *u*, uppercase letters are replaced with lowercase equivalents, and vowels marked with diereses are replaced with unmarked equivalents. At this point a copy of the Pharr (1964/1998) text is made, so that vowels marked with macrons will be available for later reference. These vowels are then replaced with unmarked equivalents.

The entirety of each edition is copied into an Excel spreadsheet, so that each verse occupies a single cell in the same column. In the first column to the left, the book and verse number of each line is entered as 1.001, 1.002, 1.003, etc. In the second column to the left, *Pharr* or *Mynors* is entered for the edition of the text. Any rows with a duplicate value for verse content, verse number, and book number are then removed. Verses remaining for both editions

indicate a difference which must be evaluated manually. All such verses will be checked against their respective print copies to ensure that they are correct.

Every verse of the Pharr (1964/1998) edition which differs from the Mynors (1969) edition, is then changed as necessary in every respect except for vowel length. If a change directly affects a word containing one or more long vowels, the length of all vowels in that word will be checked and altered as necessary to be consistent with the *Oxford Latin Dictionary* (2012) and the *Ausführliche Grammatik der Lateinischen Sprache* (Kühner, 1976/1989). An example of this process is given below, with the simplified Mynor's (1969) text on top, the simplified Pharr (1964/1998) text in the middle, and the resolved text on the bottom.

nec patris anchisae cinerem manisue reuelli
nec patris anchīsae cinerēs mānīsue reuellī
nec patris anchīsae cinerem mānīsue reuellī
*Aeneid*, 4.427

In this case, the difference represents a change in the morphological ending of the word. Since this ending does not contain a long vowel, the macron from Pharr (1964/1998) is omitted. A full list of revised verses is available in Appendix A.

### 3.2. Transcription of the Text

This section explains the theory and practice involved in transcribing the text. Following a brief introduction to the Latin alphabet, the phonetic characteristics of consonants and vowels are discussed in groups. Allophonic variation is included in the discussion for the sake of completeness. Claims are based on the work of Sidney Allen (1978/1989), Giovanna Marotta (1999), and Raphael Kühner (1976/1989).

The text is transcribed according to the educated register (Marotta, 1999, p. 286), since the *Aeneid* is most likely consistent therewith. If more than one pronunciation is likely, and the

text provides no evidence of preference, the transcription follows the orthography as closely as possible. Transcriptions are written in the alphabet of the International Phonetic Association (IPA, 1999). Detail in transcription remains as close as possible to the phonemic level, since alliteration relies on sound perception and is, in this sense, inherently phonemic. However, allophonic variation is included, when it affects the interpretation of a sound. Specifically, it is included whenever an allophone of one phoneme is identical to an allophone of another. It is also included for regular poetic variation, such as loss of final *m* in cases of elision. Hence, to be more precise, the transcription used in this study is a broad allophonic transcription.

### *3.2.1. The Latin Alphabet*

At the time of the *Aeneid*'s composition, the Latin alphabet consists of the following twenty three letters: *a*, *b*, *c*, *d*, *e*, *f*, *g*, *h*, *i*, *k*, *l*, *m*, *n*, *o*, *p*, *q*, *r*, *s*, *t*, *u*, *x*, *y*, and *z*. Seventeen of these represent consonants: *b*, *c*, *d*, *f*, *g*, *h*, *k*, *l*, *m*, *n*, *p*, *q*, *r*, *s*, *t*, *x*, and *z*. The remaining six are used for vowels and semivowels: *a*, *e*, *i*, *o*, *u*, and *y* (Kühner, 1976/1989, p. 1). The alphabet is generally phonemic in nature (Allen, 1978/1989, pp. 7-10; Marotta, 1999, p. 285), which means that each letter represents a sound capable of differentiating otherwise identical words. Evidence for the phonemic reconstruction of the Latin alphabet comes primarily from Roman documents and inscriptions, contemporary grammars, linguistic borrowings, and the historical development of its daughter languages (Kühner, 1976/1989, pp. 11-16; Marotta, 1999, pp. 285-286).

### *3.2.2. Consonants*

Latin consonants may be divided into groups according to their manner of pronunciation. The letters *b*, *c*, *d*, *g*, *k*, *p*, *q*, and *t* represent plosives. The letters *f*, *h*, *s*, and *z* stand for fricatives.

A combination of plosive and fricative is represented by *x*. Nasals are given by *m* and *n*. Lastly, the letter *l* symbolizes a lateral approximant and *r* represents a trill (Allen, 1978/1989, pp. 11-46; Kühner, 1976/1989, pp. 29-41).

In addition to the account given below, any consonant written double represents a geminate consonant (Allen, 1978/1989, pp. 11, 36). The use of a geminate consonant alters the meaning of a word and may be transcribed using the same symbol as that used for long vowels, e.g. [n:] (Marotta, 1999, p. 288). However, in this study, geminate consonants are transcribed as two instances of the same sound, e.g. [nn], so that they may be divided between syllables.

*3.2.2.1. Voiceless Plosives*

The letters *p*, *t*, *c*, *k*, and *q* represent voiceless unaspirated plosives, though they may be slightly aspirated in certain contexts (Allen, 1978/1989, pp. 12-13). The sound represented by *p* is a bilabial plosive (Allen, 1978/1989, p. 12). In contrast with its pronunciation in modern-day English, the Latin *t* represents a dental sound (Allen, 1978/1989, pp. 13-14). However, since the difference between dental and alveolar sounds is not phonemic in Latin, it is not transcribed in this study. The letters *p* and *t* are left unaltered in all circumstances, since they are identical to their IPA representations [p] and [t].

The letters *c* and *k* both represent a velar plosive (Allen, 1978/1989, p. 14). The use of two letters is due to the historical development of the alphabet. By the classical period, the latter is not used except in a few words (Kühner, 1976/1989, p. 6). The closure of this consonant may be slightly advanced before front vowels in anticipation of the following sound (Allen, 1978/1989, pp. 14-15), but this variation does not create confusion with other phonemes, and it is not represented in transcription. Both *c* and *k* are simply transcribed as [k]. However, when the

pronouns *hĭc* and *hŏc* are followed by a word initial vowel, *c* represents a geminate consonant (Allen, 1978/1989, pp. 75-77) and is transcribed as [kk].

The letter *q* only occurs in the combination *qu*, which represents a labialized, voiceless velar plosive (Allen, 1978/1989, pp. 16; Marotta, 1999, p. 293). Evidence that *qu* represents a single sound instead of two comes from its effect on syllable quantity, as well as from various phonetic processes and historical developments (Allen, 1978/1989, pp. 16-18; Marotta, 1999, pp. 293, 299). As with other velar plosives, the articulation of this consonant may be advanced before front vowels, but this need not be shown in transcription. Every instance of *qu* is simply transcribed as [$k^w$].

Aspirated voiceless plosives are not part of the phonological system of Latin. However, they are orthographically represented in Latin as *ph*, *th*, and *ch* for Greek borrowings (Allen, 1978/1989, p. 26). These sounds later develop into fricatives in Greek, but there is no evidence for this pronunciation during the classical period (Allen, 1978/1989, p. 27). The aspirated pronunciation of these sounds is likely used in the educated register (Allen, 1978/1989, p. 26) and the sequences *ph*, *th*, and *ch* are transcribed as [$p^h$], [$t^h$], and [$k^h$] in Greek borrowings. Care is taken to ensure that such transcription is not applied across morpheme boundaries in native words.

*3.2.2.2. Voiced Plosives*

The voiced plosives *b*, *d*, and *g* mirror their voiceless counterparts in place of articulation as a bilabial plosive, a dental plosive, and a velar plosive respectively (Allen, 1978/1989, pp. 20-23). In addition, the sequence *gu* represents a voiced labialized velar parallel to *qu*, when it both follows *n* and precedes a vowel (Allen, 1978/1989, p. 25; Marotta, 1999, p. 293). Except in the

cases mentioned below, the letters *b*, *d*, and *g* are transcribed as [b], [d], and [g], and the combination *gu* is transcribed as [g$^{w}$] following *n* and preceding a vowel.

Voiced plosives are sometimes subject to regressive assimilation. When they occur before a voiceless consonant in the same word, they are devoiced so as to be nearly identical in pronunciation to their voiceless counterparts (Allen, 1978/1989, pp. 21-22). For the sequences *cs* and *gs*, this change is regularly represented in writing by the letter *x* (Allen, 1978/1989, p. 45), which is always transcribed as [ks]. In other cases, however, the change may not be shown orthographically. The voiced plosives *b*, *d*, and *g* represent voiceless sounds, when they are written before another voiceless consonant (i.e. *p*, *t*, c, *k*, *q*, *f*, *s*, *x*) in the middle of a word (Allen, 1978/1989, pp. 21-22), and in this context they are transcribed as [p], [t], and [k].

The pronunciation of the velar plosive *g* also varies before the letter *n*. It may or may not be pronounced in the educated register, when it occurs at the beginning of a word in this context (Allen, 1978/1989, p. 24). However, variation in the spelling of the same word (e.g. *gnate* and *nate*) suggests that Vergil intends for *g* to be pronounced in the few cases in which it is written (e.g. Mynors, 1969, pp. 254, 260). In the middle of a word, the sequence *gn* regularly represents a combination of velar nasal and dental nasal (Allen, 1978/1989, pp. 23-25; Marotta, 1999, p. 294). This variation is included in the transcription, because the velar nasal is also an allophone of the nasal stops. Hence, the sequence *gn* is transcribed as [gn] at the beginning of a word, and as [ŋn] in the middle of a word.

*3.2.2.3. Fricatives*

Fricatives of the native phonological system are voiceless and roughly correlated with the plosives in place of articulation. The letter *f* is a labio-dental fricative, *s* is an alveolar fricative,

and *h* is glottal fricative (Allen, 1978/1989, pp. 34-36, 43, 45; Marotta, 1999, p. 293). Some disagree with a labio-dental articulation of *f* (Marotta, 1999, p. 293), but the weight of evidence seems to be in its favor (Allen, 1978/1989, p. 35). In addition, the letter *z* is used for zeta in Greek borrowings. It represents a voiced alveolar fricative at the time of the poem's composition. In the middle of a word, however, a single z always represents a geminate consonant (Allen, 1978/1989, pp. 45-46). The letters *f*, *s*, and *h* are transcribed as [f], [s], and [h]. The letter *z* is transcribed as [z] at the beginning of a word, and as [zz] in the middle of a word.

*3.2.2.4. Nasals*

The letters *m* and *n* represent a bilabial nasal and a dental nasal respectively (Allen, 1978/1989, pp. 27, 30), and are transcribed as [m] and [n] except in certain cases. They may assimilate place of articulation from a following oral or nasal stop. The letter *n* takes on a velar pronunciation before a velar plosive in the same morpheme (Allen, 1978/1989, pp. 27-28, 31). Both *m* and *n* undergo a similar process at the end of a prepositional prefix, and *n* may even assimilate place at the end of a word closely connected in speech (Allen, 1978/1989, pp. 28, 31). Assimilation of place of articulation from a following fricative is also likely in the case of the labio-dental *f* (Allen, 1978/1989, pp. 29, 35).

This variation is included in transcription because of the potential for phonemic ambiguity. However, it is restricted to cases in which it is likely to occur (Allen, 1978/1989, pp. 28, 31). At the end of the prepositional prefix *circum*-, the letter *m* is transcribed as a labio-dental nasal [ɱ] before *f*; as a dental nasal [n] before *t*, *d*, and *n*; and as a velar nasal [ŋ] before *c*, *k*, and *g*. At the end of preposition *in* and the prepositional prefixes *in*- and *con*-, the letter *n* is transcribed as a bilabial nasal [m] before *p*, *b*, and *m*; as a labio-dental nasal [ɱ] before *f*; and as

a velar nasal [ŋ] before *c*, *k*, *qu*, *g*, and *gu*. The letter *n* is also transcribed as a velar nasal [ŋ] before *c*, *k*, *qu*, *g*, and *gu* elsewhere in the middle of a word.

Nasals are also susceptible to deletion. When *n* is followed by *f* or *s* in the middle of a word, the nasal is dropped and the preceding vowel is lengthened in compensation (Allen, 1978/1989, p 28; Marotta, 1999, p. 289). In this case, the nasal may be artificially restored in the educated register (Allen, 1978/1989, pp. 29-30). Deletion of the nasal and compensatory lengthening of the preceding vowel also occurs for word final *m*, when it is not closely associated with a following stop consonant (Allen, 1978/1989, p. 30-31; Marotta, 1999, p. 289). There is some disagreement as to whether nasalization accompanies compensatory lengthening in these scenarios (Allen, 1978/1989, pp. 28, 30; Marotta, 1999, p. 289).

Deletion of word final *m* and compensatory lengthening of the preceding vowel is accounted for in the transcription in cases of elision (Allen, 1978/1989, pp. 30-31; Raven, 1965, p. 27). However, due to insufficient evidence, these vowels are neither altered in quality nor marked for nasalization. Other cases of deletion are not accounted for in the transcription, because they may be restored in the educated register and, as noted above, it seems that Vergil accounts for such variation in writing.

#### *3.2.2.5. Lateral Approximant and Apical Trill*

The letters *l* and *r* do not share a common manner of articulation, but they are often grouped together as liquids due to their effect on syllable quantity. A short vowel followed by a plosive and *l* or *r* may constitute a light or heavy syllable (Allen, 1978/1989, p. 32). The sound represented by *l* is better known as a lateral approximant, whereas the sound represented by *r* is referred to as a trill (Allen, 1978/1989, pp. 32-34).

The Latin lateral approximant has a dental or alveolar place of articulation (Allen, 1978/1989, p. 33). It may also be velarized, though the distribution of this pronunciation is a matter of debate (Allen, 1978/1989, pp 33-34; Marotta, 1999, pp. 293-294). Since the velarized pronunciation does not create phonemic ambiguity, the letter *l* is simply transcribed as [l].

The letter *r* represents an apical trill (Allen, 1978/1989, pp. 32-33). The same is true of the sequence *rh*, which represents a voiceless version of the Greek letter rho (Allen, 1978/1989, p. 33). The letter *r* may be fully assimilated before *l* in the educated register (Allen, 1978/1989, p. 33), though Vergil probably represents this pronunciation orthographically when it is intended. Hence, *r* and *rh* are always transcribed as [r].

### *3.2.3. Vowels*

The letters *a*, *e*, *i*, *o*, *u*, and *y* each represent a long and short syllabic vowel. The difference in duration usually correlates with a difference in quality. Long vowels are tense, and short vowels are lax (Allen, 1978/1989, pp. 47-49; Marotta, 1999, pp. 287-289). However, in the case of *a*, duration does not correlate with a difference in quality (Allen, 1978/1989, pp. 49, 52-53). The vowels are also consistent with their use in IPA transcription. Hence, the long syllabic vowels *ā*, *ē*, *ī*, *ō*, *ū*, and *ȳ* are transcribed as [ɑː], [eː], [iː], [oː], [uː], and [yː], and the short syllabic vowels *a*, *e*, *i*, *o*, *u*, and *y* are transcribed as [ɑ], [ɛ], [ɪ], [ɔ], [ʊ], and [ʏ] (Allen, 1978/1989, pp. 49-50). A difference in pronunciation is not likely associated with the letter *o*, when it is written instead of *u* (Allen, 1978/1989, pp. 18-19). The letter *y* is only used for upsilon in Greek borrowings, and the Greek pronunciation is likely in the educated register (Allen, 1978/1989, pp. 52-53, Allen, 1974, pp. 65, 76-83).

*3.2.3.1. Asyllabic Vowels*

The vowels *e*, *i*, and *u* may also serve an asyllabic function, though in this use they always follow the syllabic vowel (Allen, 1978/1989, pp. 37-38; Marotta, 1999, p. 290). Asyllabic *e* is regular in the combinations *ae* and *oe* in native words. The historical development of these diphthongs from *ai* and *oi* suggests that *e* is not merely an orthographic substitute for *i* but represents an actual difference in pronunciation (Allen, 1978/1989, pp. 60, 62). The asyllabic vowel *i* is only common in the words *cui*, *hui*, *huic*, and *deinde* (Allen, 1978/1989, pp. 42, 63; Kühner, 1976/1989, p. 48). It may also occur by contraction in *dehinc*, but this is not assumed in the transcription unless required for the metrical structure.

Asyllabic *u* is found in the sequences *au*, *eu*, and *ou* before a consonant or the end of a word (Allen, 1978/1989, pp. 60, 63; Marotta, 1999, p. 291). The diphthong *eu* is limited to *ceu*, *eheu*, *heu*, *heus*, *neu*, *seu*, and forms of *neuter*. The diphthong *ou* is only found in the contracted form *prout* (Allen, 1978/1989, p. 63). Asyllabic vowels are transcribed as their short counterparts without the non-syllabic diacritic [ ̯], because this does not create phonemic ambiguity. Diphthongs are identified solely by the syllabification of the text. Diphthongs in Greek borrowings are treated according to Greek principles unless stated otherwise (see Allen, 1974, pp. 75-83).

*3.2.3.2. Semivowels*

When the letters *i* and *u* occur before a vowel in the same syllable, they are best thought of as consonants in the syllable onset. There are several reasons for this treatment, including their function in metrical structure, their distribution before other vowels, and their historical development in daughter languages (Marotta, 1999, pp. 290-292). Consonantal *i* and *u* are

nonetheless included in this section, because they are allophones of vocalic phonemes. Support for this claim comes primarily from complementary distribution of the allophones (Marotta, 1999, pp. 291-292), though additional evidence is found in the poetic custom of altering their function for the sake of metrical structure and, of course, from the fact that they are written with the same letter (Allen, 1978/1989, pp. 37-38, 40-42). Since the Romans recognized the difference between the vocalic and consonantal uses of *i* and *u* (Allen, 1978/1989, pp. 37-38, 41), this difference is accounted for in the transcription of the text.

Consonantal *i* and *u* regularly precede a vowel at the beginning of a morpheme, regardless of whether or not the morpheme is compounded with a preceding element (Allen, 1978/1989, pp. 39-40; Kühner, 1976/1989, p. 42; Marotta, 1999, p. 291). This element is usually a prepositional prefix, though other morphemes are more commonly joined with *vis* 'want,' *vir* 'man,' and especially *ve* 'or' (Kühner, 1976/1989, pp. 1027-1035). Special attention must also be paid to prefixed forms of *iacere* 'to throw,' in which the stem is reduced from *iac-* to *iic-* and written with a single *i* instead of two. In such cases *i* usually stands for [jɪ] in poetry of the Augustan period, though it may be trimmed to [ɪ] if necessary (Allen, 1978/1989, pp. 39-40; Kühner, 1976/1989, pp. 121-122). Exceptions to this principle are made for forms of the verb *ire* 'to go,' words related to *uva* 'grape' and *uvidus* 'moist,' as well as Greek words which may be identified by their capitalization.

Consonantal *i* and *u* also occur between vowels in the middle of non-compound forms. The letter *i* represents a geminate in this context (Allen, 1978/1989, p. 38-40, 42; Marotta, 1999, pp. 288, 291, 302), and is more restricted in this use than the other letter. It is generally limited to the words *eius*, *huius*, *cuius*, forms of *maior* and *peior*, and some forms of *aio* (Allen, 1978/1989, pp. 62-63). In the *Aeneid*, it is also frequent in proper nouns related to *Graius* and *Troia*. The

latter are included in this list despite their Greek origin, because they are explicitly referred to as examples of this usage (Allen, 1978/1989, p. 39; Marotta, 1999). Consonantal *u* also occurs after *l* and *r* when preceded by a vowel in the same morpheme (Glare, 2012; Marotta, 1999, p. 291). Special care must be taken to distinguish the perfect active stem *volu-* of the verb *velle* 'to want' from the present and perfect active stem *volv-* of the verb *volvere* 'to roll'. Consonantal *i* and *u* are normally transcribed as [j] and [w] in the text. However, the geminate consonant *i* is transcribed as [jj], and the transcription [jɪ] is assumed in compounds of *iacere*, unless the metrical structure requires otherwise.

### 3.3. Syllabification of the Text

The process of marking syllable division is based on the proposal of Donca Steriade (1982) in her doctoral dissertation, *Greek Prosodies and the Nature of Syllabification*. The onset rhyme model which Steriade (1982, p. 72) uses is well suited for Latin as shown by metrical evidence for the existence of the rhyme (Marotta, 1999, pp. 294-295). The process Steriade (1982) recommends for assigning consonants to the syllable structure is commonly referred to as onset maximization. In this method, consonants are maximally assigned to syllable onsets in accordance with language specific rules before being moved to syllable codas (p. 78). Application of this process to Latin is supported by data from Steriade (1982), Marotta (1999), Kühner (1976/1989), and the editors of the *Oxford Latin Dictionary* (2012). An account of poetic exceptions to the normal principles is based on Allen (1978/1989) and Raven (1965) with additional support from Kühner (1976/1989). Practical application of the theory is discussed thereafter.

*3.3.1. Onset Maximization in Latin*

Onset maximization provides an ideal framework for Latin syllabification. Evidence for this claim may be drawn from the metrical structure in two respects. First, syllable quantity is determined solely by the vowel and any following consonants, supporting the existence of the rhyme as a distinct unit (Marotta, 1999, p. 295; Steriade, 1982, p. 73). This is consistent with the onset rhyme model used in Steriade's (1982) approach (p. 72). Second, the observed method of syllabification (Marotta, 1999, pp. 298-305) is consistent with the primary restraint on onset maximization, which requires that the division normally be made at the point of lowest sonority in accordance with a language specific hierarchy and constraints (Steriade, 1982, pp. 91-92).

The sonority hierarchy and constraints relevant to the formation of Latin onsets are mentioned in Steriade's (1982) study (pp. 91-100) and accounted for in greater detail in the work of Marotta (1999). The Latin onset may contain from zero to two consonants (Marotta, 1999, pp. 298-299, 304). Every consonant may occur in the onset by itself, but complex onsets are generally limited to the following combinations of obstruent and sonorant: *pl*, *pr*, *bl*, *br*, *tr*, *dr*, *cl*, *cr*, *gl*, *gr*, *fl* and *fr* (Marotta, 1999, pp. 298-299). The fricative *s* may be added to the onset before a voiceless plosive in the combinations *sp*, *spl*, *spr*, *st*, *str*, *sc*, *scl*, and *scr*, but only at the beginning of a semantically transparent morpheme (Marotta, 1999, pp. 300-301). Such restriction is also applied more generally (Marotta, 1999, pp. 286, 291-292, 298; Raven, 1965, p. 25; Steriade, 1982, p. 86). Consider the following verse:

nec prius amissam respexi animumue reflexi
*Aeneid*, 2.741

The word *respexi* 'look back' is easily identifiable as a compound of the prefix *re* 'back' and the verb *specere* 'look.' Hence, the letter *s* remains in the onset of the following syllable. In addition, the letter *f* occurs in an onset in the word *reflexi* 'bend back,' since the division between

*re* ‘back’ and *flectere* ‘to bend’ is also easily discernible. The same, however, is not true in the following verse.

apparent rari nantes in gurgite uasto,
*Aeneid*, 1.118

There is no semantically transparent division between *s* and *t* in the word *uasto* ‘immense,’ so the former remains in the coda of the preceding syllable. A similar fate awaits *t* at the end of *apparent* ‘become visible,’ which does not join *r* in the onset of the following word, because the two letters clearly belong to separate morphemes.

The discussion of syllable division in Kühner (1976/1989) is generally consistent with these observations. Individual consonants are always assigned to the syllable onset, whereas clusters of two or more consonants are only assigned to the syllable onset, if they may occur at the beginning of a word (Kühner, 1976/1989, pp. 249-251). Kühner (1976/1989) also claims that clusters which begin Greek words, or which are simply analogous thereto, may qualify as onsets for Latin words (pp. 249-251), but this is not likely. Restriction of syllable onsets by semantically transparent morpheme boundaries is also supported by most ancient accounts (Kühner, 1976/1989, pp. 250-251).

### *3.3.2. Poetic Variation*

Syllable boundaries are artificially manipulated in poetry under certain circumstances. Considerable study has been devoted to these practices (e.g. Allen, 1978/1989; Kühner, 1976/1989; Raven, 1965) and they may be grouped according to their effect on syllable boundaries as processes of syllable merger and syllable division. The use of metrical structure as evidence for these practices rests on the assumption that syllable quantity is not merely a matter of orthographic structure, as is often taught for practical purposes (e.g. Kühner, 1976/1989, pp.

223-229), but a matter of the syllable structure itself. This is explicitly supported by Marotta (1999), who claims that syllable quantity is a measure of light and heavy rhymes (p. 305). Allen (1978/1989) also states several times that vowel length and coda consonants are relevant to syllable quantity (pp. 65, 89, 91).

*3.3.2.1. Syllable Merger*

Syllable merger is commonly used to resolve hiatus, a condition in which a word final vowel occurs immediately adjacent to a word initial vowel (Allen, 1978/1989, p. 78; Kühner, 1976/1989, pp. 137-155; Raven, 1965, p. 27-28). Hiatus includes diphthongs, word final vowels followed by *m*, and word initial vowels preceded by *h* (Allen, 1978/1989, pp. 43, 78; Marotta, 1999, p. 293; Raven, 1965, p. 28). In the latter two cases, the consonant is probably reduced or deleted entirely. Syllable merger is generally avoided in poetry by authors combining or deleting vowels, so that only a single nucleus remains (Allen, 1978/1989, pp. 78-82; Kühner, 1976/1989, pp. 138-156; Raven, 1965, pp. 23, 27-28). However, monosyllabic interjections are not regularly reduced (Kühner, 1976/1989, pp. 139-140). The following verse is often cited as an example of this process, because there are three instances of hiatus between the first four words.

monstrum horrendum, informe, ingens, cui lumen ademptum.
*Aeneid*, 3.658

Long vowels and diphthong are usually contracted with a following segment into a single long vowel or diphthong (Allen, 1978/1989, pp. 79-82; Raven, 1965, p. 23). However, long *i* and *u* undergo synizesis instead, a process in which they are joined to the following syllable as a semivowel in its onset (Allen, 1978/1989, pp. 79-81). Synizesis is also possible with a more close pronunciation of short *e* (Allen, 1978/1989, p. 51; Raven, 1965, p. 24), and the reverse may even occur when the meter requires an extra syllable in a process known as vocalic dieresis

(Raven, 1965, p. 24). The phonetic qualities of contractions are difficult to establish (Allen, 1978/1989, p. 81; Raven, 1965, p. 28), though Kühner (1976/1989) gives some suggestions (pp. 141-146).

Deletion is usually limited to short vowels in word final position, though long vowels and diphthongs may be deleted when the meter requires or when the risk of confusion is insignificant (Allen, 1978/1989, pp. 79-82; Raven, 1965, p. 23). Deletion is also possible outside of hiatus in the case of short *e* at the end of certain disyllabic words (Raven, 1965, p. 24). However, evidence suggests that Vergil prefers contraction to deletion in all circumstances, and that he considers these contractions to be long (Allen, 1978/1989, pp. 81-82; Raven, 1965, p 27).

*3.3.2.2. Syllable Division*

A few exceptions are also made to the position of syllable boundaries. Evidence for these practices comes exclusively from syllables with short vowels, since their quantity is dependent on the presence or absence of consonants in the coda (Allen, 1978/1989, pp. 65, 89). However, it is unlikely that such practices are restricted to these contexts, because they are consistently applied following short vowels (Raven, 1965, p. 25).

Syllable onsets are sometimes restricted beyond normal practice. Open syllables at the end of a word are always heavy, if the following word begins with a consonant cluster containing *s* and a voiceless plosive (Allen, 1978/1989, p. 89; Marotta, 1999, p. 301). The sibilant is reckoned to the preceding coda, even though it occurs in word initial position. This cannot be attributed to a tendency to close open syllables, first, because a similar process is possible but almost never observed for clusters of *muta cum liquida* (Raven, 1965, p. 25) and, second, because it would be contrary to the use of dactylic feet (Raven, 1965, pp. 90-91). It is more likely

that the morpheme boundary is neglected, in order to achieve a division more consistent with the sonority hierarchy of the language. Hence, this restriction is probably applied, whenever the preceding word ends in a vowel or a sonorant consonant (Steriade, 1982, p. 98).

Restriction of a plosive consonant from the onset is not common, but it occasionally affects clusters of *muta cum liquida* in the middle of a morpheme, when the preceding syllable must be reckoned heavy in the metrical structure. These clusters include *pl*, *pr*, *tr*, *cl*, *cr*, *phl*, *phr*, *thr*, *chl*, *chr*, *bl*, *br*, *dr*, *kl*, *kr*, *gl*, and *gr* (Allen, 1978/1989, pp. 89-90; Raven, 1965, p. 25). There is some disagreement as to whether the clusters *fl* and *fr* are also included (Allen, 1978/1989, p. 90; Marotta, 1999, p. 298). The following verse is often cited as an example of this practice.

natum ante ora patris, patrem qui obtruncat ad aras.
*Aeneid*, 2.663

The forms *patris* and *patrem* both come from the word *pater* 'father.' The former is syllabified according to expected practice, with *tr* in the onset of the following syllable. However, the cluster is divided in the case of the latter, so that *t* makes the preceding syllable heavy.

The onset of a transparent morpheme beginning with a vowel is regularly extended to include the final consonant of a preceding morpheme (Allen, 1978/1989, pp. 43-45, 78; Kühner, 1976/1989, p. 43; Raven, 1965, p. 24). For example, in the above verse the phrase *ad aras* is syllabified as [ɑ.d ɑː.rɑːs]. This is also true in the case of words beginning with *h*, though the pronunciation of *h* may be suppressed in these cases, since the sound does not occur in any native consonant clusters and since it is already susceptible to deletion (Allen, 1978/1989, pp. 43-45; Kühner, 1976/1989, pp. 43-44). Extension of a word initial onset could theoretically be applied to create a combination of *muta cum liquida* from a morpheme final plosive and a morpheme initial liquid, but this almost never occurs (Allen , 1978/1989, pp. 89-90; Raven,

1965, p. 25). In fact, the onset is never extended, when it contains at least one consonant other than *h* (Allen, 1978/1989, p. 43; Raven, 1965, p. 24). The consistent difference in treatment suggests a preference to avoid empty or weak onsets, and supports application of this process in lieu of direct evidence.

### *3.3.3. Syllabification Process*

The transcription is first syllabified according to expected practice. This process begins by marking a syllable boundary [.] before every vowel and moving it in front of [h] if present. Other consonants are then added to syllable onsets one at a time according to the principles outlined above. Diphthongs are then combined by searching for the contexts in which they are expected. Instances of hiatus are resolved after syllabification of the text. According to Allen (1978/1989), Vergil probably resolves hiatus by means of contraction except in the case of word final [i:] and [u:], which he resolves by means of synizesis (pp. 81-82). However, inspection of the text suggests that the metrical structure is more accurately given by the second element alone, and that the first element is more likely elided. In light of this observation, the period and nucleus preceding a qualifying word are simply deleted.

### *3.3.4. Evaluation and Correction*

The evaluation process relies on a symbolic representation of the moraic structure, because it does not vary from verse to verse. Assuming a two-way division in syllable quantity, light syllables have one mora and heavy syllables have two morae (Kühner, 1976/1989, p. 223). The quantity of syllables is determined according to the principles outlined above. The number 1 represents a mora followed by a syllable boundary, whereas the number 0 represents a mora not

followed by a syllable boundary. Hence, light syllables are represented by 1, and heavy syllables by 01. Given the nature of dactylic hexameter, every verse must match the pattern: 0, 1, 0/1, 1, 0, 1, 0/1, 1, 0, 1, 0/1, 1, 0, 1, 0/1, 1, 0, 1, 0/1, 1, 0, 1, 0/1, 1, 0, 1, 0/1. The variation in certain positions accounts for the possibility of both dactylic and spondaic feet. Verses which do not match this pattern are manually adjusted according to normal practices. A full list of adjusted verses is available in Appendix B, and a sample of the final transcribed and syllabified text is available in Appendix C.

### 3.4. Chi-Square Test for Goodness-of-Fit

The distribution of each syllable initial sound is analyzed using a chi-square test for goodness-of-fit. This test determines how well the distribution of a discrete, random variable aligns with an expected distribution and, hence, how well it may be explained using that model (Everitt, 2006, p. 81). In this case, expected values are determined using a Poisson distribution. This distribution gives the probability that a discrete, random variable occurs with a given frequency in a fixed period of space or time, if the average frequency in that period is known, and if the event is independent (Everitt, 2006, p. 330). The Poisson distribution is similar to the binomial distribution used by Greenberg (1980, p. 586), but it offers better accuracy at high frequencies.

#### *3.4.1. Assumptions*

Of course, the value of the test depends on meeting its assumptions. A chi-square test for goodness-of-fit is designed for a randomly drawn sample of adequate size with independent, categorical variables (Everitt, 2006, p. 81), and the Poisson distribution accounts for the occurrence of discrete variables in a fixed spatial or temporal context (Everitt, 2006, p. 330). The

sample size of the analysis is large enough at over sixty thousand sounds. However, it has not been drawn randomly, so the results of the study must be restricted to the context of the sample. The sounds are also discrete, random variables. The verse provides a natural context for the Poisson distribution, and it is consistent in that it allows for up to seventeen syllable initial sounds. However, unfinished verses do not qualify in this sense and must be omitted from the analysis.

The main difficulty lies in the need for independence. As a whole, different aspects of language are not independent. However, sounds may be considered sufficiently independent in this study for a number of reasons. Most important is the concept of the arbitrariness of the sign attributed to Ferdinand de Saussure (1922), in which the relationship between a word (i.e. the signifier) and its concept (i.e. the signified) is defined as arbitrary (pp. 97-103). Objections to this principle have been raised in certain cases, but it is consistent with the majority of evidence. Of course, this does not mean that sounds are arbitrary in every sense of the term. The realm of possibility is limited by other linguistic relationships. However, their distribution in the entire language is sufficiently arbitrary, that they may be considered independent in that context. This is especially true given the limited size of the phonological inventory (Allen, 1978/1989, pp. 9, 47-50; IPA, 1999, p. 27). The sample size of this study allows for the sounds to be treated as independent variables.

### *3.4.2. Procedure*

The analysis proceeds as follows. Verses which cannot be reconciled into six feet are first deleted from the corpus. Consonant clusters are simplified to the initial sound, leaving the following possibilities: [p], [t], [k], [$k^w$], [$p^h$], [$t^h$], [$k^h$], [b], [d], [g], [$g^w$], [f], [s], [h], [z], [m], [n],

[l], and [r]. Aspirated plosives are kept separate from unaspirated plosives, because they are not part of the native phonological system. Syllable initial vowels also are simplified, so that long vowels and diphthongs are reduced to their initial sound. The following possibilities remain: [i], [ɪ], [j], [u], [ʊ], [w], [y], [ʏ], [e], [ɛ], [o], [ɔ], and [ɑ]. All other symbols are deleted except for a single tab separating each sound.

An Excel spreadsheet is used to facilitate the analysis and relieve any need to round values until the end. The observed number of verses containing a given sound frequency is determined from the frequency of every sound in every verse. For example, it may be shown that there are 100 verses in which syllable initial [r] occurs three times. Expected values are calculated using the formula for a Poisson distribution. The mean frequency λ of a sound per verse is calculated by taking its total frequency in the sample and dividing it by the number of verses in the sample. The probability *p* of having a given frequency *k* of sounds per verse is determined by $p(k) = \frac{\lambda^{k} \cdot e^{-\lambda}}{k!}$. The expected number of verses in the sample with frequency *k* is then derived by multiplication of *p* and the total number of verses in the sample. Expected frequencies are grouped together if necessary to ensure that no cell count is less than five.

After the cell counts have been adjusted, a chi-square statistic is calculated for the distribution of each sound via the formula $\chi^2 = \sum_{i=0}^{n} \frac{(O_i - E_i)^2}{E_i}$. The resulting statistic is then evaluated for significance via the Excel formula =*CHIDIST*, because this provides a more precise p-value than a chi-square statistic chart. The threshold of significance is set at $p < 0.050$. If the distribution of a sound differs significantly from a Poisson distribution, observed and expected values are investigated further to offer an explanation for the difference.

# CHAPTER 4. RESULTS

This section covers the results of the method described in the previous chapter. The chi-square test is reviewed step by step, and attention is drawn to relevant features of the data along the way. The statistical relevance of the results and possible explanations therefore are discussed at the end. However, implications for the research question and the field of study are explored in chapter five.

## 4.1. Chi-Square Test

Preliminary to the chi-square test, all exceptionally short verses are deleted from the sample. These include only those which cannot be reconciled into six feet under any interpretation of the text. There are 34 such verses in the 4,753 of the sample, leaving 4,719 verses for evaluation. Those which have been removed are shown in Table 4.1 below.

Table 4.1. Verses Removed from the Sample

| | | | |
|---|---|---|---|
| 1.534 | hic cursus fuit | 3.527 | stans celsa in puppi |
| 1.560 | dardanidae | 3.640 | rumpite |
| 1.636 | munera laetitiamque dii | 3.661 | solamenque mali |
| 2.066 | disce omnis | 4.044 | germanique minas |
| 2.233 | numina conclamant | 4.361 | italiam non sponte sequor |
| 2.346 | audierit | 4.400 | infabricata fugae studio |
| 2.468 | telorum interea cessat genus | 4.503 | ergo iussa parat |
| 2.614 | ferro accincta uocat | 4.516 | et matri praereptus amor |
| 2.623 | numina magna deum | 5.294 | nisus et euryalus primi |
| 2.640 | uos agitate fugam | 5.322 | tertius euryalus |
| 2.720 | abluero | 5.574 | fertur equis |
| 2.767 | stant circum | 5.595 | carpathium libycumque secant |
| 2.787 | dardanis et diuae ueneris nurus | 5.653 | haec effata |
| 3.218 | ora fame | 5.792 | in regnis hoc ausa tuis |
| 3.316 | ne dubita nam uera uides | 5.815 | unum pro multis dabitur caput |
| 3.340 | quem tibi iam troia | 6.094 | externique iterum thalami |
| 3.470 | addit equos additque duces | 6.835 | proice tela manu sanguis meus |

The removal of these verses is justified not only for the sake of consistency in analysis, but also because they are unintentionally short. Evidence from Vergil's other works and Roman poetry in general suggests that they do not reflect stylistic variation, but rather a lack of completion (Raven, 1965, p. 93).

The frequency of syllable initial sounds in the remaining verses is shown in Table 4.2 and Table 4.3 below. These tables are organized according to frequency per verse, with the total sample frequency and average frequency per verse listed at the right. Values for [y] and [ʏ] are not included, because they never occur in syllable initial position.

Table 4.2. Sound Frequency: Consonants

| | Sound Frequency per Verse | | | | | | | | Sample Total | Verse Mean |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | |
| [p] | 1,768 | 1,512 | 630 | 104 | 20 | - | - | - | 4,034 | 0.855 |
| [t] | 1,035 | 2,792 | 3,390 | 2,192 | 900 | 288 | 21 | 8 | 10,626 | 2.252 |
| [k] | 1,862 | 1,972 | 996 | 288 | 70 | 12 | - | - | 5,200 | 1.102 |
| [kʷ] | 1,847 | 1,082 | 267 | 36 | 15 | - | - | - | 3,247 | 0.688 |
| [pʰ] | 112 | 8 | - | - | - | - | - | - | 120 | 0.025 |
| [tʰ] | 151 | 10 | - | - | - | - | - | - | 161 | 0.034 |
| [kʰ] | 177 | 8 | - | - | - | - | - | - | 185 | 0.039 |
| [b] | 1,417 | 640 | 114 | 32 | - | - | - | - | 2,203 | 0.467 |
| [d] | 1,744 | 1,524 | 600 | 144 | 30 | - | - | - | 4,042 | 0.857 |
| [g] | 1,167 | 468 | 60 | 4 | - | - | - | - | 1,699 | 0.360 |
| [gʷ] | 73 | - | - | - | - | - | - | - | 73 | 0.015 |
| [f] | 1,283 | 428 | 60 | - | - | - | - | - | 1,771 | 0.375 |
| [s] | 1,560 | 2,818 | 2,025 | 936 | 190 | 24 | - | - | 7,553 | 1.601 |
| [h] | 410 | 26 | - | - | - | - | - | - | 436 | 0.092 |
| [z] | 12 | - | - | - | - | - | - | - | 12 | 0.003 |
| [m] | 1,814 | 1,622 | 675 | 180 | 20 | - | - | - | 4,311 | 0.914 |
| [n] | 1,804 | 1,988 | 1,008 | 316 | 80 | 6 | - | - | 5,202 | 1.102 |
| [l] | 1,884 | 1,372 | 441 | 60 | - | - | - | - | 3,757 | 0.796 |
| [r] | 1,784 | 2,472 | 1,644 | 408 | 140 | 12 | - | - | 6,460 | 1.369 |

Table 4.3. Sound Frequency: Vowels

| | Sound Frequency per Verse | | | | | | | | Sample Total | Verse Mean |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | |
| [i] | 374 | 30 | - | - | - | - | - | - | 404 | 0.086 |
| [ɪ] | 569 | 56 | 3 | - | - | - | - | - | 628 | 0.133 |
| [j] | 589 | 94 | 6 | 4 | - | - | - | - | 693 | 0.147 |
| [u] | 59 | 2 | - | - | - | - | - | - | 61 | 0.013 |
| [ʊ] | 461 | 32 | 3 | - | - | - | - | - | 496 | 0.105 |
| [w] | 1,588 | 870 | 237 | 40 | - | - | - | - | 2,735 | 0.580 |
| [e] | 273 | 8 | - | - | - | - | - | - | 281 | 0.060 |
| [ɛ] | 571 | 68 | 3 | - | - | - | - | - | 642 | 0.136 |
| [o] | 417 | 36 | - | - | - | - | - | - | 453 | 0.096 |
| [ɔ] | 216 | 14 | - | - | - | - | - | - | 230 | 0.049 |
| [ɑ] | 1,350 | 504 | 78 | 4 | - | - | - | - | 1,936 | 0.410 |

The data is framed in terms of frequency per verse, because the Poisson distribution can only establish frequency probability in a fixed context. In this case, the probability reflects the likelihood of having a sound occur with a given frequency in a single verse. This probability is then used to predict the expected number of verses with a given sound frequency. The data shown in the tables above serve as a stepping-stone in the derivation of the observed number of verses with the same frequency. It also shows the derivation of the mean frequency $\lambda$ of the sound per verse, which is required in calculating expected values.

First, observed numbers of verses are calculated by dividing the overall frequency of a sound by its frequency relative to the verse. For example, the sound [p] occurs twenty times with a frequency of five [p] per verse, so there are four verses with a frequency of five [p] each. Table 4.4 and Table 4.5 are derived in this manner from Table 4.2 and Table 4.3 respectively. They list the frequency of verses with a given sound frequency. Note that a column has been added for verses in which the sound does not occur at all.

Table 4.4. Verse Frequency: Consonants

| | Sound Frequency per Verse | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| [p] | 1,955 | 1,768 | 756 | 210 | 26 | 4 | - | - | - |
| [t] | 378 | 1,035 | 1,396 | 1,130 | 548 | 180 | 48 | 3 | 1 |
| [k] | 1,451 | 1,862 | 986 | 332 | 72 | 14 | 2 | - | - |
| [$k^w$] | 2,230 | 1,847 | 541 | 89 | 9 | 3 | - | - | - |
| [$p^h$] | 4,603 | 112 | 4 | - | - | - | - | - | - |
| [$t^h$] | 4,563 | 151 | 5 | - | - | - | - | - | - |
| [$k^h$] | 4,538 | 177 | 4 | - | - | - | - | - | - |
| [b] | 2,936 | 1,417 | 320 | 38 | 8 | - | - | - | - |
| [d] | 1,971 | 1,744 | 762 | 200 | 36 | 6 | - | - | - |
| [g] | 3,297 | 1,167 | 234 | 20 | 1 | - | - | - | - |
| [$g^w$] | 4,646 | 73 | - | - | - | - | - | - | - |
| [f] | 3,202 | 1,283 | 214 | 20 | - | - | - | - | - |
| [s] | 799 | 1,560 | 1,409 | 675 | 234 | 38 | 4 | - | - |
| [h] | 4,296 | 410 | 13 | - | - | - | - | - | - |
| [z] | 4,707 | 12 | - | - | - | - | - | - | - |
| [m] | 1,820 | 1,814 | 811 | 225 | 45 | 4 | - | - | - |
| [n] | 1,489 | 1,804 | 994 | 336 | 79 | 16 | 1 | - | - |
| [l] | 1,987 | 1,884 | 686 | 147 | 15 | - | - | - | - |
| [r] | 1,019 | 1,784 | 1,236 | 548 | 102 | 28 | 2 | - | - |

Table 4.5. Verse Frequency: Vowels

| | Sound Frequency per Verse | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| [i] | 4,330 | 374 | 15 | - | - | - | - | - | - |
| [ɪ] | 4,121 | 569 | 28 | 1 | - | - | - | - | - |
| [j] | 4,080 | 589 | 47 | 2 | 1 | - | - | - | - |
| [u] | 4,659 | 59 | 1 | - | - | - | - | - | - |
| [ʊ] | 4,241 | 461 | 16 | 1 | - | - | - | - | - |
| [w] | 2,607 | 1,588 | 435 | 79 | 10 | - | - | - | - |
| [e] | 4,442 | 273 | 4 | - | - | - | - | - | - |
| [ɛ] | 4,113 | 571 | 34 | 1 | - | - | - | - | - |
| [o] | 4,284 | 417 | 18 | - | - | - | - | - | - |
| [ɔ] | 4,496 | 216 | 7 | - | - | - | - | - | - |
| [ɑ] | 3,090 | 1,350 | 252 | 26 | 1 | - | - | - | - |

Expected values are calculated next. The mean frequency per verse $\lambda$ has already been determined for each sound in Table 4.2 and Table 4.3 above. The only other value required by the equation is $k$, which represents the frequency of interest. For example, if a sound occurs with a known mean frequency of $\lambda$ per verse, the equation $p(k) = \frac{\lambda^{k} \cdot e^{-\lambda}}{k!}$ gives the probability $p$ that the sound would occur once per verse, twice per verse, and so on, depending on the value of $k$. There are a maximum of seventeen syllables per verse, so probabilities are calculated for all values of $k$ from zero to seventeen. It would be pointless to show all probabilities here, since many are too small to be adequately represented. Hence, Table 4.6. and Table 4.7. are restricted in the same manner as the other tables to a sound frequency of eight.

Table 4.6. Probability of Verse Frequency: Consonants

| | Sound Frequency per Verse | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| [p] | 0.425 | 0.364 | 0.155 | 0.044 | 0.009 | 0.002 | 0.000 | 0.000 | 0.000 |
| [t] | 0.105 | 0.237 | 0.267 | 0.200 | 0.113 | 0.051 | 0.019 | 0.006 | 0.002 |
| [k] | 0.332 | 0.366 | 0.202 | 0.074 | 0.020 | 0.004 | 0.001 | 0.000 | 0.000 |
| [$k^{w}$] | 0.503 | 0.346 | 0.119 | 0.027 | 0.005 | 0.001 | 0.000 | 0.000 | 0.000 |
| [$p^{h}$] | 0.975 | 0.025 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| [$t^{h}$] | 0.966 | 0.033 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| [$k^{h}$] | 0.962 | 0.038 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| [b] | 0.627 | 0.293 | 0.068 | 0.011 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 |
| [d] | 0.425 | 0.364 | 0.156 | 0.044 | 0.010 | 0.002 | 0.000 | 0.000 | 0.000 |
| [g] | 0.698 | 0.251 | 0.045 | 0.005 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| [$g^{w}$] | 0.985 | 0.015 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| [f] | 0.687 | 0.258 | 0.048 | 0.006 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 |
| [s] | 0.202 | 0.323 | 0.258 | 0.138 | 0.055 | 0.018 | 0.005 | 0.001 | 0.000 |
| [h] | 0.912 | 0.084 | 0.004 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| [z] | 0.997 | 0.003 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| [m] | 0.401 | 0.366 | 0.167 | 0.051 | 0.012 | 0.002 | 0.000 | 0.000 | 0.000 |
| [n] | 0.332 | 0.366 | 0.202 | 0.074 | 0.020 | 0.005 | 0.001 | 0.000 | 0.000 |
| [l] | 0.451 | 0.359 | 0.143 | 0.038 | 0.008 | 0.001 | 0.000 | 0.000 | 0.000 |
| [r] | 0.254 | 0.348 | 0.238 | 0.109 | 0.037 | 0.010 | 0.002 | 0.000 | 0.000 |

Table 4.7. Probability of Verse Frequency: Vowels

| | Sound Frequency per Verse | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| [i] | 0.918 | 0.079 | 0.003 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| [ɪ] | 0.875 | 0.116 | 0.008 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| [j] | 0.863 | 0.127 | 0.009 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| [u] | 0.987 | 0.013 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| [ʊ] | 0.900 | 0.095 | 0.005 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| [w] | 0.560 | 0.325 | 0.094 | 0.018 | 0.003 | 0.000 | 0.000 | 0.000 | 0.000 |
| [e] | 0.942 | 0.056 | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| [ɛ] | 0.873 | 0.119 | 0.008 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| [o] | 0.908 | 0.087 | 0.004 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| [ɔ] | 0.952 | 0.046 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| [ɑ] | 0.663 | 0.272 | 0.056 | 0.008 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 |

Probabilities must then be converted into a format compatible with observed data. The probabilities are represented as ratios, whereas the observed data are given in terms of verse frequency. In order to derive expected verse frequencies from the probabilities, each probability is multiplied by the total verse frequency in the sample (i.e. 4,719). This gives the same ratio, but relative to the sample size. However, the chi-square test also requires that no expected cell count be less than five. Due to the nature of the Poisson distribution, there is always a point at which the expected value drops below this threshold. This problem may be resolved by combining cells as necessary. Hence, the right most cell of every row in Table 4.8 and Table 4.7 represents an expected value for frequencies equal to or greater than that shown in the corresponding column. Naturally, the same mergers are applied to observed cell counts, so that the data is comparable.

Table 4.8. Expected Verse Frequency after Adjustment: Consonants

| | Sound Frequency per Verse | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| [p] | 2,007 | 1,716 | 733 | 209 | 45 | 9 | - | - | - |
| [t] | 497 | 1,118 | 1,259 | 945 | 532 | 240 | 90 | 29 | 11 |
| [k] | 1,568 | 1,728 | 952 | 350 | 96 | 26 | - | - | - |
| [kʷ] | 2,372 | 1,632 | 561 | 129 | 26 | - | - | - | - |
| [pʰ] | 4,601 | 118 | - | - | - | - | - | - | - |
| [tʰ] | 4,561 | 158 | - | - | - | - | - | - | - |
| [kʰ] | 4,538 | 181 | - | - | - | - | - | - | - |
| [b] | 2,959 | 1,381 | 322 | 50 | 6 | - | - | - | - |
| [d] | 2,004 | 1,716 | 735 | 210 | 45 | 9 | - | - | - |
| [g] | 3,292 | 1,185 | 213 | 28 | - | - | - | - | - |
| [gʷ] | 4,647 | 72 | - | - | - | - | - | - | - |
| [f] | 3,242 | 1,217 | 228 | 31 | - | - | - | - | - |
| [s] | 952 | 1,524 | 1,220 | 651 | 260 | 83 | 22 | 6 | - |
| [h] | 4,303 | 398 | 19 | - | - | - | - | - | - |
| [z] | 4,707 | 12 | - | - | - | - | - | - | - |
| [m] | 1,893 | 1,729 | 790 | 241 | 55 | 12 | - | - | - |
| [n] | 1,567 | 1,728 | 952 | 350 | 96 | 26 | - | - | - |
| [l] | 2,129 | 1,695 | 675 | 179 | 36 | 7 | - | - | - |
| [r] | 1,200 | 1,643 | 1,125 | 513 | 176 | 48 | 14 | - | - |

Table 4.9. Expected Verse Frequency after Adjustment: Vowels

| | Sound Frequency per Verse | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| [i] | 4,332 | 371 | 16 | - | - | - | - | - | - |
| [ɪ] | 4,131 | 550 | 38 | - | - | - | - | - | - |
| [j] | 4,074 | 598 | 46 | - | - | - | - | - | - |
| [u] | 4,658 | 61 | - | - | - | - | - | - | - |
| [ʊ] | 4,248 | 447 | 24 | - | - | - | - | - | - |
| [w] | 2,643 | 1,532 | 444 | 86 | 14 | - | - | - | - |
| [e] | 4,446 | 265 | 8 | - | - | - | - | - | - |
| [ɛ] | 4,119 | 560 | 40 | - | - | - | - | - | - |
| [o] | 4,287 | 412 | 20 | - | - | - | - | - | - |
| [ɔ] | 4,495 | 219 | 5 | - | - | - | - | - | - |
| [ɑ] | 3,131 | 1,284 | 263 | 40 | - | - | - | - | - |

Now that observed and expected values have been calculated, the chi-square test itself may be performed. The formula $\sum_{i=0}^{n} \frac{(O_i - E_i)^2}{E_i}$ is used to derive a chi-square statistic, which represents the total difference between observed and expected values (Everitt, 2006, p. 81). The difference between a given observed value and its expected value is first squared and then divided by the expected value. This process is repeated for every pair of observed and expected values, and the results are summed to give the chi-square statistic.

Interpretation of this statistic depends on the number of observed and expected pairs included in the sum. This is accounted for by the degrees of freedom in the analysis. The degrees of freedom refer to the number of observed and expected pairs, in which the value may vary without affecting the total (Everitt, 2006, p. 127-128). Since all of the above analyses consist of a single row only, the degrees of freedom for each analysis are equal to the number of columns minus one.

Once the chi-square statistic and the degrees of freedom are known, the probability that the distribution fits the model is calculated in terms of a p-value (Everitt, 2006, p. 346). Chi-square probability charts are sometimes used for this purpose, but a more precise p-value can be obtained through the Excel formula =*CHIDIST*. Table 4.10 and Table 4.11 show the chi-square statistic, degrees of freedom, and p-value for the distribution of each sound. Individual addends of the chi-square statistic are also shown. Distributions which pass the threshold of significance at $p < 0.050$ are lightly shaded.

Table 4.10. Chi-Square Test Results: Consonants

| | Sound Frequency per Verse | | | | | | | | | $\chi^2$ | df | p |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | |
| [p] | 1.4 | 1.6 | 0.7 | 0.0 | 7.8 | 2.7 | - | - | - | 14.1 | 5 | 0.015 |
| [t] | 28.3 | 6.2 | 15.0 | 36.3 | 0.5 | 14.8 | 19.5 | 23.2 | 8.8 | 152.6 | 8 | 0.000 |
| [k] | 8.7 | 10.5 | 1.2 | 0.9 | 6.1 | 3.7 | - | - | - | 31.2 | 5 | 0.000 |
| [$k^w$] | 8.4 | 28.4 | 0.7 | 12.3 | 7.2 | - | - | - | - | 57.1 | 4 | 0.000 |
| [$p^h$] | 0.0 | 0.1 | - | - | - | - | - | - | - | 0.1 | 1 | 0.817 |
| [$t^h$] | 0.0 | 0.0 | - | - | - | - | - | - | - | 0.0 | 1 | 0.853 |
| [$k^h$] | 0.0 | 0.0 | - | - | - | - | - | - | - | 0.0 | 1 | 0.975 |
| [b] | 0.2 | 0.9 | 0.0 | 3.0 | 0.4 | - | - | - | - | 4.4 | 4 | 0.349 |
| [d] | 0.5 | 0.4 | 1.0 | 0.5 | 1.8 | 1.0 | - | - | - | 5.2 | 5 | 0.394 |
| [g] | 0.0 | 0.3 | 2.0 | 1.8 | - | - | - | - | - | 4.1 | 3 | 0.254 |
| [$g^w$] | 0.0 | 0.0 | - | - | - | - | - | - | - | 0.0 | 1 | 0.947 |
| [f] | 0.5 | 3.6 | 0.9 | 4.2 | - | - | - | - | - | 9.2 | 3 | 0.027 |
| [s] | 24.7 | 0.8 | 29.4 | 0.9 | 2.7 | 24.7 | 15.0 | 6.3 | - | 104.4 | 7 | 0.000 |
| [h] | 0.0 | 0.4 | 1.9 | - | - | - | - | - | - | 2.3 | 2 | 0.322 |
| [z] | 0.0 | 0.0 | - | - | - | - | - | - | - | 0.0 | 1 | 0.996 |
| [m] | 2.8 | 4.2 | 0.6 | 1.0 | 1.8 | 5.1 | - | - | - | 15.5 | 5 | 0.009 |
| [n] | 3.9 | 3.4 | 1.8 | 0.6 | 3.1 | 3.0 | - | - | - | 15.9 | 5 | 0.007 |
| [l] | 9.4 | 21.2 | 0.2 | 5.7 | 11.9 | 6.5 | - | - | - | 55.0 | 5 | 0.000 |
| [r] | 27.4 | 12.1 | 11.0 | 2.4 | 30.9 | 8.4 | 9.8 | - | - | 101.9 | 6 | 0.000 |

Table 4.11. Chi-Square Test Results: Vowels

| | Sound Frequency per Verse | | | | | | | | | $\chi^2$ | df | p |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | |
| [i] | 0.0 | 0.0 | 0.1 | - | - | - | - | - | - | 0.1 | 2 | 0.934 |
| [ɪ] | 0.0 | 0.7 | 2.2 | - | - | - | - | - | - | 2.9 | 2 | 0.230 |
| [j] | 0.0 | 0.1 | 0.3 | - | - | - | - | - | - | 0.5 | 2 | 0.790 |
| [u] | 0.0 | 0.0 | - | - | - | - | - | - | - | 0.0 | 1 | 0.937 |
| [ʊ] | 0.0 | 0.5 | 2.2 | - | - | - | - | - | - | 2.7 | 2 | 0.262 |
| [w] | 0.5 | 2.0 | 0.2 | 0.5 | 1.2 | - | - | - | - | 4.4 | 4 | 0.353 |
| [e] | 0.0 | 0.3 | 2.0 | - | - | - | - | - | - | 2.3 | 2 | 0.318 |
| [ɛ] | 0.0 | 0.2 | 0.6 | - | - | - | - | - | - | 0.8 | 2 | 0.666 |
| [o] | 0.0 | 0.1 | 0.3 | - | - | - | - | - | - | 0.4 | 2 | 0.836 |
| [ɔ] | 0.0 | 0.0 | 0.5 | - | - | - | - | - | - | 0.5 | 2 | 0.779 |
| [ɑ] | 0.5 | 3.3 | 0.5 | 4.3 | - | - | - | - | - | 8.6 | 3 | 0.035 |

### 4.2. Discussion of Results

Strictly speaking, a chi-square test for goodness-of-fit only reveals whether a distribution is sufficiently similar to a selected model, that it may be accounted for by that model (Everitt, 2006, p. 81). It does not distinguish degrees of similarity. The distribution is either similar or not, depending on a preselected threshold of significance. Nor does the test guarantee that the model accounts for similar distributions or explains why others are different. However, this does not mean that the test is without value. As reiterated several times in this study, statistical tests provide objective frameworks around which additional insight may be built. Deviation from statistical rigor is not to be viewed as a problem, because all statistical data is informed by subjective evidence in some degree. This is especially true in the case of poetic analysis and, hence, the following discussion of the results is informed by subjective insight.

First, however, the assumptions underlying the interpretation of statistical data ought to be explained. Variation in the degree to which a distribution differs from the model is based on variation in the p-value itself. As stated above, the p-value normally serves as a means of judgment against the threshold of significance. However, it is not an abstract entity. The p-value represents the probability of a given event (Everitt, 2006, pp. 338, 346). If it is lower than five percent (or sometimes less), the event is judged to be unlikely. The probability may be interpreted without reference to this threshold, as long as it is understood that this represents a departure from statistical rigor.

Variation in the nature of a distribution may be deduced from addends of the chi-square statistic, as well as from observed and expected values. The chi-square statistic represents the total difference in distribution for all observed and expected values (Everitt, 2006, p. 81). The greater this number, the greater the probability that the distribution differs from the model. The

probability of difference also increases with lower degrees of freedom, because a larger chi-square statistic is more striking when divided amongst fewer cells. Hence, addends of the chi-square statistic provide reasonable insight into the magnitude of difference at any given set of observed and expected values. The values themselves may then be used to determine the direction of this difference. Of course, it must be reiterated that this use of the statistics represents a divergence from their intended function.

The following discussion begins with an account of distributions which differ significantly from the model. Those which do not differ significantly are discussed thereafter. Included in these sections are relevant features of the distributions such as degree of difference from the model, as well as phonetic characteristics and sample frequencies of their sounds. The nature of significant differences in distribution is explained afterwards. These insights allow the results to be related to the research question in the next chapter.

### *4.2.1. Significant Differences in Distribution*

The distribution of each sound in this group is associated with a p-value which passes the threshold of significance. They differ from a Poisson distribution to such extent, that they cannot be adequately explained by this model. Included in this group are the voiceless unaspirated plosives [p], [t], [k], and [$k^w$]; the voiceless fricatives [f] and [s]; the nasals [m] and [n]; the lateral approximant [l]; the trill [r]; and the vowel [ɑ]. The distributions of the sounds [t], [k], [$k^w$], [s], [l], and [r] have probabilities so low, that they would still qualify as significant at a threshold of $p < 0.00001$. The distributions of the nasals [m] and [n] would also qualify as significant under a more restrictive threshold of $p < 0.010$. As for the other sounds in the group,

it is worth mentioning that the labial obstruents [p] and [f] fall further from the threshold at p = 0.015 and p = 0.027 respectively, than does the vowel [ɑ] at p = 0.035.

The phonetic characteristics of this group are striking. The entire native inventory of voiceless obstruents is included except for [h], which is clearly idiomatic in pronunciation and metrical treatment (Allen, 1978/1989, pp. 43-45; Raven, 1965, pp. 24, 27). The native inventory of sonorant consonants is included without exception. Indeed, the vowel [ɑ] is the only member of this group not associated with related sounds, and it is also the last member to qualify under the threshold of significance.

Of course, it may be objected that membership in the group has more to do with the sample frequency of the sounds than with their phonetic characteristics. Eleven of the fifteen sounds with a sample frequency near or above 1,700 qualify for this group, whereas none of the fifteen sounds with a sample frequency below 700 qualify. However, it is difficult to account for exceptions with sample frequencies alone, because they cannot be associated with one another on any other basis. This does not mean that sample frequency is irrelevant, but rather that phonetic characteristics offer a better explanation of the data. Even exceptions to the relationship of sample frequency and distribution probability are easily accounted for through phonetic characteristics. Of the eight most striking exceptions, [b], [d], and [g] are voiced plosives, [w] and [ʊ] are allophones of the same vowel, [ɪ] and [e] are both unrounded front vowels, and [h] is associated with vowels.

### *4.2.2. Insignificant Differences in Distribution*

The distribution of each sound in this group is associated with a p-value which does not pass the threshold of significance. They follow the Poisson distribution closely enough, that they

may be accounted for as random events under this model. Included in this group are the voiceless aspirated plosives [$p^h$], [$t^h$], and [$k^h$]; the voiced plosives [b], [d], [g], and [$g^w$]; the fricatives [h] and [z]; the semivowels [j] and [w], and the vowels [i], [ɪ], [u], [ʊ], [e], [ɛ], [o], and [ɔ]. There are also noticeable differences in the degree of significance. The distributions of [b], [d], [g], [h], [w], [ɪ], and [ʊ] are somewhat similar to the model with p-values between 0.200 and 0.400. The similarity is more striking for the distributions of [$p^h$], [$t^h$], [$k^h$], [$g^w$] [z], [j], [i], [u], [e], [ɛ], [o], and [ɔ], all of which have probabilities above 0.600. There are also phonetic similarities amongst the sounds in this group. The native inventory of voiced obstruents is included without exception. The same is true for Greek sounds, which also happen to belong to the group most similar to the model. Semivowels and vowels are all included as well with the exception of [ɑ].

*4.2.3. Nature of Differences in Distribution*

The nature of differences between observed and expected values is also interesting. Generally, there is an increase over expected values for the number of verses containing a sound once or twice, and a decrease in the number of verses containing the sound at other frequencies. However, the largest chi-square addends usually occur in distributions with probabilities less than 0.00001. In other words, a substantial difference between observed and expected values at any particular verse frequency is generally restricted to [t], [k], [$k^w$], [s], [l], and [r].

It is somewhat difficult to distinguish uniform patterns within this group, but some distinction may be drawn between [k], [$k^w$], and [l] on the one hand, and [t], [s], and [r] on the other. Members of the former group generally show a moderate to significant increase for verses in which the sound occurs once, no significant difference for verses in which the sound occurs twice, and a moderate decrease for all other verses. Members of the latter group generally show

an insignificant to moderate increase for verses in which the sound occurs once, a moderate to significant increase for verses in which the sound occurs twice, an insignificant increase for verses in which the sound occurs thrice, and a moderate to significant decrease for all other verses. However, [t] is somewhat unique in that it shows a moderate decrease for verses in which it occurs once, a significant increase for verses in which it occurs thrice, and an insignificant increase for verses in which it occurs four times.

To summarize, [k], [kʷ], and [l] occur once per verse more often than expected, but at apparent cost to verses in which they might have occurred three or more times. The sounds [t], [s], and [r] occur twice per verse more often than expected at even greater cost to other frequencies. However, [r] is also more frequent once per verse, and [t] more frequent thrice per verse.

### 4.3. Summary of Results

Sound distributions differ significantly from the Poisson model for the voiceless obstruents [p], [t], [k], [kʷ], [f], and [s], and for the sonorants [m], [n], [l], and [r]. Distributions do not differ significantly for the voiced obstruents [b], [d], [g], and [gʷ], nor for the vocalic sounds [i], [ɪ], [j], [u], [ʊ], [w], [e], [ɛ], [o], and [ɔ]. Non-native sounds also show no significant difference from the model. Exceptions to the association of phonetic characteristics with distribution significance only need to be made for two sounds and are minor in each case. The distribution probability of the vowel [ɑ] is the last to pass the threshold of significance, and the distribution of the voiceless fricative [h] is not so unusual given the sound's association with vowels in poetry.

Differences in distribution generally come from an increased frequency in the number of verses containing a sound once or twice. It is not surprising that the trend is most pronounced for distributions with the smallest probability values and, hence, the least resemblance to the model. Exceptionally unexpected increases exist for verses in which [k], [$k^w$], [l], and [r] occur once, in which [t], [s], and [r] occur twice, and in which [t] occurs thrice. Decreases are generally observed elsewhere.

The phonetic characteristics of the sounds offer the greatest explanatory power for their distribution. The strength and consistency of the relationship suggests a phonetic cause in spite of dependence on other linguistic variables. This is especially true in light of the fact that each sound is evaluated separately, and that the overall sample frequency of the sounds cannot adequately account for their distribution. Furthermore, the striking similarity between the distribution of certain sounds and the model supports the assumption made earlier, that the sounds are sufficiently independent for purposes of the test.

# CHAPTER 5. CONCLUSION

The results offer insight into the research question of the study. Under the assumptions of the analysis, the distribution of syllable initial sounds is significantly unusual in certain contexts. Phonetic features can explain these tendencies, because of the surprising consistency with which they relate to differences in distribution. The results also corroborate many claims of existing work, while calling a few into question. However, this study is not without its own limitations, and ample opportunity remains for further work.

## 5.1. Conclusion

The results discussed in the previous chapter provide an answer to the research question of the study: for which sounds is syllable initial repetition within a verse unexpected, in the sense that it is unlikely to follow a Poisson model at random? These sounds include the voiceless obstruents [p], [t], [k], [$k^w$], [f], and [s], the sonorants [m], [n], [l], and [r], and the vowel [ɑ].

The following differences between observed and expected verse frequencies are particularly noteworthy. An increase in expected values is observed for verses in which the apical sounds [t], [s], and [r] occur twice per verse, and in which the voiceless plosive [t] occurs thrice per verse. Lower than expected values are also relevant, because they represent repetition retained in spite of a general tendency for loss. With this in mind, a decrease in expected values is observed for verses in which the labialized velar [$k^w$] occurs thrice per verse, the voiceless plosives [p], [k], and [$k^w$] occur four times per verse, and the bilabial nasal [m] occurs five times per verse. In addition, the lateral approximant [l] occurs less often than expected at frequencies of three or more per verse, the trill [r] at frequencies of four or more per verse, and the voiceless obstruents [t] and [s] at frequencies of five or more per verse.

**5.2. Implications**

The results have shown how observed sound repetition compares against expected usage in the entirety of the text. The breadth provided by this perspective gives insight beyond what it possible in a single passage. However, in order for it be meaningful in textual interpretation, it must be drawn back to the context of a few verses. Consider, for example, the following passage, in which Aeolus releases the winds at the behest of Juno, so that they may wreak havoc on the Trojan fleet:

> Haec ubi dicta, cauum conuersa cuspide montem
> impulit in latus; ac uenti uelut agmine facto
> qua data porta, ruunt et terras turbine perflant.
> *Aeneid*, 1.081-1.083

In the footnotes of his edition, Pharr (1964/1998) draws attention to the use of alliteration in the first and third verses, noting in the case of the latter that every word but one contains the letter *t* (p. 24). A closer look at the first verse highlights the presence of three consecutive words beginning with *c*, and two others which also contain the letter. There are, in fact, four syllables which begin with the sound [k] in the verse. The results have already shown that this sound is distributed in an unexpected way in the entire text, and there are only 72 verses in which [k] occurs four times, a quarter less than the 96 expected. There is a moderate tendency to restrict this sort of repetition from occurring, and the fact that it nonetheless remains in this verse suggests that Vergil has a reason for doing so. A plosive stop like [k] is a fairly short, punctuated sound. Perhaps he wishes to draw attention to the point of the *cuspis* ‘spear’ with which Aeolus strikes the mountain. This seems to be a very reasonable assumption in light of the fact that the word occurs together with the adjective *conuersa* ‘turned downward’ in the middle of a four word chiasm.

Similar observations may be made in the case of the other verse. Five of the seven instances of [t] mentioned by Pharr (1964/1998) occur at the beginning of a syllable, and the distribution of this sound is significantly different from the model. In a rather uncanny coincidence, this pattern is also as infrequent as the former, with 180 observed verses being a quarter less than the 240 expected. Repetition of [t] five times per verse is, then, almost exactly as unlikely as repetition of [k] four times per verse. It is more difficult to draw upon the semantic content of the passage for a reason for its retention, but a similar chiasm does occur at the end of the verse in *ruunt et terras turbine perflant* 'they rushed (out) and blew across the earth in a whirlwind.' Both actions of the wind occur on the outside of the structure, surrounding the earth in a circle of motion. Hence, the words *terras* and *turbine* appear to be associated, not only in the use of sound, but also in sense and position as with *conuersa cuspide*. It would seem, then, that Pharr's (1964/1998) impression of alliteration in these verses is confirmed.

Given that alliteration is used in this passage, one may ask whether other sounds are involved. There is certainly additional potential for repetition of [t]. The second verse contains five instances of syllable initial [t] and is, in this sense, just as alliterative as the third verse. Further, the fourth and fifth feet of the second verse both begin with [t], just as *terras turbine* in the third verse. This observation can only be made from a syllable initial approach to alliteration. Syllable initial [t] also occurs twice in the first verse. This is one of the few cases in which there are actually more verses than expected. The 1,396 observed verses exceed the 1,259 expected by about eleven percent. However, in this case it is difficult to discern the motivation for the repetition. The most that can be said, it seems, is that it works well with the other plosives.

Also interesting is the repetition of other apical sounds in the passage. Syllable initial [l] occurs three times in the second verse, and syllable initial [r] twice in the third verse. The

distribution of each sound is significantly different from the model. Syllable initial [l] occurs three times per verse 147 times, which is about an eighteen percent decrease from the 179 expected. It is somewhat unusual that [l] is repeated as many as three times. The opposite trend is observed for [r], which occurs twice per verse 1,236 times, or in about ten percent more verses than the 1,125 expected. The repetition of [r] is unusual, but in a different way than that of [l], since it is slightly more frequent than one would expect. Motivation for the repetition of both [r] and [l] is not as abundant as for [k] and [t]. They do, however, occur closely together in the phrases *impulit in latus* 'he thrust (it) into the side' and *ruunt et terras* 'they rushed (out) and (blew across) the earth.' It seems that these sounds are used as embellishments to the pattern created with the plosives.

The last instance of repetition which is unusual according to the results is that of syllable initial [p] twice in the third verse. The distribution of this sound does differ significantly from the model, but the 756 observed verses of this pattern only exceed the 733 expected verses by about three percent. In other words, the occurrence of syllable initial [p] twice within a single verse is indeed unusual, but not by very much. Perhaps it is used to reinforce the effect of other plosive consonants. It is also possible that it contributes to a pattern in the final two feet of the verse. Not only is there a preponderance of labial sounds in these feet, but a similar pattern appears at the end of verse two as well. It seems likely that [p] also serves as an embellishment to the greater effect.

Thus far, the discussion has focused on how the results can inform the interpretation of unexpected repetition. However, there are also many sounds for which repetition is always expected. In the above passage, for example, syllable initial [w] occurs twice in the middle of both the first and second verses. It seems to be interwoven with the other patterns, especially in

the phrase *uenti uelut* ‘the winds just as if,’ which stands apart in the second verse. In addition, the sound [w] seems a natural onomatopoeia for describing the flight of the winds. Yet, despite all of this, the repetition of this sound is not unexpected. The distribution of [w] does not differ significantly from the model, and the 435 verses of this particular pattern only fall short of the 444 expected verses by about two percent. The relative frequency of the sound in these verses cannot be drawn upon for evidence of intentional use. It is quite common for syllable initial [w] to occur twice per verse. Of course, this does not discount the possibility that [w] is intentionally used in these verses, but it means that such evidence must come from something other than its relative frequency.

In general, however, the findings of this study are consistent with existing observations of Vergil’s style. There are more verses than expected in which sounds occur only twice, and less verses than expected in which they occur at a high frequency. This aligns with Wilkinson’s (1963) claim that Vergil uses “alliteration with artistic restraint” (p. 26). Clarke (1976) also notes that two-word alliteration is the most common pattern in the *Aeneid*, and he proceeds to use it for his entire analysis (pp. 284-286). Even Greenberg (1980) finds that Vergil prefers two-word alliteration (pp. 608-610). The fact that both Clarke (1976) and Greenberg (1980) define alliteration as a word initial phenomenon does not pose a significant problem to this observation, because word initial repetition is frequently included in syllable initial repetition. This is particularly true for the sounds [b], [m], [n], [l], and [r], which Greenberg (1980) offers as evidence of his claim (pp. 609-610).

Observations on sound usage are also fairly consistent with the results of this study. Voiceless obstruents and sonorants generally occur with greater frequency in the context of unexpected repetition than do voiced obstruents and vowels. Clarke (1976) finds that this is true

for all members of the former group except *qu*, though the trend is less convincing in the case of *l* and *r*. Vowels are also relatively infrequent (p. 298). The voiced bilabial plosive *b* is the only sound Greenberg (1980) mentions, which does not qualify under the above generalization. The other four sounds are all sonorants. However, he does not draw attention to the voiceless plosives. Avoidance of *e* and *i* is also noted (pp. 608-610).

### 5.3. Limitations and Future Work

Several limitations may be accounted for in future work. First, this study only includes text from the first half of the *Aeneid*. Extension of the method to the rest of the poem, to the remaining work of Vergil, and to the writings of other Roman poets will allow for comparison of different authors and texts, and will lead to a greater understanding of sound repetition in these works individually and collectively. Opportunities for extending the definition of the alliteration are also quite numerous. The context may be focused to a particular part of the verse, or it may be extended to multiple verses. More than one sound may also be involved. Both Deutsch (1939/1978) and Clarke (1976) mention the use of interwoven patterns of repetition, and different sounds may even be associated on the basis of one or more features. Indeed, disagreement of this sort has been seen in the differences of sound association in Clarke (1976), Greenberg (1980), and this study as well.

There is also room for improvement in the method of analysis. This study considers sounds sufficiently independent for the statistical test, but greater precision can be achieved by accounting for their relationship with other phonetic, morphemic, syntactic, and semantic features. This is especially true in the case of syllable stress. Lastly, greater perspective can be provided through the use of multiple statistical methods.

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## APPENDIX A: Resolution of Textual Differences

| Verse | Edition | Text |
|---|---|---|
| 1.002 | Mynors (1969) | italiam fato profugus lauiniaque uenit |
| | Pharr (1964/1998) | ītaliam fātō profugus lāuīnaque uēnit |
| | Resolved | ītaliam fātō profugus lāuīniaque uēnit |
| 1.030 | Mynors (1969) | troas reliquias danaum atque immitis achilli |
| | Pharr (1964/1998) | trōas relliquiās danaum atque immītis achillī |
| | Resolved | trōas rēliquiās danaum atque immītis achillī |
| 1.069 | Mynors (1969) | incute uim uentis submersasque obrue puppis |
| | Pharr (1964/1998) | incute uim uentīs summersāsque obrue puppīs |
| | Resolved | incute uim uentīs submersāsque obrue puppīs |
| 1.070 | Mynors (1969) | aut age diuersos et dissice corpora ponto |
| | Pharr (1964/1998) | aut age dīuersōs et disiice corpora pontō |
| | Resolved | aut age dīuersōs et dissice corpora pontō |
| 1.175 | Mynors (1969) | succepitque ignem foliis atque arida circum |
| | Pharr (1964/1998) | suscēpitque ignem foliīs atque ārida circum |
| | Resolved | succēpitque ignem foliīs atque ārida circum |
| 1.222 | Mynors (1969) | fata lyci fortemque gyan fortemque cloanthum |
| | Pharr (1964/1998) | fāta lycī fortemque gyān fortem cloanthum |
| | Resolved | fāta lycī fortemque gyān fortemque cloanthum |
| 1.224 | Mynors (1969) | despiciens mare ueliuolum terrasque iacentis |
| | Pharr (1964/1998) | dispiciēns mare uēliuolum terrāsque iacentīs |
| | Resolved | dēspiciēns mare uēliuolum terrāsque iacentīs |
| 1.284 | Mynors (1969) | cum domus assaraci pthiam clarasque mycenas |
| | Pharr (1964/1998) | cum domus assaracī phthīam clārāsque mycēnās |
| | Resolved | cum domus assaracī pthīam clārāsque mycēnās |
| 1.301 | Mynors (1969) | remigio alarum ac libyae citus adstitit oris |
| | Pharr (1964/1998) | rēmigiō ālārum ac libyae citus astitit ōrīs |
| | Resolved | rēmigiō ālārum ac libyae citus astitit ōrīs |
| 1.343 | Mynors (1969) | huic coniunx sychaeus erat ditissimus auri |
| | Pharr (1964/1998) | huic coniūnx sȳchaeus erat dītissimus agrī |
| | Resolved | huic coniūnx sȳchaeus erat dītissimus aurī |
| 1.429 | Mynors (1969) | rupibus excidunt scaenis decora apta futuris |
| | Pharr (1964/1998) | rūpibus excīdunt scaenīs decora alta futūrīs |
| | Resolved | rūpibus excīdunt scaenīs decora apta futūrīs |
| 1.436 | Mynors (1969) | feruet opus redolentque thymo fraglantia mella |
| | Pharr (1964/1998) | feruet opus redolentque thymō fragrantia mella |
| | Resolved | feruet opus redolentque thymō fraglantia mella |
| 1.455 | Mynors (1969) | artificumque manus inter se operumque laborem |
| | Pharr (1964/1998) | artificumque manūs intrā sē operumque labōrem |
| | Resolved | artificumque manūs inter sē operumque labōrem |

| | | |
|---|---|---|
| 1.467 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | hac fugerent grai premeret troiana iuuentus<br>hāc fugerent graiī premeret troiāna iuuentūs<br>hāc fugerent graī premeret troiāna iuuentūs |
| 1.530 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | est locus hesperiam grai cognomine dicunt<br>est locus hesperiam graiī cognōmine dīcunt<br>est locus hesperiam graī cognōmine dīcunt |
| 1.585 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | submersum dictis respondent cetera matris<br>summersum dictīs respondent cētera mātris<br>submersum dictīs respondent cētera mātris |
| 1.598 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | quae nos reliquias danaum terraeque marisque<br>quae nōs relliquiās danaum terraeque marisque<br>quae nōs rēliquiās danaum terraeque marisque |
| 1.599 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | omnibus exhaustos iam casibus omnium egenos<br>omnibus exhaustīs iam cāsibus omnium egēnōs<br>omnibus exhaustōs iam cāsibus omnium egēnōs |
| 1.604 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | usquam iustitiae est et mens sibi conscia recti<br>ūsquam iūstitia est et mēns sibi cōnscia rēctī<br>ūsquam iūstitiae est et mēns sibi cōnscia rēctī |
| 1.654 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | maxima natarum priami colloque monile<br>maximo nātārum priamī collōque monīle<br>maxima nātārum priamī collōque monīle |
| 2.013 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | incipiam fracti bello fatisque repulsi<br>incipiamfrāctī bellō fātīsque repulsī<br>incipiam frāctī bellō fātīsque repulsī |
| 2.069 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | heu quae nunc tellus inquit quae me aequora possunt<br>heu quae mē tellūs inquit quae mē aequora possunt<br>heu quae nunc tellūs inquit quae mē aequora possunt |
| 2.076 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | <br>ille haec dēpositā tandem formīdine fātur<br> |
| 2.145 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | his lacrimis uitam damus et miserescimus ultro<br>hīc lacrimīs uītam damus et miserēscimus ultrō<br>hīs lacrimīs uītam damus et miserēscimus ultrō |
| 2.151 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | quidue petunt quae religio aut quae machina belli<br>quidue petunt quae relligiō aut quae māchina bellī<br>quidue petunt quae rēligiō aut quae māchina bellī |
| 2.188 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | neu populum antiqua sub religione tueri<br>neu populum antīquā sub relligiōne tuērī<br>neu populum antīquā sub rēligiōne tuērī |
| 2.200 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | obicitur magis atque improuida pectora turbat<br>obiicitur magis atque imprōuida pectora turbat<br>obicitur magis atque imprōuida pectora turbat |

| | | |
|---|---|---|
| 2.236 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | subiciunt lapsus et stuppea uincula collo<br>subiiciunt lāpsūs et stuppea uincula collō<br>subiciunt lāpsūs et stuppea uincula collō |
| 2.326 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | gloria teucrorum ferus omnis iuppiter argos<br>glōria teucrōrum ferus omnia iuppiter argōs<br>glōria teucrōrum ferus omnīs iuppiter argōs |
| 2.347 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | quos ubi confertos ardere in proelia uidi<br>quōs ubi cōnfertōs audēre in proelia uīdī<br>quōs ubi cōnfertōs ardēre in proelia uīdī |
| 2.365 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | corpora perque domos et religiosa deorum<br>corpora perque domōs et relligiōsa deōrum<br>corpora perque domōs et rēligiōsa deōrum |
| 2.392 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | androgei galeam clipeique insigne decorum<br>androgeō galeam clipeīque īnsigne decōrum<br>androgeī galeam clipeīque īnsigne decōrum |
| 2.444 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | protecti obiciunt prensant fastigia dextris<br>prōtēctī obiiciunt prēnsant fastīgia dextrīs<br>prōtēctī obiciunt prēnsant fastīgia dextrīs |
| 2.569 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | tyndarida aspicio dant claram incendia lucem<br>tyndarida aspiciō dant clāra incendia lūcem<br>tyndarida aspiciō dant clāram incendia lūcem |
| 2.572 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | et danaum poenam et deserti coniugis iras<br>et poenās danaum et dēsertī coniugis īrās<br>et danaum poenam et dēsertī coniugis īrās |
| 2.584 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | feminea in poena est habet haec uictoria laudem<br>fēmineā in poenā est nec habet uictōria laudem<br>fēmineā in poenā est habet haec uictōria laudem |
| 2.587 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | ultricis famam et cineres satiasse meorum<br>ultrīcis flammae et cinerēs satiāsse meōrum<br>ultrīcis fāmam et cinerēs satiāsse meōrum |
| 2.616 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | insedit nimbo effulgens et gorgone saeua<br>īnsēdit limbō effulgēns et gorgone saeuā<br>īnsēdit nimbō effulgēns et gorgone saeuā |
| 2.691 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | da deinde auxilium pater atque haec omina firma<br>dā deinde augurium pater atque haec ōmina firmā<br>dā deinde auxilium pater atque haec ōmina firmā |
| 2.715 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | religione patrum multos seruata per annos<br>relligiōne patrum multōs seruāta per annōs<br>rēligiōne patrum multōs seruāta per annōs |
| 2.727 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | tela neque aduerso glomerati examine grai<br>tēla neque aduersō glomerātī ex agmine graiī<br>tēla neque aduersō glomerātī exāmine graī |

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| 2.739 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | substitit errauitne uia seu lapsa resedit<br>substitit errāuitne uiā seu lassa resēdit<br>substitit errāuitne uiā seu lapsa resēdit |
| 2.778 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | eueniunt nec te comitem hinc portare creusam<br>ēueniunt nec tē hinc comitem asportāre creūsam<br>ēueniunt nec tē comitem hinc portāre creūsam |
| 2.786 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | aspiciam aut grais seruitum matribus ibo<br>aspiciam aut graiīs seruītum mātribus ībō<br>aspiciam aut graīs seruītum mātribus ībō |
| 3.082 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | occurrit ueterem anchisen agnouit amicum<br>occurrit ueterem anchīsēn adgnōuit amīcum<br>occurrit ueterem anchīsēn agnōuit amīcum |
| 3.087 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | pergama reliquias danaum atque immitis achilli<br>pergama relliquiās danaum atque immītis achillī<br>pergama rēliquiās danaum atque immītis achillī |
| 3.115 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | placemus uentos et cnosia regna petamus<br>plācēmus uentōs et gnōsia rēgna petāmus<br>plācēmus uentōs et cnōsia rēgna petāmus |
| 3.125 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | bacchatamque iugis naxon uiridemque donusam<br>bacchātamque iugīs naxum uiridemque donūsam<br>bacchātamque iugīs naxon uiridemque donūsam |
| 3.126 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | olearon niueamque paron sparsasque per aequor<br>ōlearum niueamque parum sparsāsque per aequor<br>ōlearon niueamque paron sparsāsque per aequor |
| 3.127 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | cycladas et crebris legimus freta concita terris<br>cycladas et crēbrīs legimus freta cōnsita terrīs<br>cycladas et crēbrīs legimus freta cōncita terrīs |
| 3.149 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | quos mecum a troia mediisque ex ignibus urbis<br>quōs mēcum ab troiā mediīsque ex ignibus urbis<br>quōs mēcum ā troiā mediīsque ex ignibus urbis |
| 3.163 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | est locus hesperiam grai cognomine dicunt<br>est locus hesperiam graiī cognōmine dīcunt<br>est locus hesperiam graī cognōmine dīcunt |
| 3.230 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | arboribus clausam circum atque horrentibus umbris<br>arboribus clausā circum atque horrentibus umbrīs<br>arboribus clausam circum atque horrentibus umbrīs |
| 3.314 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | subicio et raris turbatus uocibus hisco<br>subiiciō et rārīs turbātus uōcibus hīscō<br>subiciō et rārīs turbātus uōcibus hīscō |
| 3.360 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | qui tripodas clarii et laurus qui sidera sentis<br>quī tripodas clariī laurōs quī sīdera sentīs<br>quī tripodas clariī et laurus quī sīdera sentīs |

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| 3.363 | Mynors (1969) | religio et cuncti suaserunt numine diui |
| | Pharr (1964/1998) | relligiō et cūnctī suāsērunt nūmine dīuī |
| | Resolved | rēligiō et cūnctī suāsērunt nūmine dīuī |
| 3.398 | Mynors (1969) | effuge cuncta malis habitantur moenia grais |
| | Pharr (1964/1998) | effuge cūncta malīs habitantur moenia graiīs |
| | Resolved | effuge cūncta malīs habitantur moenia graīs |
| 3.409 | Mynors (1969) | hac casti maneant in religione nepotes |
| | Pharr (1964/1998) | hāc castī maneant in relligiōne nepōtēs |
| | Resolved | hāc castī maneant in rēligiōne nepōtēs |
| 3.427 | Mynors (1969) | pube tenus postrema immani corpore pistrix |
| | Pharr (1964/1998) | pūbe tenus postrēma immānī corpore pristīx |
| | Resolved | pūbe tenus postrēma immānī corpore pistrīx |
| 3.464 | Mynors (1969) | dona dehinc auro grauia ac secto elephanto |
| | Pharr (1964/1998) | dōna dehinc aurō grauia sectōque elephantō |
| | Resolved | dōna dehinc aurō grauia ac sectō elephantō |
| 3.499 | Mynors (1969) | auspiciis et quae fuerit minus obuia grais |
| | Pharr (1964/1998) | auspiciīs et quae fuerit minus obuia graiīs |
| | Resolved | auspiciīs et quae fuerit minus obuia graīs |
| 3.534 | Mynors (1969) | obiectae salsa spumant aspergine cautes |
| | Pharr (1964/1998) | obiectae salsā spūmant aspargine cautēs |
| | Resolved | obiectae salsā spūmant aspergine cautēs |
| 3.535 | Mynors (1969) | ipse latet gemino demittunt bracchia muro |
| | Pharr (1964/1998) | ipse latet geminō dīmittunt bracchia mūrō |
| | Resolved | ipse latet geminō dēmittunt bracchia mūrō |
| 3.593 | Mynors (1969) | respicicmus dira inluuies immissaque barba |
| | Pharr (1964/1998) | respicimus dīra inluuiēs inmissaque barba |
| | Resolved | respicimus dīra inluuiēs immissaque barba |
| 3.673 | Mynors (1969) | intremuere undae penitusque exterrita tellus |
| | Pharr (1964/1998) | contremuēre undae penitusque exterrita tellūs |
| | Resolved | intremuēre undae penitusque exterrita tellūs |
| 3.684 | Mynors (1969) | contra iussa monent heleni scyllamque charybdinque |
| | Pharr (1964/1998) | contrā iussa monent helenī scyllam atque charybdim |
| | Resolved | contrā iussa monent helenī scyllamque charybdinque |
| 3.685 | Mynors (1969) | inter utrimque uiam leti discrimine paruo |
| | Pharr (1964/1998) | inter utramque uiam lētī discrīmine paruō |
| | Resolved | inter utrimque uiam lētī discrīmine paruō |
| 3.686 | Mynors (1969) | ni teneam cursus certum est dare lintea retro |
| | Pharr (1964/1998) | nī teneant cursūs certum est dare lintea retrō |
| | Resolved | nī teneam cursūs certum est dare lintea retrō |
| 4.025 | Mynors (1969) | uel pater omnipotens adigat me fulmine ad umbras |
| | Pharr (1964/1998) | uel pater omnipotēns abigat mē fulmine ad umbrās |
| | Resolved | uel pater omnipotēns adigat mē fulmine ad umbrās |

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| 4.091 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | tara iouis coniunx nec famam obstare furori<br>cāra iouis coniūnx nec fāmam obstāre furōrī<br>cāra iouis coniūnx nec fāmam obstāre furōrī |
| 4.092 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | calibus adgreditur uenerem saturnia dictis<br>tālibus adgreditur uenerem sāturnia dictīs<br>tālibus adgreditur uenerem sāturnia dictīs |
| 4.257 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | litus harenosum ad libyae uentosque secabat<br>lītus harēnōsum ad libyae uentōsque secābat<br>lītus harēnōsum ad libyae uentōsque secābat |
| 4.269 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | regnator caelum et terras qui numine torquet<br>rēgnātor caelum ac terrās quī nūmine torquet<br>rēgnātor caelum et terrās quī nūmine torquet |
| 4.276 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | debetur tali cyllenius ore locutus<br>dēbēntur tālī cyllēnius ōre locūtus<br>dēbētur tālī cyllēnius ōre locūtus |
| 4.295 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | imperio laeti parent et iussa facessunt<br>imperiō laetī pārent ac iussa facessunt<br>imperiō laetī pārent et iussa facessunt |
| 4.343 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | reliquias colerem priami tecta alta manerent<br>relliquiās colerem priamī tēcta alta manērent<br>rēliquiās colerem priamī tēcta alta manērent |
| 4.414 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | cogitur et supplex animos summittere amori<br>cōgitur et supplex animōs submittere amōrī<br>cōgitur et supplex animōs summittere amōrī |
| 4.427 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | nec patris anchisae cinerem manisue reuelli<br>nec patris anchīsae cinerēs mānīsue reuellī<br>nec patris anchīsae cinerem mānīsue reuellī |
| 4.428 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | cur mea dicta negat duras demittere in auris<br>cūr mea dicta neget dūrās dēmittere in aurīs<br>cūr mea dicta negat dūrās dēmittere in aurīs |
| 4.477 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | consilium uultu tegit ac spem fronte serenat<br>cōnsilium uoltū tegit ac spem fronte serēnat<br>cōnsilium uultū tegit ac spem fronte serēnat |
| 4.497 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | quo perii super imponas abolere nefandi<br>quō periī superimpōnās abolēre nefandī<br>quō periī super impōnās abolēre nefandī |
| 4.528 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | lēnībant cūrās et corda oblīta labōrum |
| 4.549 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | his germana malis oneras atque obicis hosti<br>hīs germāna malīs onerās atque obiicis hostī<br>hīs germāna malīs onerās atque obicis hostī |

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| 4.559 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | et crinis flauos et membra decora iuuenta<br>et crīnīs flāuōs et membra decōra iuuentae<br>et crīnīs flāuōs et membra decōra iuuenta |
| 4.593 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | diripientque rates alii naualibus ite<br>dēripientque ratēs aliī nāuālibus īte<br>dīripientque ratēs aliī nāuālibus īte |
| 4.646 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | conscendit furibunda rogos ensemque recludit<br>cōnscendit furibunda gradūs ēnsemque reclūdit<br>cōnscendit furibunda rogōs ēnsemque reclūdit |
| 5.029 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | quoue magis fessas optem dimittere nauis<br>quōue magis fessās optem dēmittere nāuīs<br>quōue magis fessās optem dīmittere nāuīs |
| 5.047 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | ex quo reliquias diuinique ossa parentis<br>ex quō relliquiās dīuīnīque ossa parentis<br>ex quō rēliquiās dīuīnīque ossa parentis |
| 5.103 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | subiciunt ueribus prunas et uiscera torrent<br>subiiciunt ueribus prūnās et uīscera torrent<br>subiciunt ueribus prūnās et uīscera torrent |
| 5.112 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | perfusae uestes argenti aurique talenta<br>perfūsae uestēs argentī aurīque talentum<br>perfūsae uestēs argentī aurīque talenta |
| 5.126 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | fluctibus hiberni condunt ubi sidera cauri<br>flūctibus hībernī condunt ubi sīdera cōrī<br>flūctibus hībernī condunt ubi sīdera caurī |
| 5.162 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | quo tantum mihi dexter abis huc derige cursum<br>quō tantum mihi dexter abīs hūc dērige gressum<br>quō tantum mihi dexter abīs hūc dērige cursum |
| 5.202 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | namque furens animi dum proram ad saxa suburget<br>namque furēns animī dum prōram ad saxa suburguet<br>namque furēns animī dum prōram ad saxa suburget |
| 5.224 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | consequitur cedit quoniam spolita magistro est<br>cōnsequitur cēdit quoniam spoliāta magistrō est<br>cōnsequitur cēdit quoniam spoliāta magistrō est |
| 5.238 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | proiciam in fluctus et uina liquentia fundam<br>prōiiciam in flūctūs et uīna liquentia fundam<br>prōiciam in flūctūs et uīna liquentia fundam |
| 5.306 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | cnosia bina dabo leuato lucida ferro<br>gnōsia bīna dabō lēuātō lūcida ferrō<br>cnōsia bīna dabō lēuātō lūcida ferrō |
| 5.320 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | proximus huic longo sed proximus interuallo<br>proximus huic longō sed proxumus interuallō<br>proximus huic longō sed proximus interuallō |

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| 5.359 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | et clipeum efferri iussit didymaonis artes<br>et clipeum efferrī iussit didymāonis artīs<br>et clipeum efferrī iussit didymāonis artēs |
| 5.381 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | aeneae stetit ante pedes nec plura moratus<br>aenēae stetit aute pedēs nec plūra morātus<br>aenēae stetit ante pedēs nec plūra morātus |
| 5.505 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | intremuit malus micuitque exterrita pennis<br>intremuit mālus timuitque exterrita pennīs<br>intremuit mālus micuitque exterrita pennīs |
| 5.512 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | illa notos atque atra uolans in nubila fugit<br>illa notōs atque alta uolāns in nūbila fūgit<br>illa notōs atque atra uolāns in nūbila fūgit |
| 5.522 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | hic oculis subitum obicitur magnoque futurum<br>hīc oculīs subitum obiicitur magnōque futūrum<br>hīc oculīs subitum obicitur magnōque futūrum |
| 5.551 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | dic ait ipse omnem longo decedere circo<br>dīc ait ipse omnem longō discēdere circō<br>dīc ait ipse omnem longō dēcēdere circō |
| 5.563 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | una acies iuuenum ducit quam paruos ouantem<br>ūna aciēs iuuenum dūcit quam paruus ouantem<br>ūna aciēs iuuenum dūcit quam paruus ouantem |
| 5.572 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | esse sui dederat monumentum et pignus amoris<br>esse suī dederat monimentum et pignus amōris<br>esse suī dederat monimentum et pignus amōris |
| 5.595 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | carpathium libycumque secant<br>carpathium libycumque secant lūduntque per undās<br>carpathium libycumque secant |
| 5.615 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | pontum aspectabant flentes heu tot uada fessis<br>pontum adspectābant flentēs heu tot uada fessīs<br>pontum āspectābant flentēs heu tot uada fessīs |
| 5.619 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | conicit et faciemque deae uestemque reponit<br>coniicit et faciemque deae uestemque repōnit<br>conicit et faciemque deae uestemque repōnit |
| 5.649 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | qui uultus uocisque sonus uel gressus eunti<br>quis uultus uōcisque sonus uel gressus euntī<br>quī uultus uōcisque sonus uel gressus euntī |
| 5.662 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | coniciunt furit immissis uolcanus habenis<br>coniiciunt furit immissīs uolcānus habēnīs<br>coniciunt furit immissīs uolcānus habēnīs |
| 5.776 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | proicit in fluctus ac uina liquentia fundit<br>prōiicit in flūctūs ac uīna liquentia fundit<br>prōicit in flūctūs ac uīna liquentia fundit |

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| 5.787 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | reliquias troiae cineres atque ossa peremptae<br>relliquiās troiae cinerēs atque ossa perēmptae<br>rēliquiās troiae cinerēs atque ossa perēmptae |
| 5.825 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | laeua tenet thetis et melite panopeaque uirgo<br>laeua tenent thetis et melitē panopēaque uirgō<br>laeua tenet thetis et melitē panopēaque uirgō |
| 5.851 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | et caeli totiens deceptus fraude sereni<br>et caelō totiēns dēceptus fraude serēnī<br>et caelī totiēns dēceptus fraude serēnī |
| 5.858 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | et super incumbens cum puppis parte reuulsa<br>et superincumbēns cum puppis parte reuulsā<br>et super incumbēns cum puppis parte reuulsā |
| 6.023 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | contra elata mari respondet cnosia tellus<br>contrā ēlāta marī respondet gnōsia tellūs<br>contrā ēlāta marī respondet cnōsia tellūs |
| 6.039 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | praestiterit totidem lectas ex more bidentis<br>praestiterit totidem lēctās dē mōre bidentīs<br>praestiterit totidem lēctās ex mōre bidentīs |
| 6.116 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | idem orans mandata dabat gnatique patrisque<br>īdem ōrāns mandāta dabat nātīque patrisque<br>īdem ōrāns mandāta dabat gnātīque patrisque |
| 6.141 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | auricomos quam quis decerpserit arbore fetus<br>auricomōs quam quī dēcerpserit arbore fētūs<br>auricomōs quam quis dēcerpserit arbore fētūs |
| 6.193 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | maternas agnouit auis laetusque precatur<br>māternās agnōscit auīs laetusque precātur<br>māternās agnōuit auīs laetusque precātur |
| 6.203 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | sedibus optatis gemina super arbore sidunt<br>sēdibus optātīs geminae super arbore sīdunt<br>sēdibus optātīs geminā super arbore sīdunt |
| 6.222 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | coniciunt pars ingenti subiere feretro<br>coniiciunt pars ingentī subiēre feretrō<br>coniciunt pars ingentī subiēre feretrō |
| 6.227 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | reliquias uino et bibulam lauere fauillam<br>relliquiās uīnō et bibulam lāuēre fauīllam<br>rēliquiās uīnō et bibulam lāuēre fauīllam |
| 6.242 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | unde locum grai dixerunt nomine aornum<br>unde locum graiī dīxērunt nōmine aornon<br>unde locum graī dīxērunt nōmine aornum |
| 6.249 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | succipiunt pateris ipse atri uelleris agnam<br>suscipiunt paterīs ipse ātrī uelleris agnam<br>succipiunt paterīs ipse ātrī uelleris agnam |

| | | |
|---|---|---|
| 6.255 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | ecce autem primi sub limina solis et ortus<br>ecce autem prīmī sub lūmina sōlis et ortūs<br>ecce autem prīmī sub līmina sōlis et ortūs |
| 6.366 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | inice namque potes portusque require uelinos<br>iniice namque potes portūsque requīre uelīnōs<br>inice namque potes portūsque requīre uelīnōs |
| 6.382 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | his dictiscurae emotae pulsusque parumper<br>hīs dictīs cūrae ēmōtae pulsusque parumper<br>hīs dictīs cūrae ēmōtae pulsusque parumper |
| 6.421 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | obicit ille fame rabida tria guttura pandens<br>obiicit ille famē rabidā tria guttura pandēns<br>obicit ille famē rabidā tria guttura pandēns |
| 6.433 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | consiliumque uocat uitasque et crimina discit<br>conciliumque uocat uītāsque et crīmina discit<br>consiliumque uocat uītāsque et crīmina discit |
| 6.475 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | nec minus aeneas casu percussus iniquo<br>nec minus aenēās cāsū concussus inīquō<br>nec minus aenēās cāsū percussus inīquō |
| 6.495 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | deiphobum uidet et lacerum crudeliter ora<br>dēiphobum uīdit lacerum crūdēliter ōra<br>dēiphobum uidet et lacerum crūdēliter ōra |
| 6.505 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | tunc egomet tumulum rhoeteo in litore inanem<br>tunc egomet tumulum rhoetēō līt̄ore inānem<br>tunc egomet tumulum rhoetēō in līt̄ore inānem |
| 6.524 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | emouet et fidum capiti subduxerat ensem<br>āmouet et fīdum capitī subdūxerat ēnsem<br>ēmouet et fīdum capitī subdūxerat ēnsem |
| 6.529 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | hortator scelerum aeolides di talia grais<br>hortātor scelerum aeolidēs dī tālia graiīs<br>hortātor scelerum aeolidēs dī tālia graīs |
| 6.561 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | urgentur poenis quis tantus plangor ad auras<br>urgentur poenīs quis tantus clangor ad aurīs<br>urgentur poenīs quis tantus plangor ad aurās |
| 6.566 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | cnosius haec rhadamanthus habet durissima regna<br>gnōsius haec rhadamanthus habet dūrissima rēgna<br>cnōsius haec rhadamanthus habet dūrissima rēgna |
| 6.586 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | dum flammas iouis et sonitus imitatur olympi<br>dum flammam iouis et sonitūs imitātur olympī<br>dum flammās iouis et sonitūs imitātur olympī |
| 6.602 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | quos super atra silex iam iam lapsura cadentique<br>quō super ātra silex iam iam lāpsūra cadentīque<br>quōs super ātra silex iam iam lāpsūra cadentīque |

| | | |
|---|---|---|
| 6.609 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | pulsatusue parens et fraus innexa clienti<br>pulsātusue parēns aut fraus innexa clientī<br>pulsātusue parēns et fraus innexa clientī |
| 6.658 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | inter odoratum lauris nemus unde superne<br>inter odōrātum laurī nemus unde supernē<br>inter odōrātum laurīs nemus unde supernē |
| 6.664 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | quique sui memores aliquos fecere merendo<br>quīque suī memorēs aliōs fēcēre merendō<br>quīque suī memorēs aliquōs fēcēre merendō |
| 6.707 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | ac ueluti in pratis ubi apes aestate serena<br>ac uelut in prātīs ubi apēs aestāte serēnā<br>ac ueluti in prātīs ubi apēs aestāte serēnā |
| 6.724 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | principio caelum ac terras camposque liquentis<br>principiō caelum ac terram campōsque liquentīs<br>principiō caelum ac terrās campōsque liquentīs |
| 6.731 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | seminibus quantum non noxia corpora tardant<br>sēminibus quantum nōn corpora noxia tardant<br>sēminibus quantum nōn noxia corpora tardant |
| 6.835 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | proice tela manu sanguis meus<br>prōiice tēla manū sanguis meus<br>prōice tēla manū sanguis meus |
| 6.868 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | o gnate ingentem luctum ne quaere tuorum<br>ō nāte ingentem lūctum nē quaere tuōrum<br>ō gnāte ingentem lūctum nē quaere tuōrum |
| 6.869 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | ostendent terris hunc tantum fata nec ultra<br>ostendent terrīs hunc tantum fāta neque ultrā<br>ostendent terrīs hunc tantum fāta nec ultrā |
| 6.900 | Mynors (1969)<br>Pharr (1964/1998)<br>Resolved | tum se ad caietae recto fert limite portum<br>tum sē ad caiētae rēctō fert līt̆ore portum<br>tum sē ad caiētae rēctō fert līmite portum |

## APPENDIX B: Resolution of Transcription and Syllabification

| Verse | Description | Text |
|---|---|---|
| 1.002 | Synizesis | ītaliam fātō profugus lāuīniaque uēnit<br>.iː.tɑ.lɪ.ɑm .fɑː.toː .prɔ.fʊ.gʊs .lɑː.wiː.nɪ.ɑ.kʷɛ .weː.nɪt<br>.iː.tɑ.lɪ.ɑm .fɑː.toː .prɔ.fʊ.gʊs .lɑː.wiːn.jɑ.kʷɛ .weː.nɪt |
| 1.016 | Hiatus | posthabitā coluisse samō hīc illius arma<br>.pɔs.thɑ.bɪ.tɑː .kɔ.lʊ.ɪs.sɛ .sɑ.m hiː.k ɪl.lɪ.ʊ.s ɑr.mɑ<br>.pɔs.thɑ.bɪ.tɑː .kɔ.lʊ.ɪs.sɛ .sɑ.moː .hiː.k ɪl.lɪ.ʊ.s ɑr.mɑ |
| 1.030 | Syllabification | trōas rēliquiās danaum atque immītis achillī<br>.troː.ɑs .reː.lɪ.kʷɪ.ɑː.s .dɑ.nɑ ɑt.kʷ ɪm.miː.tɪ.s ɑ.kʰɪl.liː<br>.troː.ɑs .reː.lɪ.kʷɪ.ɑː.s .dɑ.nɑ. ɑt.kʷ ɪm.miː.tɪ.s ɑ.kʰɪl.liː |
| 1.073 | Synizesis | cōnūbiō iungam stabilī propriamque dicābō<br>.koː.nuː.bɪ.oː .jʊŋ.gɑm s.tɑ.bɪ.liː .prɔ.prɪ.ɑm.kʷɛ .dɪ.kɑː.boː<br>.koː.nuːb.joː .jʊŋ.gɑm s.tɑ.bɪ.liː .prɔ.prɪ.ɑm.kʷɛ .dɪ.kɑː.boː |
| 1.096 | Syllabification | contigit oppetere ō danaum fortissime gentis<br>.kɔn.tɪ.gɪ.t ɔp.pɛ.tɛ.r oː .dɑ.nɑʊm .fɔr.tɪs.sɪ.mɛ .gɛn.tɪs<br>.kɔn.tɪ.gɪ.t ɔp.pɛ.tɛ.r oː .dɑ.nɑ.ʊm .fɔr.tɪs.sɪ.mɛ .gɛn.tɪs |
| 1.119 | Synizesis | arma uirum tabulaeque et trōia gaza per undās<br>.ɑr.mɑ .wɪ.rʊm .tɑ.bʊ.lɑɛ.kʷ ɛt .troːj.jɑ .gɑz.zɑ .pɛ.r ʊn.dɑː.s<br>.ɑr.mɑ .wɪ.rʊm .tɑ.bʊ.lɑɛ.kʷ ɛt .troː.ɪ.ɑ .gɑz.zɑ .pɛ.r ʊn.dɑː.s |
| 1.131 | Contraction | eurum ad sē zephyrumque uocat dehinc tālia fātur<br>.ɛʊ.r ɑd .seː .zɛ.pʰʏ.rʊm.kʷɛ .wɔ.kɑt .dɛ.hɪŋk .tɑː.lɪ.ɑ .fɑː.tʊr<br>.ɛʊ.r ɑd .seː .zɛ.pʰʏ.rʊm.kʷɛ .wɔ.kɑt .dɛɪŋk .tɑː.lɪ.ɑ .fɑː.tʊr |
| 1.201 | Muta cum Liquida | accestis scopulōs uōs et cyclōpia saxa<br>.ɑk.kɛs.tɪs .skɔ.pʊ.loːs .woː.s ɛt .kʏ.kloː.pɪ.ɑ .sɑk.sɑ<br>.ɑk.kɛs.tɪs .skɔ.pʊ.loːs .woː.s ɛt .kʏk.loː.pɪ.ɑ .sɑk.sɑ |
| 1.205 | Vowel Length | tendimus in latium sēdēs ubī fāta quiētās<br>.tɛn.dɪ.mʊ.s ɪn .lɑ.tɪ.ʊm .seː.deː.s ʊ.biː .fɑː.tɑ .kʷɪ.eː.tɑː.s<br>.tɛn.dɪ.mʊ.s ɪn .lɑ.tɪ.ʊm .seː.deː.s ʊ.bɪ .fɑː.tɑ .kʷɪ.eː.tɑː.s |
| 1.249 | Synizesis | trōia nunc placidā compostus pāce quiēscit<br>.troːj.jɑ .nʊŋk .plɑ.kɪ.dɑː .kɔm.pɔs.tʊs .pɑː.kɛ .kʷɪ.eː.s.kɪt<br>.troː.ɪ.ɑ .nʊŋk .plɑ.kɪ.dɑː .kɔm.pɔs.tʊs .pɑː.kɛ .kʷɪ.eː.s.kɪt |
| 1.256 | Contraction | ōscula lībāuit nātae dehinc tālia fātur<br>.oː.s.kʊ.lɑ .liː.bɑː.wɪt .nɑː.tɑɛ .dɛ.hɪŋk .tɑː.lɪ.ɑ .fɑː.tʊr<br>.oː.s.kʊ.lɑ .liː.bɑː.wɪt .nɑː.tɑɛ .dɛɪŋk .tɑː.lɪ.ɑ .fɑː.tʊr |
| 1.308 | Long in Position | quī teneant nam inculta uidet hominēsne feraene<br>.kʷiː .tɛ.nɛ.ɑnt .n ɪŋ.kʊl.tɑ .wɪ.dɛ.t hɔ.mɪ.neː.s.nɛ .fɛ.rɑɛ.nɛ<br>.kʷiː .tɛ.nɛ.ɑnt .n ɪŋ.kʊl.tɑ .wɪ.dɛt. hɔ.mɪ.neː.s.nɛ .fɛ.rɑɛ.nɛ |
| 1.317 | Muta cum Liquida | harpalycē uolucremque fugā praeuertitur hebrum<br>.hɑr.pɑ.lʏ.keː .wɔ.lʊ.krɛm.kʷɛ .fʊ.gɑː .prɑɛ.wɛr.tɪ.tʊ.r hɛ.brʊm<br>.hɑr.pɑ.lʏ.keː .wɔ.lʊ.krɛm.kʷɛ .fʊ.gɑː .prɑɛ.wɛr.tɪ.tʊ.r hɛb.rʊm |

| | | |
|---|---|---|
| 1.332 | Hypermetric Verse | iactēmur doceās ignārī hominumque locōrumque<br>.jɑk.teː.mʊr .dɔ.kɛ.ɑː.s ɪŋ.nɑː.r hɔ.mɪ.nʊm.kʷɛ .lɔ.koː.rʊm.kʷɛ<br>.jɑk.teː.mʊr .dɔ.kɛ.ɑː.s ɪŋ.nɑː.r hɔ.mɪ.nʊm.kʷɛ .lɔ.koː.rʊmkʷ |
| 1.336 | Muta cum Liquida | uirginibus tyriīs mōs est gestāre pharetram<br>.wɪr.gɪ.nɪ.bʊs .tʏ.rɪ.iː.s .moː.s ɛst .gɛs.tɑː.rɛ .pʰɑ.rɛ.trɑm<br>.wɪr.gɪ.nɪ.bʊs .tʏ.rɪ.iː.s .moː.s ɛst .gɛs.tɑː.rɛ .pʰɑ.rɛt.rɑm |
| 1.348 | Vowel Length | quōs inter medius uēnit furor ille sȳchaeum<br>.kʷoː.s ɪn.tɛr .mɛ.dɪ.ʊs .weː.nɪt .fʊ.rɔ.r ɪl.lɛ .syː.kʰɑɛ.ʊm<br>.kʷoː.s ɪn.tɛr .mɛ.dɪ.ʊs .weː.nɪt .fʊ.rɔ.r ɪl.lɛ .sʏ.kʰɑɛ.ʊm |
| 1.357 | Synizesis | tum celerāre fugam patriāque excēdere suādet<br>.tʊm .kɛ.lɛ.rɑː.rɛ .fʊ.gɑm .pɑ.trɪ.ɑː.kʷ ɛks.keː.dɛ.rɛ .sʊ.ɑː.dɛt<br>.tʊm .kɛ.lɛ.rɑː.rɛ .fʊ.gɑm .pɑ.trɪ.ɑː.kʷ ɛks.keː.dɛ.rɛ .swɑː.dɛt |
| 1.384 | Muta cum Liquida | ipse ignōtus egēns libyae dēserta peragrō<br>.ɪp.s ɪŋ.noː.tʊ.s ɛ.geː.ns .lɪ.bʏ.ɑɛ .deː.sɛr.tɑ .pɛ.rɑ.groː<br>.ɪp.s ɪŋ.noː.tʊ.s ɛ.geː.ns .lɪ.bʏ.ɑɛ .deː.sɛr.tɑ .pɛ.rɑg.roː |
| 1.405 | Hiatus | et uēra incessū patuit dea ille ubi mātrem<br>.ɛt .weː.r ɪŋ.kɛs.suː .pɑ.tʊ.ɪt .dɛ. ɪl.l ʊ.bɪ .mɑː.trɛm<br>.ɛt .weː.r ɪŋ.kɛs.suː .pɑ.tʊ.ɪt .dɛ.ɑ. ɪl.l ʊ.bɪ .mɑː.trɛm |
| 1.436 | Muta cum Liquida | feruet opus redolentque thymō fraglantia mella<br>.fɛr.wɛ.t ɔ.pʊs .rɛ.dɔ.lɛnt.kʷɛ .tʰʏ.moː .frɑ.glɑn.tɪ.ɑ .mɛl.lɑ<br>.fɛr.wɛ.t ɔ.pʊs .rɛ.dɔ.lɛnt.kʷɛ .tʰʏ.moː .frɑg.lɑn.tɪ.ɑ .mɛl.lɑ |
| 1.448 | Hypermetric Verse | aerea cui gradibus surgēbant līmina nexaeque<br>.ɑɛ.rɛ.ɑ .kʊɪ .grɑ.dɪ.bʊs .sʊr.geː.bɑnt .liː.mɪ.nɑ .nɛk.sɑɛ.kʷɛ<br>.ɑɛ.rɛ.ɑ .kʊɪ .grɑ.dɪ.bʊs .sʊr.geː.bɑnt .liː.mɪ.nɑ .nɛk.sɑɛ.kʷ |
| 1.458 | Muta cum Liquida | atrīdās priamumque et saeuum ambōbus achillem<br>.ɑ.triː.dɑː.s .prɪ.ɑ.mʊm.kʷ ɛt .sɑɛ.w ɑm.boː.bʊ.s ɑ.kʰɪl.lɛm<br>.ɑt.riː.dɑː.s .prɪ.ɑ.mʊm.kʷ ɛt .sɑɛ.w ɑm.boː.bʊ.s ɑ.kʰɪl.lɛm |
| 1.467 | Transcription | hāc fugerent graī premeret troiāna iuuentūs<br>.hɑːk .fʊ.gɛ.rɛnt .grɑ.iː .prɛ.mɛ.rɛt .trɔj.jɑː.nɑ .jʊ.wɛn.tuːs<br>.hɑːk .fʊ.gɛ.rɛnt .grɑj.jiː .prɛ.mɛ.rɛt .trɔj.jɑː.nɑ .jʊ.wɛn.tuːs |
| 1.478 | Long in Position | per terram et uersā puluis īnscrībitur hastā<br>.pɛr .tɛr.r ɛt .wɛr.sɑː .pʊl.wɪ.s iːns.kriː.bɪ.tʊ.r hɑs.tɑː<br>.pɛr .tɛr.r ɛt .wɛr.sɑː .pʊl.wɪs. iːns.kriː.bɪ.tʊ.r hɑs.tɑː |
| 1.480 | Muta cum Liquida | crīnibus īliades passīs peplumque ferēbant<br>.kriː.nɪ.bʊ.s iː.lɪ.ɑ.dɛs .pɑs.siː.s .pɛ.plʊm.kʷɛ .fɛ.reː.bɑnt<br>.kriː.nɪ.bʊ.s iː.lɪ.ɑ.dɛs .pɑs.siː.s .pɛp.lʊm.kʷɛ .fɛ.reː.bɑnt |
| 1.489 | Muta cum Liquida | ēōāsque aciēs et nigrī memnonis arma<br>.eː.oː.ɑː.s.kʷ ɑ.kɪ.eː.s ɛt .nɪ.griː .mɛm.nɔ.nɪ.s ɑr.mɑ<br>.eː.oː.ɑː.s.kʷ ɑ.kɪ.eː.s ɛt .nɪg.riː .mɛm.nɔ.nɪ.s ɑr.mɑ |
| 1.500 | Muta cum Liquida | hinc atque hinc glomerantur orēades illa pharetram<br>.hɪŋ.k ɑt.kʷ hɪŋk .glɔ.mɛ.rɑn.tʊ.r ɔ.reː.ɑ.dɛ.s ɪl.lɑ .pʰɑ.rɛ.trɑm<br>.hɪŋ.k ɑt.kʷ hɪŋk .glɔ.mɛ.rɑn.tʊ.r ɔ.reː.ɑ.dɛ.s ɪl.lɑ .pʰɑ.rɛt.rɑm |

| | | |
|---|---|---|
| 1.525 | Vowel Length | ōrāmus prohibē īnfandōs a nāuibus ignīs<br>.oː.raː.mʊs .prɔ.hɪ.b iːŋ.fan.doː.s ɑ .naː.wɪ.bʊ.s ɪŋ.niː.s<br>.oː.raː.mʊs .prɔ.hɪ.b iːŋ.fan.doː.s ɑː .naː.wɪ.bʊ.s ɪŋ.niː.s |
| 1.530 | Transcription | est locus hesperiam graī cognōmine dīcunt<br>.ɛst .lɔ.kʊ.s hɛs.pɛ.rɪ.ɑm .graː.iː .kɔŋ.noː.mɪ.nɛ .diː.kʊnt<br>.ɛst .lɔ.kʊ.s hɛs.pɛ.rɪ.ɑm .grɑj.jiː .kɔŋ.noː.mɪ.nɛ .diː.kʊnt |
| 1.596 | Synizesis | trōius aenēās libycīs ēreptus ab undīs<br>.troːj.jʊ.s ɑɛ.neː.ɑː.s .lɪ.bʏ.kiː.s eː.rɛp.tʊ.s ɑ.b ʊn.diː.s<br>.troː.ɪ.ʊ.s ɑɛ.neː.ɑː.s .lɪ.bʏ.kiː.s eː.rɛp.tʊ.s ɑ.b ʊn.diː.s |
| 1.598 | Syllabification | quae nōs rēliquiās danaum terraeque marisque<br>.kʷɑɛ .noː.s .reː.lɪ.kʷɪ.ɑː.s .dɑ.nɑʊm .tɛr.rɑɛ.kʷɛ .mɑ.rɪs.kʷɛ<br>.kʷɑɛ .noː.s .reː.lɪ.kʷɪ.ɑː.s .dɑ.nɑ.ʊm .tɛr.rɑɛ.kʷɛ .mɑ.rɪs.kʷɛ |
| 1.617 | Hiatus | tūne ille aenēās quem dardaniō anchīsae<br>.tuː.n ɪl.l ɑɛ.neː.ɑː.s .kʷɛm .dɑr.dɑ.nɪ. ɑŋ.kʰiː.sɑɛ<br>.tuː.n ɪl.l ɑɛ.neː.ɑː.s .kʷɛm .dɑr.dɑ.nɪ.oː ɑŋ.kʰiː.sɑɛ |
| 1.622 | Muta cum Liquida | uastābat cyprum et uictor diciōne tenēbat<br>.wɑs.tɑː.bɑt .kʏ.pr ɛt .wɪk.tɔr .dɪ.kɪ.oː.nɛ .tɛ.neː.bɑt<br>.wɑs.tɑː.bɑt .kʏp.r ɛt .wɪk.tɔr .dɪ.kɪ.oː.nɛ .tɛ.neː.bɑt |
| 1.651 | Long in Position | pergama cum peteret inconcessōsque hymenaeōs<br>.pɛr.gɑ.mɑ .kʊm .pɛ.tɛ.rɛ.t ɪŋ.kɔŋ.kɛs.soː.s.kʷ hʏ.mɛ.nɑɛ.oː.s<br>.pɛr.gɑ.mɑ .kʊm .pɛ.tɛ.rɛt. ɪŋ.kɔŋ.kɛs.soː.s.kʷ hʏ.mɛ.nɑɛ.oː.s |
| 1.668 | Long in Position | lītora iactētur odiīs iūnōnis acerbae<br>.liː.tɔ.rɑ .jɑk.teː.tʊ.r ɔ.dɪ.iː.s .juː.noː.nɪ.s ɑ.kɛr.bɑɛ<br>.liː.tɔ.rɑ .jɑk.teː.tɔr. ɔ.dɪ.iː.s .juː.noː.nɪ.s ɑ.kɛr.bɑɛ |
| 1.681 | Muta cum Liquida | aut super īdalium sacrātā sēde recondam<br>.ɑʊt .sʊ.pɛ.r iː.dɑ.lɪ.ʊm .sɑ.krɑː.tɑː .seː.dɛ .rɛ.kɔn.dɑm<br>.ɑʊt .sʊ.pɛ.r iː.dɑ.lɪ.ʊm .sɑk.rɑː.tɑː .seː.dɛ .rɛ.kɔn.dɑm |
| 1.698 | Synizesis | aureā composuit spondā mediamque locāuit<br>.ɑʊ.rɛ.ɑː .kɔm.pɔ.sʊ.ɪt .spɔn.dɑː .mɛ.dɪ.ɑm.kʷɛ .lɔ.kɑː.wɪt<br>.ɑʊ.rɛɑː .kɔm.pɔ.sʊ.ɪt .spɔn.dɑː .mɛ.dɪ.ɑm.kʷɛ .lɔ.kɑː.wɪt |
| 1.710 | Muta cum Liquida | flagrantīsque deī uultūs simulātaque uerba<br>.flɑ.grɑn.tiː.s.kʷɛ .dɛ.iː .wʊl.tuː.s .sɪ.mʊ.lɑː.tɑ.kʷɛ .wɛr.bɑ<br>.flɑg.rɑn.tiː.s.kʷɛ .dɛ.iː .wʊl.tuː.s .sɪ.mʊ.lɑː.tɑ.kʷɛ .wɛr.bɑ |
| 1.722 | Synizesis | iam prīdem residēs animōs dēsuētaque corda<br>.jɑm .priː.dɛm .rɛ.sɪ.deː.s ɑ.nɪ.moː.s .deː.sʊ.eː.tɑ.kʷɛ .kɔr.dɑ<br>.jɑm .priː.dɛm .rɛ.sɪ.deː.s ɑ.nɪ.moː.s .deː.swe:.tɑ.kʷɛ .kɔr.dɑ |
| 1.726 | Contraction | ātria dēpendent lychnī laqueāribus aureīs<br>.ɑː.trɪ.ɑ .deː.pɛn.dɛnt .lʏkʰ.niː .lɑ.kʷɛ.ɑː.rɪ.bʊ.s ɑʊ.rɛ.iː.s<br>.ɑː.trɪ.ɑ .deː.pɛn.dɛnt .lʏkʰ.niː .lɑ.kʷɛ.ɑː.rɪ.bʊ.s ɑʊ.rɛi:s |
| 1.754 | Syllabification | īnsidiās inquit danaum cāsūsque tuōrum<br>.iːn.sɪ.dɪ.ɑː.s ɪŋ.kʷɪt .dɑ.nɑʊm .kɑː.suː.s.kʷɛ .tʊ.oː.rʊm<br>.iːn.sɪ.dɪ.ɑː.s ɪŋ.kʷɪt .dɑ.nɑ.ʊm .kɑː.suː.s.kʷɛ .tʊ.oː.rʊm |

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| 2.009 | Synizesis | praecipitat suādentque cadentia sīdera somnōs<br>.praɛ.kɪ.pɪ.tat .sʊ.ɑː.dɛnt.kʷɛ .kɑ.dɛn.tɪ.ɑ .siː.dɛ.rɑ .sɔm.noːs<br>.praɛ.kɪ.pɪ.tat .swɑː.dɛnt.kʷɛ .kɑ.dɛn.tɪ.ɑ .siː.dɛ.rɑ .sɔm.noːs |
| 2.011 | Muta cum Liquida | et breuiter troiae suprēmum audīre labōrem<br>.ɛt .brɛ.wɪ.tɛr .trɔj.jɑɛ .sʊ.preː.m ɑʊ.diː.rɛ .lɑ.boː.rɛm<br>.ɛt .brɛ.wɪ.tɛr .trɔj.jɑɛ .sʊp.reː.m ɑʊ.diː.rɛ .lɑ.boː.rɛm |
| 2.014 | Syllabification | ductōrēs danaum tot iam lābentibus annīs<br>.dʊk.toː.reːs .dɑ.nɑʊm .tɔt .jɑm .lɑː.bɛn.tɪ.bʊ.s ɑn.niːs<br>.dʊk.toː.reːs .dɑ.nɑ.ʊm .tɔt .jɑm .lɑː.bɛn.tɪ.bʊ.s ɑn.niːs |
| 2.016 | Synizesis | aedificant sectāque intexunt abiete costās<br>.ɑɛ.dɪ.fɪ.kɑnt .sɛk.tɑː.kʷ ɪn.tɛk.sʊn.t ɑ.bɪ.ɛ.tɛ .kɔs.tɑːs<br>.ɑɛ.dɪ.fɪ.kɑnt .sɛk.tɑː.kʷ ɪn.tɛk.sʊn.t ɑb.jɛ.tɛ .kɔs.tɑːs |
| 2.036 | Syllabification | aut pelagō danaum īnsidiās suspectaque dōna<br>.ɑʊt .pɛ.lɑ.goː .dɑ.nɑ iːn.sɪ.dɪ.ɑːs .sʊs.pɛk.tɑ.kʷɛ .doː.nɑ<br>.ɑʊt .pɛ.lɑ.goː .dɑ.nɑ. iːn.sɪ.dɪ.ɑːs .sʊs.pɛk.tɑ.kʷɛ .doː.nɑ |
| 2.038 | Muta cum Liquida | aut terebrāre cauās uterī et temptāre latebrās<br>.ɑʊt .tɛ.rɛ.brɑː.rɛ .kɑ.wɑː.s ʊ.tɛ.r ɛt .tɛmp.tɑː.rɛ .lɑ.tɛ.brɑːs<br>.ɑʊt .tɛ.rɛ.brɑː.rɛ .kɑ.wɑː.s ʊ.tɛ.r ɛt .tɛmp.tɑː.rɛ .lɑ.tɛb.rɑːs |
| 2.044 | Syllabification | dōna carēre dolīs danaum sīc nōtus ulixēs<br>.doː.nɑ .kɑ.reː.rɛ .dɔ.liːs .dɑ.nɑʊm .siːk .noː.tʊ.s ʊ.lɪk.seːs<br>.doː.nɑ .kɑ.reː.rɛ .dɔ.liːs .dɑ.nɑ.ʊm .siːk .noː.tʊ.s ʊ.lɪk.seːs |
| 2.055 | Muta cum Liquida | impulerat ferrō argolicās foedāre latebrās<br>.ɪm.pʊ.lɛ.rɑt .fɛr.r ɑr.gɔ.lɪ.kɑːs .fɔɛ.dɑː.rɛ .lɑ.tɛ.brɑːs<br>.ɪm.pʊ.lɛ.rɑt .fɛr.r ɑr.gɔ.lɪ.kɑːs .fɔɛ.dɑː.rɛ .lɑ.tɛb.rɑːs |
| 2.065 | Syllabification | accipe nunc danaum īnsidiās et crīmine ab ūnō<br>.ɑk.kɪ.pɛ .nʊŋk .dɑ.nɑ iːn.sɪ.dɪ.ɑː.s ɛt .krɪː.mɪ.n ɑ.b uː.noː<br>.ɑk.kɪ.pɛ .nʊŋk .dɑ.nɑ. iːn.sɪ.dɪ.ɑː.s ɛt .krɪː.mɪ.n ɑ.b uː.noː |
| 2.132 | Muta cum Liquida | iamque diēs īnfanda aderat mihi sacra parārī<br>.jɑm.kʷɛ .dɪ.eː.s iːŋ.fɑn.d ɑ.dɛ.rɑt .mɪ.hɪ .sɑ.krɑ .pɑ.rɑː.riː<br>.jɑm.kʷɛ .dɪ.eː.s iːŋ.fɑn.d ɑ.dɛ.rɑt .mɪ.hɪ .sɑk.rɑ .pɑ.rɑː.riː |
| 2.157 | Muta cum Liquida | fās mihi graiōrum sacrāta resoluere iūra<br>.fɑːs .mɪ.hɪ .grɑj.joː.rʊm .sɑ.krɑː.tɑ .rɛ.sɔl.wɛ.rɛ .juː.rɑ<br>.fɑːs .mɪ.hɪ .grɑj.joː.rʊm .sɑk.rɑː.tɑ .rɛ.sɔl.wɛ.rɛ .juː.rɑ |
| 2.162 | Syllabification | omnis spēs danaum et coeptī frīdūcia bellī<br>.ɔm.nɪs .speːs .dɑ.nɑ ɛt .kɔɛp.tiː .fiː.duː.kɪ.ɑ .bɛl.liː<br>.ɔm.nɪs .speːs .dɑ.nɑ. ɛt .kɔɛp.tiː .fiː.duː.kɪ.ɑ .bɛl.liː |
| 2.165 | Muta cum Liquida | fātāle adgressī sacrātō āuellere templō<br>.fɑː.tɑː.l ɑd.grɛs.siː .sɑ.krɑː.t ɑː.wɛl.lɛ.rɛ .tɛm.ploː<br>.fɑː.tɑː.l ɑd.grɛs.siː .sɑk.rɑː.t ɑː.wɛl.lɛ.rɛ .tɛm.ploː |
| 2.169 | Muta cum Liquida | ex illō fluere ac retrō sublāpsa referrī<br>.ɛk.s ɪl.loː .flʊ.ɛ.r ɑk .rɛ.troː .sʊb.lɑːp.sɑ .rɛ.fɛr.riː<br>.ɛk.s ɪl.loː .flʊ.ɛ.r ɑk .rɛt.roː .sʊb.lɑːp.sɑ .rɛ.fɛr.riː |

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| 2.170 | Syllabification | spēs danaum frāctae uīrēs āuersa deae mēns<br>.speːs .dɑ.nɑʊm .frɑː.k.tɑɛ .wiː.reː.s ɑː.wɛr.sɑ .dɛ.ɑɛ .meːns<br>.speːs .dɑ.nɑ.ʊm .frɑː.k.tɑɛ .wiː.reː.s ɑː.wɛr.sɑ .dɛ.ɑɛ .meːns |
| 2.211 | Muta cum Liquida | sībila lambēbant linguīs uibrantibus ōra<br>.siː.bɪ.lɑ .lɑm.beː.bɑnt .lɪŋ.gʷiː.s .wɪ.brɑn.tɪ.bʊ.s oː.rɑ<br>.siː.bɪ.lɑ .lɑm.beː.bɑnt .lɪŋ.gʷiː.s .wɪb.rɑn.tɪ.bʊ.s oː.rɑ |
| 2.230 | Muta cum Liquida | lāocoonta ferunt sacrum quī cuspide rōbur<br>.lɑː.ɔ.kɔ.ɔn.tɑ .fɛ.rʊnt .sɑ.krʊm .kʷiː .kʊs.pɪ.dɛ .roː.bʊr<br>.lɑː.ɔ.kɔ.ɔn.tɑ .fɛ.rʊnt .sɑk.rʊm .kʷiː .kʊs.pɪ.dɛ .roː.bʊr |
| 2.239 | Muta cum Liquida | sacra canunt fūnemque manū contingere gaudent<br>.sɑ.krɑ .kɑ.nʊnt .fuː.nɛm.kʷɛ .mɑ.nuː .kɔn.tɪŋ.gɛ.rɛ .gɑʊ.dɛnt<br>.sɑk.rɑ .kɑ.nʊnt .fuː.nɛm.kʷɛ .mɑ.nuː .kɔn.tɪŋ.gɛ.rɛ .gɑʊ.dɛnt |
| 2.245 | Muta cum Liquida | et mōnstrum īnfēlīx sacrātā sistimus arce<br>.ɛt .moːns.tr iːŋ.feː.liːks .sɑ.krɑː.tɑː .sɪs.tɪ.mʊ.s ɑr.kɛ<br>.ɛt .moːns.tr iːŋ.feː.liːks .sɑk.rɑː.tɑː .sɪs.tɪ.mʊ.s ɑr.kɛ |
| 2.274 | Syllabification | ei mihi quālis erat quantum mūtātus ab illō<br>.ɛ.ɪ .mɪ.hɪ .kʷɑː.lɪ.s ɛ.rɑt .kʷɑn.tʊm .muː.tɑː.tʊ.s ɑ.b ɪl.loː<br>.ɛɪ .mɪ.hɪ .kʷɑː.lɪ.s ɛ.rɑt .kʷɑn.tʊm .muː.tɑː.tʊ.s ɑ.b ɪl.loː |
| 2.276 | Syllabification | uel danaum phrygiōs iaculātus puppibus ignīs<br>.wɛl .dɑ.nɑʊm .pʰrʏ.gɪ.oːs .jɑ.kʊ.lɑː.tʊs .pʊp.pɪ.bʊ.s ɪŋ.niːs<br>.wɛl .dɑ.nɑ.ʊm .pʰrʏ.gɪ.oːs .jɑ.kʊ.lɑː.tʊs .pʊp.pɪ.bʊ.s ɪŋ.niːs |
| 2.293 | Muta cum Liquida | sacra suōsque tibī commendat troia penātīs<br>.sɑ.krɑ .sʊ.oːs.kʷɛ .tɪ.biː .kɔm.mɛn.dɑt .trɔj.jɑ .pɛ.nɑː.tiːs<br>.sɑk.rɑ .sʊ.oːs.kʷɛ .tɪ.biː .kɔm.mɛn.dɑt .trɔj.jɑ .pɛ.nɑː.tiːs |
| 2.309 | Syllabification | tum uērō manifesta fidēs danaumque patēscunt<br>.tʊm .weː.roː .mɑ.nɪ.fɛs.tɑ .fɪ.deːs .dɑ.nɑʊm.kʷɛ .pɑ.teːs.kʊnt<br>.tʊm .weː.roː .mɑ.nɪ.fɛs.tɑ .fɪ.deːs .dɑ.nɑ.ʊm.kʷɛ .pɑ.teːs.kʊnt |
| 2.319 | Muta cum Liquida | panthūs othryadēs arcis phoebīque sacerdōs<br>.pɑn.tʰuː.s ɔ.tʰrʏ.ɑ.deː.s ɑr.kɪs .pʰɔɛ.biː.kʷɛ .sɑ.kɛr.doːs<br>.pɑn.tʰuː.s ɔtʰ.rʏ.ɑ.deː.s ɑr.kɪs .pʰɔɛ.biː.kʷɛ .sɑ.kɛr.doːs |
| 2.320 | Muta cum Liquida | sacra manū uictōsque deōs paruumque nepōtem<br>.sɑ.krɑ .mɑ.nuː .wɪk.toːs.kʷɛ .dɛ.oːs .pɑr.wʊm.kʷɛ .nɛ.poː.tɛm<br>.sɑk.rɑ .mɑ.nuː .wɪk.toːs.kʷɛ .dɛ.oːs .pɑr.wʊm.kʷɛ .nɛ.poː.tɛm |
| 2.336 | Muta cum Liquida | tālibus othryadae dictīs et nūmine dīuum<br>.tɑː.lɪ.bʊ.s ɔ.tʰrʏ.ɑ.dɑɛ .dɪk.tiː.s ɛt .nuː.mɪ.nɛ .diː.wʊm<br>.tɑː.lɪ.bʊ.s ɔtʰ.rʏ.ɑ.dɑɛ .dɪk.tiː.s ɛt .nuː.mɪ.nɛ .diː.wʊm |
| 2.369 | Long in Position | lūctus ubīque pauor et plūrima mortis imāgō<br>.luːk.tʊ.s ʊ.biː.kʷɛ .pɑ.wɔ.r ɛt .pluː.rɪ.mɑ .mɔr.tɪ.s ɪ.mɑː.goː<br>.luːk.tʊ.s ʊ.biː.kʷɛ .pɑ.wɔr. ɛt .pluː.rɪ.mɑ .mɔr.tɪ.s ɪ.mɑː.goː |
| 2.370 | Syllabification | prīmus sē danaum magnā comitante cateruā<br>.priː.mʊs .seː .dɑ.nɑʊm .mɑŋ.nɑː .kɔ.mɪ.tɑn.tɛ .kɑ.tɛr.wɑː<br>.priː.mʊs .seː .dɑ.nɑ.ʊm .mɑŋ.nɑː .kɔ.mɪ.tɑn.tɛ .kɑ.tɛr.wɑː |

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| 2.378 | Muta cum Liquida | obstipuit retrōque pedem cum uōce repressit<br>.ɔp.stɪ.pʊ.ɪt .rɛ.troː.kʷɛ .pɛ.dɛm .kʊm .woː.kɛ .rɛ.prɛs.sɪt<br>.ɔp.stɪ.pʊ.ɪt .rɛt.roː.kʷɛ .pɛ.dɛm .kʊm .woː.kɛ .rɛ.prɛs.sɪt |
| 2.389 | Syllabification | mūtēmus clipeōs danaumque īnsignia nōbīs<br>.muː.teː.mʊs .klɪ.pɛ.oː.s .dɑ.nɑʊm.kʷ iː.n.sɪŋ.nɪ.ɑ .noː.biː.s<br>.muː.teː.mʊs .klɪ.pɛ.oː.s .dɑ.nɑ.ʊm.kʷ iː.n.sɪŋ.nɪ.ɑ .noː.biː.s |
| 2.398 | Syllabification | cōnserimus multōs danaum dēmittimus orcō<br>.koː.n.sɛ.rɪ.mʊs .mʊl.toː.s .dɑ.nɑʊm .deː.mɪt.tɪ.mʊ.s ɔr.koː<br>.koː.n.sɛ.rɪ.mʊs .mʊl.toː.s .dɑ.nɑ.ʊm .deː.mɪt.tɪ.mʊ.s ɔr.koː |
| 2.411 | Long in Position | nostrōrum obruimur oriturque miserrima caedēs<br>.nɔs.troː.r ɔb.rʊ.ɪ.mʊ.r ɔ.rɪ.tʊr.kʷɛ .mɪ.sɛr.rɪ.mɑ .kɑɛ.deː.s<br>.nɔs.troː.r ɔb.rʊ.ɪ.mʊr. ɔ.rɪ.tʊr.kʷɛ .mɪ.sɛr.rɪ.mɑ .kɑɛ.deː.s |
| 2.414 | Syllabification | undique collēctī inuādunt ācerrimus aiāx<br>.ʊn.dɪ.kʷɛ .kɔl.leː.k.t ɪn.wɑː.dʊn.t ɑː.kɛr.rɪ.mʊ.s ɑ.ɪ.ɑː.ks<br>.ʊn.dɪ.kʷɛ .kɔl.leː.k.t ɪn.wɑː.dʊn.t ɑː.kɛr.rɪ.mʊ.s ɑɪ.ɑː.ks |
| 2.415 | Muta cum Liquida | et geminī atrīdae dolopumque exercitus omnis<br>.ɛt .gɛ.mɪ.n ɑ.triː.dɑɛ .dɔ.lɔ.pʊm.kʷ ɛk.sɛr.kɪ.tʊ.s ɔm.nɪs<br>.ɛt .gɛ.mɪ.n ɑt.riː.dɑɛ .dɔ.lɔ.pʊm.kʷ ɛk.sɛr.kɪ.tʊ.s ɔm.nɪs |
| 2.433 | Syllabification | uītāuisse uicēs danaum et sī fāta fuissent<br>.wiː.tɑː.wɪs.sɛ .wɪ.keː.s .dɑ.nɑ ɛt .siː .fɑː.tɑ .fʊ.ɪs.sɛnt<br>.wiː.tɑː.wɪs.sɛ .wɪ.keː.s .dɑ.nɑ. ɛt .siː .fɑː.tɑ .fʊ.ɪs.sɛnt |
| 2.442 | Synizesis | haerent parietibus scālae postīsque sub ipsōs<br>.hɑɛ.rɛnt .pɑ.rɪ.ɛ.tɪ.bʊs .skɑː.lɑɛ .pɔs.tiː.s.kʷɛ .sʊ.b ɪp.soː.s<br>.hɑɛ.rɛnt .pɑr.jɛ.tɪ.bʊs .skɑː.lɑɛ .pɔs.tiː.s.kʷɛ .sʊ.b ɪp.soː.s |
| 2.462 | Syllabification | et danaum solitae nāuēs et achāica castra<br>.ɛt .dɑ.nɑʊm .sɔ.lɪ.tɑɛ .nɑː.weː.s ɛ.t ɑ.kʰɑː.ɪ.kɑ .kɑs.trɑ<br>.ɛt .dɑ.nɑ.ʊm .sɔ.lɪ.tɑɛ .nɑː.weː.s ɛ.t ɑ.kʰɑː.ɪ.kɑ .kɑs.trɑ |
| 2.466 | Syllabification | cum sonitū trahit et danaum super agmina lātē<br>.kʊm .sɔ.nɪ.tuː .trɑ.hɪ.t ɛt .dɑ.nɑʊm .sʊ.pɛ.r ɑg.mɪ.nɑ .lɑː.teː<br>.kʊm .sɔ.nɪ.tuː .trɑ.hɪ.t ɛt .dɑ.nɑ.ʊm .sʊ.pɛ.r ɑg.mɪ.nɑ .lɑː.teː |
| 2.481 | Transcription | aerātōs iamque excīsā trabe firma cauāuit<br>.ɑɛ.rɑː.toː.s .jɑm.kʷ ɛks.kiː.sɑː .trɑ.bɛ .fɪr.mɑ .kɑ.wɑː.ʊ.ɪt<br>.ɑɛ.rɑː.toː.s .jɑm.kʷ ɛks.kiː.sɑː .trɑ.bɛ .fɪr.mɑ .kɑ.wɑː.wɪt |
| 2.492 | Synizesis | custōdēs sufferre ualent labat ariete crēbrō<br>.kʊs.toː.deː.s .sʊf.fɛr.rɛ .wɑ.lɛnt .lɑ.bɑ.t ɑ.rɪ.ɛ.tɛ .kreː.broː<br>.kʊs.toː.deː.s .sʊf.fɛr.rɛ .wɑ.lɛnt .lɑ.bɑ.t ɑr.jɛ.tɛ .kreː.broː |
| 2.505 | Vowel Length | procubuēre tenent danaī quā dēficit ignis<br>.prɔ.kʊ.bʊ.eː.rɛ .tɛ.nɛnt .dɑ.nɑ.iː .kʷɑː .deː.fɪ.kɪ.t ɪŋ.nɪs<br>.proː.kʊ.bʊ.eː.rɛ .tɛ.nɛnt .dɑ.nɑ.iː .kʷɑː .deː.fɪ.kɪ.t ɪŋ.nɪs |
| 2.509 | Synizesis | arma diū senior dēsuēta trementibus aeuō<br>.ɑr.mɑ .dɪ.uː .sɛ.nɪ.ɔr .deː.sʊ.eː.tɑ .trɛ.mɛn.tɪ.bʊ.s ɑɛ.woː<br>.ɑr.mɑ .dɪ.uː .sɛ.nɪ.ɔr .deː.sweː.tɑ .trɛ.mɛn.tɪ.bʊ.s ɑɛ.woː |

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|---|---|---|
| 2.525 | Muta cum Liquida | ad sēsē et sacrā longaeuum in sēde locāuit<br>.ɑd .seː.s ɛt .sɑ.krɑː .lɔŋ.gɑɛ.w ɪn .seː.dɛ .lɔ.kɑː.wɪt<br>.ɑd .seː.s ɛt .sɑk.rɑː .lɔŋ.gɑɛ.w ɪn .seː.dɛ .lɔ.kɑː.wɪt |
| 2.536 | Vowel Length | dī si qua est caelō pietās quae tālia cūret<br>.diː .sɪ .kʷ ɛst .kɑɛ.loː .pɪ.ɛ.tɑː.s .kʷɑɛ .tɑː.lɪ.ɑ .kuː.rɛt<br>.diː .siː .kʷ ɛst .kɑɛ.loː .pɪ.ɛ.tɑː.s .kʷɑɛ .tɑː.lɪ.ɑ .kuː.rɛt |
| 2.563 | Long in Position | et dīrepta domus et paruī cāsus iūlī<br>.ɛt .diː.rɛp.tɑ .dɔ.mʊ.s ɛt .pɑr.wiː .kɑː.sʊ.s ɪ.uː.liː<br>.ɛt .diː.rɛp.tɑ .dɔ.mʊs. ɛt .pɑr.wiː .kɑː.sʊ.s ɪ.uː.liː |
| 2.572 | Syllabification | et danaum poenam et dēsertī coniugis īrās<br>.ɛt .dɑ.nɑʊm .pɔɛ.n ɛt .deː.sɛr.tiː .kɔn.jʊ.gɪ.s iː.rɑː.s<br>.ɛt .dɑ.nɑ.ʊm .pɔɛ.n ɛt .deː.sɛr.tiː .kɔn.jʊ.gɪ.s iː.rɑː.s |
| 2.628 | Muta cum Liquida | ēruere agricolae certātim illa ūsque minātur<br>.eː.rʊ.ɛ.r ɑ.grɪ.kɔ.lɑɛ .kɛr.tɑː.t ɪl.l uː.s.kʷɛ .mɪ.nɑː.tʊr<br>.eː.rʊ.ɛ.r ɑg.rɪ.kɔ.lɑɛ .kɛr.tɑː.t ɪl.l uː.s.kʷɛ .mɪ.nɑː.tʊr |
| 2.663 | Muta cum Liquida | nātum ante ōra patris patrem quī obtruncat ad ārās<br>.nɑː.t ɑn.t oː.rɑ .pɑ.trɪs .pɑ.trɛm .kʷ ɔp.trʊŋ.kɑ.t ɑ.d ɑː.rɑː.s<br>.nɑː.t ɑn.t oː.rɑ .pɑ.trɪs .pɑt.rɛm .kʷ ɔp.trʊŋ.kɑ.t ɑ.d ɑː.rɑː.s |
| 2.666 | Muta cum Liquida | ascanium patremque meum iuxtāque creūsam<br>.ɑs.kɑ.nɪ.ʊm .pɑ.trɛm.kʷɛ .mɛ.ʊm .jʊks.tɑː.kʷɛ .krɛ.uː.sɑm<br>.ɑs.kɑ.nɪ.ʊm .pɑt.rɛm.kʷɛ .mɛ.ʊm .jʊks.tɑː.kʷɛ .krɛ.uː.sɑm |
| 2.674 | Vowel Length | haerebat paruumque patrī tendēbat iūlum<br>.hɑɛ.rɛ.bɑt .pɑr.wʊm.kʷɛ .pɑ.triː .tɛn.deː.bɑ.t ɪ.uː.lʊm<br>.hɑɛ.reː.bɑt .pɑr.wʊm.kʷɛ .pɑ.triː .tɛn.deː.bɑ.t ɪ.uː.lʊm |
| 2.717 | Muta cum Liquida | tū genitor cape sacra manū patriōsque penātīs<br>.tuː .gɛ.nɪ.tɔr .kɑ.pɛ .sɑ.krɑ .mɑ.nuː .pɑ.trɪ.oː.s.kʷɛ .pɛ.nɑː.tiːs<br>.tuː .gɛ.nɪ.tɔr .kɑ.pɛ .sɑk.rɑ .mɑ.nuː .pɑ.trɪ.oː.s.kʷɛ .pɛ.nɑː.tiːs |
| 2.727 | Transcription | tēla neque aduersō glomerātī exāmine graī<br>.teː.lɑ .nɛ.kʷ ɑd.wɛr.soː .glɔ.mɛ.rɑː.t ɛk.sɑː.mɪ.nɛ .grɑ.iː<br>.teː.lɑ .nɛ.kʷ ɑd.wɛr.soː .glɔ.mɛ.rɑː.t ɛk.sɑː.mɪ.nɛ .grɑj.jiː |
| 2.743 | Vowel Length | uēnimus hīc demum collēctīs omnibus ūna<br>.weː.nɪ.mʊ.s hiːk .dɛ.mʊm .kɔl.leːk.tiː.s ɔm.nɪ.bʊ.s uː.nɑ<br>.weː.nɪ.mʊ.s hiːk .deː.mʊm .kɔl.leːk.tiː.s ɔm.nɪ.bʊ.s uː.nɑ |
| 2.745 | Hypermetric Verse | quem nōn incūsāuī āmēns hominumque deōrumque<br>.kʷɛm .noː.n ɪŋ.kuː.sɑː.w ɑː.meːn.s hɔ.mɪ.nʊm.kʷɛ .dɛ.oː.rʊm.kʷɛ<br>.kʷɛm .noː.n ɪŋ.kuː.sɑː.w ɑː.meːn.s hɔ.mɪ.nʊm.kʷɛ .dɛ.oː.rʊmkʷ |
| 2.753 | Muta cum Liquida | quā gressum extuleram repetō et uestīgia retrō<br>.kʷɑː .grɛs.s ɛks.tʊ.lɛ.rɑm .rɛ.pɛ.t ɛt .wɛs.tiː.gɪ.ɑ .rɛ.troː<br>.kʷɑː .grɛs.s ɛks.tʊ.lɛ.rɑm .rɛ.pɛ.t ɛt .wɛs.tiː.gɪ.ɑ .rɛt.roː |
| 2.763 | Synizesis | praedam adseruābant hūc undique trōia gaza<br>.prɑɛ.d ɑt.sɛr.wɑː.bɑn.t huː.k ʊn.dɪ.kʷɛ .troːj.jɑ .gɑz.zɑ<br>.prɑɛ.d ɑt.sɛr.wɑː.bɑn.t huː.k ʊn.dɪ.kʷɛ .troː.ɪ.ɑ .gɑz.zɑ |

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|---|---|---|
| 2.782 | Muta cum Liquida | inter opīma uirum lēnī fluit agmine thybris<br>.ɪn.tɛ.r ɔ.pi:.mɑ .wɪ.rʊm .le:.ni: .flʊ.ɪ.t ɑg.mɪ.nɛ .tʰʏ.brɪs<br>.ɪn.tɛ.r ɔ.pi:.mɑ .wɪ.rʊm .le:.ni: .flʊ.ɪ.t ɑg.mɪ.nɛ .tʰʏb.rɪs |
| 2.786 | Transcription | aspiciam aut graīs seruītum mātribus ībō<br>.ɑs.pɪ.kɪ. ɑʊt .grɑ.i:s .sɛr.wi:.tʊm .mɑ:.trɪ.bʊ.s i:.bo:<br>.ɑs.pɪ.kɪ. ɑʊt .graj.ji:s .sɛr.wi:.tʊm .mɑ:.trɪ.bʊ.s i:.bo: |
| 3.019 | Muta cum Liquida | sacra diōnaeae mātrī dīuīsque ferēbam<br>.sɑ.krɑ .dɪ.o:.nɑɛ.ɑɛ .mɑ:.tri: .di:.wi:s.kʷɛ .fɛ.re:.bɑm<br>.sɑk.rɑ .dɪ.o:.nɑɛ.ɑɛ .mɑ:.tri: .di:.wi:s.kʷɛ .fɛ.re:.bɑm |
| 3.057 | Muta cum Liquida | aurī sacra famēs postquam pauor ossa relīquit<br>.ɑʊ.ri: .sɑ.krɑ .fɑ.me:s .pɔst.kʷɑm .pɑ.wɔ.r ɔs.sɑ .rɛ.li:.kʷɪt<br>.ɑʊ.ri: .sɑk.rɑ .fɑ.me:s .pɔst.kʷɑm .pɑ.wɔ.r ɔs.sɑ .rɛ.li:.kʷɪt |
| 3.067 | Muta cum Liquida | sanguinis et sacrī paterās animamque sepulcrō<br>.sɑŋ.gʷɪ.nɪ.s ɛt .sɑ.kri: .pɑ.tɛ.rɑ:.s ɑ.nɪ.mɑm.kʷɛ .sɛ.pʊl.kro:<br>.sɑŋ.gʷɪ.nɪ.s ɛt .sɑk.ri: .pɑ.tɛ.rɑ:.s ɑ.nɪ.mɑm.kʷɛ .sɛ.pʊl.kro: |
| 3.068 | Muta cum Liquida | condimus et magnā suprēmum uōce ciēmus<br>.kɔn.dɪ.mʊ.s ɛt .mɑŋ.nɑ: .sʊ.pre:.mʊm .wo:.kɛ .kɪ.e:.mʊs<br>.kɔn.dɪ.mʊ.s ɛt .mɑŋ.nɑ: .sʊp.re:.mʊm .wo:.kɛ .kɪ.e:.mʊs |
| 3.073 | Muta cum Liquida | sacra marī colitur mediō grātissima tellūs<br>.sɑ.krɑ .mɑ.ri: .kɔ.lɪ.tʊr .mɛ.dɪ.o: .grɑ:.tɪs.sɪ.mɑ .tɛl.lu:s<br>.sɑk.rɑ .mɑ.ri: .kɔ.lɪ.tʊr .mɛ.dɪ.o: .grɑ:.tɪs.sɪ.mɑ .tɛl.lu:s |
| 3.074 | Hiatus | nēreidum mātrī et neptūnō aegaeō<br>.ne:.rɛ.ɪ.dʊm .mɑ:.tr ɛt .nɛp.tu:.n ɑɛ.gɑɛ.o:<br>.ne:.rɛ.ɪ.dʊm .mɑ:.tri: .ɛt .nɛp.tu:.no: .ɑɛ.gɑɛ.o: |
| 3.081 | Muta cum Liquida | uittīs et sacrā redimītus tempora laurō<br>.wɪt.ti:.s ɛt .sɑ.krɑ: .rɛ.dɪ.mi:.tʊs .tɛm.pɔ.rɑ .lɑʊ.ro:<br>.wɪt.ti:.s ɛt .sɑk.rɑ: .rɛ.dɪ.mi:.tʊs .tɛm.pɔ.rɑ .lɑʊ.ro: |
| 3.087 | Syllabification | pergama rēliquiās danaum atque immītis achillī<br>.pɛr.gɑ.mɑ .re:.lɪ.kʷɪ.ɑ:s .dɑ.nɑ ɑt.kʷ ɪm.mi:.tɪ.s ɑ.kʰɪl.li:<br>.pɛr.gɑ.mɑ .re:.lɪ.kʷɪ.ɑ:s .dɑ.nɑ. ɑt.kʷ ɪm.mi:.tɪ.s ɑ.kʰɪl.li: |
| 3.091 | Long in Position | līminaque laurusque deī tōtusque mouērī<br>.li:.mɪ.nɑ.kʷɛ .lɑʊ.rʊs.kʷɛ .dɛ.i: .to:.tʊs.kʷɛ .mɔ.we:.ri:<br>.li:.mɪ.nɑ.kʷɛ: .lɑʊ.rʊs.kʷɛ .dɛ.i: .to:.tʊs.kʷɛ .mɔ.we:.ri: |
| 3.112 | Long in Position | īdaeumque nemus hinc fīda silentia sacrīs<br>.i:.dɑɛ.ʊm.kʷɛ .nɛ.mʊ.s hɪŋk .fi:.dɑ .sɪ.lɛn.tɪ.ɑ .sɑ.kri:s<br>.i:.dɑɛ.ʊm.kʷɛ .nɛ:.mʊ.s hɪŋk .fi:.dɑ .sɪ.lɛn.tɪ.ɑ .sɑ.kri:s |
| 3.120 | Muta cum Liquida | nigram hiemī pecudem zephyrīs fēlīcibus albam<br>.nɪ.gr hɪ.ɛ.mi: .pɛ.kʊ.dɛm .zɛ.pʰʏ.ri:s .fe:.li:.kɪ.bʊ.s ɑl.bɑm<br>.nɪg.r hɪ.ɛ.mi: .pɛ.kʊ.dɛm .zɛ.pʰʏ.ri:s .fe:.li:.kɪ.bʊ.s ɑl.bɑm |
| 3.127 | Muta cum Liquida | cycladas et crēbrīs legimus freta cōncita terrīs<br>.kʏ.klɑ.dɑ.s ɛt .kre:.bri:s .lɛ.gɪ.mʊs .frɛ.tɑ .ko:ŋ.kɪ.tɑ .tɛr.ri:s<br>.kʏk.lɑ.dɑ.s ɛt .kre:.bri:s .lɛ.gɪ.mʊs .frɛ.tɑ .ko:ŋ.kɪ.tɑ .tɛr.ri:s |

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|---|---|---|
| 3.136 | Synizesis | cōnūbiīs aruīsque nouīs operāta iuuentūs<br>.koː.nuː.bɪ.iː.s ɑr.wiː.s.kʷɛ .nɔ.wiː.s ɔ.pɛ.rɑː.tɑ .jʊ.wɛn.tuː.s<br>.koː.nuːb.jiː.s ɑr.wiː.s.kʷɛ .nɔ.wiː.s ɔ.pɛ.rɑː.tɑ .jʊ.wɛn.tuː.s |
| 3.141 | Muta cum Liquida | corpora tum sterilīs exūrere sīrius agrōs<br>.kɔr.pɔ.rɑ .tʊm s.tɛ.rɪ.liː.s ɛk.suː.rɛ.rɛ .siː.rɪ.ʊ.s ɑ.groː.s<br>.kɔr.pɔ.rɑ .tʊm s.tɛ.rɪ.liː.s ɛk.suː.rɛ.rɛ .siː.rɪ.ʊ.s ɑg.roː.s |
| 3.148 | Muta cum Liquida | effigiēs sacrae dīuum phrygiīque penātēs<br>.ɛf.fɪ.gɪ.eːs .sɑ.krɑɛ .diː.wʊm .pʰrʏ.gɪ.iː.kʷɛ .pɛ.nɑː.teːs<br>.ɛf.fɪ.gɪ.eːs .sɑk.rɑɛ .diː.wʊm .pʰrʏ.gɪ.iː.kʷɛ .pɛ.nɑː.teːs |
| 3.161 | Synizesis | mūtandae sēdēs nōn haec tibi līmora suāsit<br>.muː.tɑn.dɑɛ .seː.deːs .noː.n hɑɛk .tɪ.bɪ .liː.tɔ.rɑ .sʊ.ɑː.sɪt<br>.muː.tɑn.dɑɛ .seː.deːs .noː.n hɑɛk .tɪ.bɪ .liː.tɔ.rɑ .swɑː.sɪt |
| 3.163 | Transcription | est locus hesperiam graī cognōmine dīcunt<br>.ɛst .lɔ.kʊ.s hɛs.pɛ.rɪ.ɑm .grɑ.iː .kɔŋ.noː.mɪ.nɛ .diː.kʊnt<br>.ɛst .lɔ.kʊ.s hɛs.pɛ.rɪ.ɑm .grɑj.jiː .kɔŋ.noː.mɪ.nɛ .diː.kʊnt |
| 3.194 | Muta cum Liquida | tum mihi caeruleus suprā caput astitit imber<br>.tʊm .mɪ.hɪ .kɑɛ.rʊ.lɛ.ʊs .sʊ.prɑː .kɑ.pʊ.t ɑs.tɪ.tɪ.t ɪm.bɛr<br>.tʊm .mɪ.hɪ .kɑɛ.rʊ.lɛ.ʊs .sʊp.rɑː .kɑ.pʊ.t ɑs.tɪ.tɪ.t ɪm.bɛr |
| 3.195 | Muta cum Liquida | noctem hiememque ferēns et inhorruit unda tenebrīs<br>.nɔk.t hɪ.ɛ.mɛm.kʷɛ .fɛ.reːn.s ɛ.t ɪ.nhɔr.rʊ.ɪ.t ʊn.dɑ .tɛ.nɛ.briːs<br>.nɔk.t hɪ.ɛ.mɛm.kʷɛ .fɛ.reːn.s ɛ.t ɪ.nhɔr.rʊ.ɪ.t ʊn.dɑ .tɛ.nɛb.riːs |
| 3.211 | Semihiatus | īnsulae īoniō in magnō quās dīra celaenō<br>.iːn.sʊ.l iː.ɔ.nɪ. ɪm .mɑŋ.noː .kʷɑːs .diː.rɑ .kɛ.lɑɛ.noː<br>.iːn.sʊ.lɑ .iː.ɔ.nɪ. ɪm .mɑŋ.noː .kʷɑːs .diː.rɑ .kɛ.lɑɛ.noː |
| 3.221 | Muta cum Liquida | caprigenumque pecus nūllō custōde per herbās<br>.kɑ.prɪ.gɛ.nʊm.kʷɛ .pɛ.kʊs .nuːl.loː .kʊs.toː.dɛ .pɛ.r hɛr.bɑːs<br>.kɑp.rɪ.gɛ.nʊm.kʷɛ .pɛ.kʊs .nuːl.loː .kʊs.toː.dɛ .pɛ.r hɛr.bɑːs |
| 3.225 | Vowel Length | at subitae horrificō lāpsū de montibus adsunt<br>.ɑt .sʊ.bɪ.t hɔr.rɪ.fɪ.koː .lɑːp.suː .dɛ .mɔn.tɪ.bʊ.s ɑt.sʊnt<br>.ɑt .sʊ.bɪ.t hɔr.rɪ.fɪ.koː .lɑːp.suː .deː .mɔn.tɪ.bʊ.s ɑt.sʊnt |
| 3.232 | Muta cum Liquida | rūrsum ex dīuersō caelī caecīsque latebrīs<br>.ruːr.s ɛks .diː.wɛr.soː .kɑɛ.liː .kɑɛ.kiː.s.kʷɛ .lɑ.tɛ.briːs<br>.ruːr.s ɛks .diː.wɛr.soː .kɑɛ.liː .kɑɛ.kiː.s.kʷɛ .lɑ.tɛb.riːs |
| 3.241 | Muta cum Liquida | obscēnās pelagī ferrō foedāre uolucrīs<br>.ɔps.keː.nɑː.s .pɛ.lɑ.giː .fɛr.roː .fɔɛ.dɑː.rɛ .wɔ.lʊ.kriːs<br>.ɔps.keː.nɑː.s .pɛ.lɑ.giː .fɛr.roː .fɔɛ.dɑː.rɛ .wɔ.lʊk.riːs |
| 3.262 | Muta cum Liquida | sīue deae seu sint dīrae obscēnaeque uolucrēs<br>.siː.wɛ .dɛ.ɑɛ .sɛʊ .sɪnt .diː.r ɔps.keː.nɑɛ.kʷɛ .wɔ.lʊ.kreːs<br>.siː.wɛ .dɛ.ɑɛ .sɛʊ .sɪnt .diː.r ɔps.keː.nɑɛ.kʷɛ .wɔ.lʊk.reːs |
| 3.273 | Muta cum Liquida | et terram altrīcem saeuī exsecrāmur ulixī<br>.ɛt .tɛr.r ɑl.triː.kɛm .sɑɛ.w ɛks.sɛ.krɑː.mʊ.r ʊ.lɪk.siː<br>.ɛt .tɛr.r ɑl.triː.kɛm .sɑɛ.w ɛks.sɛk.rɑː.mʊ.r ʊ.lɪk.siː |

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|---|---|---|
| 3.305 | Muta cum Liquida | et geminās causam lacrimīs sacrāuerat ārās<br>.ɛt .gɛ.mɪ.nɑː.s .kɑʊ.sɑm .lɑ.krɪ.miː.s .sɑ.krɑː.wɛ.rɑ.t ɑː.rɑː.s<br>.ɛt .gɛ.mɪ.nɑː.s .kɑʊ.sɑm .lɑ.krɪ.miː.s .sɑk.rɑː.wɛ.rɑ.t ɑː.rɑː.s |
| 3.306 | Synizesis | ut mē cōnspexit uenientem et trōia circum<br>.ʊt .meː .koː.ns.pɛk.sɪt .wɛ.nɪ.ɛn.t ɛt .troː.j.jɑ .kɪr.kʊm<br>.ʊt .meː .koː.ns.pɛk.sɪt .wɛ.nɪ.ɛn.t ɛt .troː.ɪ.ɑ .kɪr.kʊm |
| 3.363 | Synizesis | rēligiō et cūnctī suāsērunt nūmine dīuī<br>.reː.lɪ.gɪ. ɛt .kuːŋk.tiː .sʊ.ɑː.seː.rʊnt .nuː.mɪ.nɛ .diː.wiː<br>.reː.lɪ.gɪ. ɛt .kuːŋk.tiː .swɑː.seː.rʊnt .nuː.mɪ.nɛ .diː.wiː |
| 3.365 | Synizesis | sōla nouum dictūque nefās harpyia celaenō<br>.soː.lɑ .nɔ.wʊm .dɪk.tuː.kʷɛ .nɛ.fɑː.s hɑr.pʏ.ɪ.ɑ .kɛ.lɑɛ.noː<br>.soː.lɑ .nɔ.wʊm .dɪk.tuː.kʷɛ .nɛ.fɑː.s hɑr.pʏɪ.ɑ .kɛ.lɑɛ.noː |
| 3.371 | Muta cum Liquida | sacrātī capitis mēque ad tua līmina phoebe<br>.sɑ.krɑː.tiː .kɑ.pɪ.tɪs .meː.kʷ ɑd .tʊ.ɑ .liː.mɪ.nɑ .pʰɔɛ.bɛ<br>.sɑk.rɑː.tiː .kɑ.pɪ.tɪs .meː.kʷ ɑd .tʊ.ɑ .liː.mɪ.nɑ .pʰɔɛ.bɛ |
| 3.398 | Transcription | effuge cūncta malīs habitantur moenia graīs<br>.ɛf.fʊ.gɛ .kuːŋk.tɑ .mɑ.liː.s hɑ.bɪ.tɑn.tʊr .mɔɛ.nɪ.ɑ .grɑ.iː.s<br>.ɛf.fʊ.gɛ .kuːŋk.tɑ .mɑ.liː.s hɑ.bɪ.tɑn.tʊr .mɔɛ.nɪ.ɑ .grɑj.jiː.s |
| 3.399 | Muta cum Liquida | hīc et nārycīī posuērunt moenia locrī<br>.hiː.k ɛt .nɑː.rʏ.kɪ.iː .pɔ.sʊ.eː.rʊnt .mɔɛ.nɪ.ɑ .lɔ.kriː<br>.hiː.k ɛt .nɑː.rʏ.kɪ.iː .pɔ.sʊ.eː.rʊnt .mɔɛ.nɪ.ɑ .lɔk.riː |
| 3.408 | Muta cum Liquida | hunc sociī mōrem sacrōrum hunc ipse tenētō<br>.hʊŋk .sɔ.kɪ.iː .moː.rɛm .sɑ.kroː.r hʊŋ.k ɪp.sɛ .tɛ.neː.toː<br>.hʊŋk .sɔ.kɪ.iː .moː.rɛm .sɑk.roː.r hʊŋ.k ɪp.sɛ .tɛ.neː.toː |
| 3.416 | Muta cum Liquida | dissiluisse ferunt cum prōtinus utraque tellūs<br>.dɪs.sɪ.lʊ.ɪs.sɛ .fɛ.rʊnt .kʊm .proː.tɪ.nʊ.s ʊ.trɑ.kʷɛ .tɛl.luː.s<br>.dɪs.sɪ.lʊ.ɪs.sɛ .fɛ.rʊnt .kʊm .proː.tɪ.nʊ.s ʊt.rɑ.kʷɛ .tɛl.luː.s |
| 3.424 | Muta cum Liquida | at scyllam caecīs cohibet spēlunca latebrīs<br>.ɑt .skʏl.lɑm .kɑɛ.kiː.s .kɔ.hɪ.bɛt .speː.lʊŋ.kɑ .lɑ.tɛ.briː.s<br>.ɑt .skʏl.lɑm .kɑɛ.kiː.s .kɔ.hɪ.bɛt .speː.lʊŋ.kɑ .lɑ.tɛb.riː.s |
| 3.464 | Hiatus | dōna dehinc aurō grauia ac sectō elephantō<br>.doː.nɑ .dɛ.hɪŋ.k ɑʊ.roː .grɑ.wɪ. ɑk .sɛk.t ɛ.lɛ.pʰɑn.toː<br>.doː.nɑ .dɛ.hɪŋ.k ɑʊ.roː .grɑ.wɪ. ɑk .sɛk.toː .ɛ.lɛ.pʰɑn.toː |
| 3.496 | Muta cum Liquida | arua neque ausoniae semper cēdentia retrō<br>.ɑr.wɑ .nɛ.kʷ ɑʊ.sɔ.nɪ.ɑɛ .sɛm.pɛr .keː.dɛn.tɪ.ɑ .rɛ.troː<br>.ɑr.wɑ .nɛ.kʷ ɑʊ.sɔ.nɪ.ɑɛ .sɛm.pɛr .keː.dɛn.tɪ.ɑ .rɛt.roː |
| 3.499 | Transcription | auspiciīs et quae fuerit minus obuia graīs<br>.ɑʊs.pɪ.kɪ.iː.s ɛt .kʷɑɛ .fʊ.ɛ.rɪt .mɪ.nʊ.s ɔb.wɪ.ɑ .grɑ.iː.s<br>.ɑʊs.pɪ.kɪ.iː.s ɛt .kʷɑɛ .fʊ.ɛ.rɪt .mɪ.nʊ.s ɔb.wɪ.ɑ .grɑj.jiː.s |
| 3.500 | Muta cum Liquida | sī quandō thybrim uīcīnaque thybridis arua<br>.siː .kʷɑn.doː .tʰʏ.brɪm .wiː.kiː.nɑ.kʷɛ .tʰʏ.brɪ.dɪ.s ɑr.wɑ<br>.siː .kʷɑn.doː .tʰʏ.brɪm .wiː.kiː.nɑ.kʷɛ .tʰʏb.rɪ.dɪ.s ɑr.wɑ |

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|---|---|---|
| 3.517 | Vowel Length | armātumque aurō circumspicit ōriōna<br>.ɑr.mɑː.tʊm.kʷ ɑʊ.roː .kɪr.kʊms.pɪ.kɪ.t oː.rɪ.oː.nɑ<br>.ɑr.mɑː.tʊm.kʷ ɑʊ.roː .kɪr.kʊms.pɪ.kɪ.t oː.riː.oː.nɑ |
| 3.541 | Synizesis | sed tamen īdem ōlim currū succēdere suētī<br>.sɛd .tɑ.mɛ.n iː.d oː.lɪm .kʊr.ruː .sʊk.keː.dɛ.rɛ .sʊ.eː.tiː<br>.sɛd .tɑ.mɛ.n iː.d oː.lɪm .kʊr.ruː .sʊk.keː.dɛ.rɛ .sweː.tiː |
| 3.542 | Muta cum Liquida | quadripedēs et frēna iugō concordia ferre<br>.kʷɑ.drɪ.pɛ.deː.s ɛt .freː.nɑ .jʊ.goː .kɔŋ.kɔr.dɪ.ɑ .fɛr.rɛ<br>.kʷɑd.rɪ.pɛ.deː.s ɛt .freː.nɑ .jʊ.goː .kɔŋ.kɔr.dɪ.ɑ .fɛr.rɛ |
| 3.554 | Muta cum Liquida | tum procul ē flūctū trīnacria cernitur aetna<br>.tʊm .prɔ.kʊ.l eː .fluː.k.tuː .triː.nɑ.krɪ.ɑ .kɛr.nɪ.tʊ.r ɑɛt.nɑ<br>.tʊm .prɔ.kʊ.l eː .fluː.k.tuː .triː.nɑk.rɪ.ɑ .kɛr.nɪ.tʊ.r ɑɛt.nɑ |
| 3.569 | Muta cum Liquida | ignārīque uiae cyclōpum adlābimur ōrīs<br>.ɪŋ.nɑː.riː.kʷɛ .wɪ.ɑɛ .kʏ.kloː.p ɑd.lɑː.bɪ.mʊ.r oː.riːs<br>.ɪŋ.nɑː.riː.kʷɛ .wɪ.ɑɛ .kʏk.loː.p ɑd.lɑː.bɪ.mʊ.r oː.riːs |
| 3.596 | Synizesis | isque ubi dardaniōs habitūs et trōia uīdit<br>.ɪs.kʷ ʊ.bɪ .dɑr.dɑ.nɪ.oː.s hɑ.bɪ.tuː.s ɛt .troːj.jɑ .wiː.dɪt<br>.ɪs.kʷ ʊ.bɪ .dɑr.dɑ.nɪ.oː.s hɑ.bɪ.tuː.s ɛt .troː.ɪ.ɑ .wiː.dɪt |
| 3.606 | Hiatus | sī pereō hominum manibus periisse iuuābit<br>.siː .pɛ.rɛ. hɔ.mɪ.nʊm .mɑ.nɪ.bʊs .pɛ.rɪ.ɪs.sɛ .jʊ.wɑː.bɪt<br>.siː .pɛ.rɛ.oː .hɔ.mɪ.nʊm .mɑ.nɪ.bʊs .pɛ.rɪ.ɪs.sɛ .jʊ.wɑː.bɪt |
| 3.617 | Muta cum Liquida | immemorēs sociī uastō cyclōpis in antrō<br>.ɪm.mɛ.mɔ.reːs .sɔ.kɪ.iː .wɑs.toː .kʏ.kloː.pɪ.s ɪ.n ɑn.troː<br>.ɪm.mɛ.mɔ.reːs .sɔ.kɪ.iː .wɑs.toː .kʏk.loː.pɪ.s ɪ.n ɑn.troː |
| 3.644 | Muta cum Liquida | īnfandī cyclōpes et altīs montibus errant<br>.iːŋ.fɑn.diː .kʏ.kloː.pɛ.s ɛ.t ɑl.tiː.s .mɔn.tɪ.bʊ.s ɛr.rɑnt<br>.iːŋ.fɑn.diː .kʏk.loː.pɛ.s ɛ.t ɑl.tiː.s .mɔn.tɪ.bʊ.s ɛr.rɑnt |
| 3.675 | Muta cum Liquida | at genus ē siluīs cyclōpum et montibus altīs<br>.ɑt .gɛ.nʊ.s eː .sɪl.wiː.s .kʏ.kloː.p ɛt .mɔn.tɪ.bʊ.s ɑl.tiː.s<br>.ɑt .gɛ.nʊ.s eː .sɪl.wiː.s .kʏk.loː.p ɛt .mɔn.tɪ.bʊ.s ɑl.tiː.s |
| 3.684 | Hypermetric Verse | contrā iussa monent helenī scyllamque charybdinque<br>.kɔn.trɑː .jʊs.sɑ .mɔ.nɛn.t hɛ.lɛ.niː s.kʏl.lɑm.kʷɛ .kʰɑ.rʏb.dɪŋ.kʷɛ<br>.kɔn.trɑː .jʊs.sɑ .mɔ.nɛn.t hɛ.lɛ.niː s.kʏl.lɑm.kʷɛ .kʰɑ.rʏb.dɪŋkʷ |
| 3.686 | Muta cum Liquida | nī teneam cursūs certum est dare lintea retrō<br>.niː .tɛ.nɛ.ɑm .kʊr.suː.s .kɛr.t ɛst .dɑ.rɛ .lɪn.tɛ.ɑ .rɛ.troː<br>.niː .tɛ.nɛ.ɑm .kʊr.suː.s .kɛr.t ɛst .dɑ.rɛ .lɪn.tɛ.ɑ .rɛt.roː |
| 4.022 | Geminate | sōlus hic īnflexit sēnsūs animumque labantem<br>.soː.lʊ.s hɪk.k iːŋ.flɛk.sɪt .seːn.suː.s ɑ.nɪ.mʊm.kʷɛ .lɑ.bɑn.tɛm<br>.soː.lʊ.s hɪ.k iːŋ.flɛk.sɪt .seːn.suː.s ɑ.nɪ.mʊm.kʷɛ .lɑ.bɑn.tɛm |
| 4.050 | Muta cum Liquida | tū modo posce deōs ueniam sacrīsque litātīs<br>.tuː .mɔ.dɔ .pɔs.kɛ .dɛ.oː.s .wɛ.nɪ.ɑm .sɑ.kriː.s.kʷɛ .lɪ.tɑː.tiː.s<br>.tuː .mɔ.dɔ .pɔs.kɛ .dɛ.oː.s .wɛ.nɪ.ɑm .sɑk.riː.s.kʷɛ .lɪ.tɑː.tiː.s |

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|---|---|---|
| 4.064 | Long in Position | pectoribus inhiāns spīrantia cōnsulit exta<br>.pɛk.tɔ.rɪ.bʊ.s ɪ.nhɪ.ɑ:ns .spi:.rɑn.tɪ.ɑ .ko:n.sʊ.lɪ.t ɛks.tɑ<br>.pɛk.tɔ.rɪ.bʊs. ɪ.nhɪ.ɑ:ns .spi:.rɑn.tɪ.ɑ .ko:n.sʊ.lɪ.t ɛks.tɑ |
| 4.072 | Muta cum Liquida | nescius illa fugā siluās saltūsque peragrat<br>.nɛs.kɪ.ʊ.s ɪl.lɑ .fʊ.gɑ: .sɪl.wɑ:s .sɑl.tu:s.kʷɛ .pɛ.rɑ.grɑt<br>.nɛs.kɪ.ʊ.s ɪl.lɑ .fʊ.gɑ: .sɪl.wɑ:s .sɑl.tu:s.kʷɛ .pɛ.rɑg.rɑt |
| 4.081 | Synizesis | lūna premit suādentque cadentia sīdera somnōs<br>.lu:.nɑ .prɛ.mɪt .sʊ.ɑ:.dɛnt.kʷɛ .kɑ.dɛn.tɪ.ɑ .si:.dɛ.rɑ .sɔm.no:s<br>.lu:.nɑ .prɛ.mɪt .swɑ:.dɛnt.kʷɛ .kɑ.dɛn.tɪ.ɑ .si:.dɛ.rɑ .sɔm.no:s |
| 4.117 | Vowel Length | uēnātum aenēās ūnaque miserrima dīdō<br>.we:.nɑ:.t ɑɛ.ne:.ɑ:.s u:.nɑ.kʷɛ .mɪ.sɛr.rɪ.mɑ .di:.do:<br>.we:.nɑ:.t ɑɛ.ne:.ɑ:.s u:.nɑ:.kʷɛ .mɪ.sɛr.rɪ.mɑ .di:.do: |
| 4.120 | Muta cum Liquida | hīs ego nigrantem commixtā grandine nimbum<br>.hi:.s ɛ.gɔ .nɪ.grɑn.tɛm .kɔm.mɪks.tɑ: .grɑn.dɪ.nɛ .nɪm.bʊm<br>.hi:.s ɛ.gɔ .nɪg.rɑn.tɛm .kɔm.mɪks.tɑ: .grɑn.dɪ.nɛ .nɪm.bʊm |
| 4.126 | Synizesis | cōnūbiō iungam stabilī propriamque dicābō<br>.ko:.nu:.bɪ.o: .jʊŋ.gɑm s.tɑ.bɪ.li: .prɔ.prɪ.ɑm.kʷɛ .dɪ.kɑ:.bo:<br>.ko:.nu:b.jo: .jʊŋ.gɑm s.tɑ.bɪ.li: .prɔ.prɪ.ɑm.kʷɛ .dɪ.kɑ:.bo: |
| 4.146 | Long in Position | crētesque dryopesque fremunt pictīque agathyrsī<br>.kre:.tɛs.kʷɛ .drʏ.ɔ.pɛs.kʷɛ .frɛ.mʊnt .pɪk.ti:.kʷ ɑ.gɑ.tʰʏr.si:<br>.kre:.tɛs.kʷɛ: .drʏ.ɔ.pɛs.kʷɛ .frɛ.mʊnt .pɪk.ti:.kʷ ɑ.gɑ.tʰʏr.si: |
| 4.152 | Muta cum Liquida | ecce ferae saxī dēiectae uertice caprae<br>.ɛk.kɛ .fɛ.rɑɛ .sɑk.si: .de:.jɛk.tɑɛ .wɛr.tɪ.kɛ .kɑ.prɑɛ<br>.ɛk.kɛ .fɛ.rɑɛ .sɑk.si: .de:.jɛk.tɑɛ .wɛr.tɪ.kɛ .kɑp.rɑɛ |
| 4.163 | Muta cum Liquida | dardaniusque nepōs ueneris dīuersa per agrōs<br>.dɑr.dɑ.nɪ.ʊs.kʷɛ .nɛ.po:s .wɛ.nɛ.rɪs .di:.wɛr.sɑ .pɛ.r ɑ.gro:s<br>.dɑr.dɑ.nɪ.ʊs.kʷɛ .nɛ.po:s .wɛ.nɛ.rɪs .di:.wɛr.sɑ .pɛ.r ɑg.ro:s |
| 4.168 | Synizesis | cōnūbiīs summōque ululārunt uertice nymphae<br>.ko:.nu:.bɪ.i:s .sʊm.mo:.kʷ ʊ.lʊ.lɑ:.rʊnt .wɛr.tɪ.kɛ .nʏm.pʰɑɛ<br>.ko:.nu:b.ji:s .sʊm.mo:.kʷ ʊ.lʊ.lɑ:.rʊnt .wɛr.tɪ.kɛ .nʏm.pʰɑɛ |
| 4.213 | Syllabification | cuique locī lēgēs dedimus cōnūbia nostra<br>.kʊ.ɪ.kʷɛ .lɔ.ki: .le:.ge:s .dɛ.dɪ.mʊs .ko:.nu:.bɪ.ɑ .nɔs.trɑ<br>.kʊɪ.kʷɛ .lɔ.ki: .le:.ge:s .dɛ.dɪ.mʊs .ko:.nu:.bɪ.ɑ .nɔs.trɑ |
| 4.216 | Muta cum Liquida | maeoniā mentum mitrā crīnemque madentem<br>.mɑɛ.ɔ.nɪ.ɑ: .mɛn.tʊm .mɪ.trɑ: .kri:.nɛm.kʷɛ .mɑ.dɛn.tɛm<br>.mɑɛ.ɔ.nɪ.ɑ: .mɛn.tʊm .mɪt.rɑ: .kri:.nɛm.kʷɛ .mɑ.dɛn.tɛm |
| 4.222 | Long in Position | tum sīc mercurium adloquitur ac tālia mandat<br>.tʊm .si:k .mɛr.kʊ.rɪ. ɑd.lɔ.kʷɪ.tʊ.r ɑk .tɑ:.lɪ.ɑ .mɑn.dɑt<br>.tʊm .si:k .mɛr.kʊ.rɪ. ɑd.lɔ.kʷɪ.tʊr. ɑk .tɑ:.lɪ.ɑ .mɑn.dɑt |
| 4.235 | Hiatus | quid struit aut quā spē inimīcā in gente morātur<br>.kʷɪd .strʊ.ɪ.t ɑʊt .kʷɑ: s.p ɪ.nɪ.mi:.k ɪŋ .gɛn.tɛ .mɔ.rɑ:.tʊr<br>.kʷɪd .strʊ.ɪ.t ɑʊt .kʷɑ: s.pe: .ɪ.nɪ.mi:.k ɪŋ .gɛn.tɛ .mɔ.rɑ:.tʊr |

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| 4.240 | Muta cum Liquida | aurea quae sublīmem ālīs sīue aequora suprā<br>.ɑʊ.rɛ.ɑ .kʷɑɛ .sʊb.liː.m ɑː.liː.s .siː.w ɑɛ.kʷɔ.rɑ .sʊ.prɑː<br>.ɑʊ.rɛ.ɑ .kʷɑɛ .sʊb.liː.m ɑː.liː.s .siː.w ɑɛ.kʷɔ.rɑ .sʊp.rɑː |
| 4.301 | Muta cum Liquida | bacchātur quālis commōtīs excita sacrīs<br>.bɑk.kʰɑː.tʊr .kʷɑː.lɪs .kɔm.moː.tiː.s ɛks.kɪ.tɑ .sɑ.kriːs<br>.bɑk.kʰɑː.tʊr .kʷɑː.lɪs .kɔm.moː.tiː.s ɛks.kɪ.tɑ .sɑk.riːs |
| 4.302 | Synizesis | thyias ubi audītō stimulant trietērica bacchō<br>.tʰʏ.ɪ.ɑ.s ʊ.b ɑʊ.diː.toː s.tɪ.mʊ.lɑnt .trɪ.ɛ.teː.rɪ.kɑ .bɑk.kʰoː<br>.tʰʏɪ.ɑ.s ʊ.b ɑʊ.diː.toː s.tɪ.mʊ.lɑnt .trɪ.ɛ.teː.rɪ.kɑ .bɑk.kʰoː |
| 4.367 | Muta cum Liquida | caucasus hyrcānaeque admōrunt ūbera tigrēs<br>.kɑʊ.kɑ.sʊ.s hʏr.kɑː.nɑɛ.kʷ ɑd.moː.rʊn.t uː.bɛ.rɑ .tɪ.greːs<br>.kɑʊ.kɑ.sʊ.s hʏr.kɑː.nɑɛ.kʷ ɑd.moː.rʊn.t uː.bɛ.rɑ .tɪg.reːs |
| 4.401 | Muta cum Liquida | migrantīs cernās tōtāque ex urbe ruentīs<br>.mɪ.grɑn.tiːs .kɛr.nɑːs .toː.tɑː.kʷ ɛk.s ʊr.bɛ .rʊ.ɛn.tiːs<br>.mɪg.rɑn.tiːs .kɛr.nɑːs .toː.tɑː.kʷ ɛk.s ʊr.bɛ .rʊ.ɛn.tiːs |
| 4.404 | Muta cum Liquida | it nigrum campīs agmen praedamque per herbās<br>.ɪt .nɪ.grʊm .kɑm.piː.s ɑg.mɛn .prɑɛ.dɑm.kʷɛ .pɛ.r hɛr.bɑːs<br>.ɪt .nɪg.rʊm .kɑm.piː.s ɑg.mɛn .prɑɛ.dɑm.kʷɛ .pɛ.r hɛr.bɑːs |
| 4.454 | Muta cum Liquida | horrendum dictū laticēs nigrēscere sacrōs<br>.hɔr.rɛn.dʊm .dɪk.tuː .lɑ.tɪ.keːs .nɪ.greː.s.kɛ.rɛ .sɑ.kroːs<br>.hɔr.rɛn.dʊm .dɪk.tuː .lɑ.tɪ.keːs .nɪg.reː.s.kɛ.rɛ .sɑk.roːs |
| 4.485 | Muta cum Liquida | quae dabat et sacrōs seruābat in arbore rāmōs<br>.kʷɑɛ .dɑ.bɑ.t ɛt .sɑ.kroːs .sɛr.wɑː.bɑ.t ɪ.n ɑr.bɔ.rɛ .rɑː.moːs<br>.kʷɑɛ .dɑ.bɑ.t ɛt .sɑk.roːs .sɛr.wɑː.bɑ.t ɪ.n ɑr.bɔ.rɛ .rɑː.moːs |
| 4.489 | Muta cum Liquida | sistere aquam fluuiīs et uertere sīdera retrō<br>.sɪs.tɛ.r ɑ.kʷɑm .flʊ.wɪ.iː.s ɛt .wɛr.tɛ.rɛ .siː.dɛ.rɑ .rɛ.troː<br>.sɪs.tɛ.r ɑ.kʷɑm .flʊ.wɪ.iː.s ɛt .wɛr.tɛ.rɛ .siː.dɛ.rɑ .rɛt.roː |
| 4.500 | Muta cum Liquida | nōn tamen anna nouīs praetexere fūnera sacrīs<br>.noːn .tɑ.mɛ.n ɑn.nɑ .nɔ.wiːs .prɑɛ.tɛk.sɛ.rɛ .fuː.nɛ.rɑ .sɑ.kriːs<br>.noːn .tɑ.mɛ.n ɑn.nɑ .nɔ.wiːs .prɑɛ.tɛk.sɛ.rɛ .fuː.nɛ.rɑ .sɑk.riːs |
| 4.514 | Muta cum Liquida | pūbentēs herbae nigrī cum lacte uenēnī<br>.puː.bɛn.teː.s hɛr.bɑɛ .nɪ.griː .kʊm .lɑk.tɛ .wɛ.neː.niː<br>.puː.bɛn.teː.s hɛr.bɑɛ .nɪg.riː .kʊm .lɑk.tɛ .wɛ.neː.niː |
| 4.525 | Muta cum Liquida | cum tacet omnis ager pecudēs pictaeque uolucrēs<br>.kʊm .tɑ.kɛ.t ɔm.nɪ.s ɑ.gɛr .pɛ.kʊ.deː.s .pɪk.tɑɛ.kʷɛ .wɔ.lʊ.kreːs<br>.kʊm .tɑ.kɛ.t ɔm.nɪ.s ɑ.gɛr .pɛ.kʊ.deː.s .pɪk.tɑɛ.kʷɛ .wɔ.lʊk.reːs |
| 4.558 | Hypermetric Verse | omnia mercuriō similis uōcemque colōremque<br>.ɔm.nɪ.ɑ .mɛr.kʊ.rɪ.oː .sɪ.mɪ.lɪs .woː.kɛm.kʷɛ .kɔ.loː.rɛm.kʷɛ<br>.ɔm.nɪ.ɑ .mɛr.kʊ.rɪ.oː .sɪ.mɪ.lɪs .woː.kɛm.kʷɛ .kɔ.loː.rɛmkʷ |
| 4.629 | Hypermetric Verse | imprecor arma armīs pugnent ipsīque nepōtēsque<br>.ɪm.prɛ.kɔ.r ɑr.m ɑr.miːs .pʊŋ.nɛn.t ɪp.siː.kʷɛ .nɛ.poː.teːs.kʷɛ<br>.ɪm.prɛ.kɔ.r ɑr.m ɑr.miːs .pʊŋ.nɛn.t ɪp.siː.kʷɛ .nɛ.poː.teːskʷ |

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| 4.638 | Muta cum Liquida | sacra iouī stygiō quae rīte incepta parāuī<br>.sɑ.krɑ .jɔ.wiː s.tʏ.gɪ.oː .kʷɑɛ .riː.t ɪŋ.kɛp.tɑ .pɑ.rɑː.wiː<br>.sɑk.rɑ .jɔ.wiː s.tʏ.gɪ.oː .kʷɑɛ .riː.t ɪŋ.kɛp.tɑ .pɑ.rɑː.wiː |
| 4.667 | Hiatus | lāmentīs gemitūque et fēmineō ululātū<br>.lɑː.mɛn.tiːs .gɛ.mɪ.tuː.kʷ ɛt .feː.mɪ.nɛ. ʊ.lʊ.lɑː.tuː<br>.lɑː.mɛn.tiːs .gɛ.mɪ.tuː.kʷ ɛt .feː.mɪ.nɛ.oː .ʊ.lʊ.lɑː.tuː |
| 4.686 | Synizesis | sēmianimemque sinū germānam amplexa fouēbat<br>.seː.mɪ.ɑ.nɪ.mɛm.kʷɛ .sɪ.nuː .gɛr.mɑː.n ɑm.plɛk.sɑ .fɔ.weː.bɑt<br>.seːm.jɑ.nɪ.mɛm.kʷɛ .sɪ.nuː .gɛr.mɑː.n ɑm.plɛk.sɑ .fɔ.weː.bɑt |
| 4.690 | Transcription | ter sēsē attollēns cubitōque adnixa leuāuit<br>.tɛr .seː.s ɑt.tɔl.leːns .kʊ.bɪ.toː.kʷ ɑd.nɪk.sɑ .lɛ.wɑː.ʊ.ɪt<br>.tɛr .seː.s ɑt.tɔl.leːns .kʊ.bɪ.toː.kʷ ɑd.nɪk.sɑ .lɛ.wɑː.wɪt |
| 4.702 | Muta cum Liquida | dēuolat et suprā caput astitit hunc ego dītī<br>.deː.wɔ.lɑ.t ɛt .sʊ.prɑː .kɑ.pʊ.t ɑs.tɪ.tɪ.t hʊŋ.k ɛ.gɔ .diː.tiː<br>.deː.wɔ.lɑ.t ɛt .sʊp.rɑː .kɑ.pʊ.t ɑs.tɪ.tɪ.t hʊŋ.k ɛ.gɔ .diː.tiː |
| 4.703 | Muta cum Liquida | sacrum iussa ferō tēque istō corpore soluō<br>.sɑ.krʊm .jʊs.sɑ .fɛ.roː .teː.kʷ ɪs.toː .kɔr.pɔ.rɛ .sɔl.woː<br>.sɑk.rʊm .jʊs.sɑ .fɛ.roː .teː.kʷ ɪs.toː .kɔr.pɔ.rɛ .sɔl.woː |
| 5.010 | Muta cum Liquida | ollī caeruleus suprā caput astitit imber<br>.ɔl.liː .kɑɛ.rʊ.lɛ.ʊs .sʊ.prɑː .kɑ.pʊ.t ɑs.tɪ.tɪ.t ɪm.bɛr<br>.ɔl.liː .kɑɛ.rʊ.lɛ.ʊs .sʊp.rɑː .kɑ.pʊ.t ɑs.tɪ.tɪ.t ɪm.bɛr |
| 5.011 | Muta cum Liquida | noctem hiememque ferēns et inhorruit unda tenebrīs<br>.nɔk.t hɪ.ɛ.mɛm.kʷɛ .fɛ.reːn.s ɛ.t ɪ.nhɔr.rʊ.ɪ.t ʊn.dɑ .tɛ.nɛ.briːs<br>.nɔk.t hɪ.ɛ.mɛm.kʷɛ .fɛ.reːn.s ɛ.t ɪ.nhɔr.rʊ.ɪ.t ʊn.dɑ .tɛ.nɛb.riːs |
| 5.038 | Synizesis | trōia crīnīsō conceptum flūmine māter<br>.troːj.jɑ .kriː.niː.soː .kɔŋ.kɛp.tʊm .fluː.mɪ.nɛ .mɑː.tɛr<br>.troː.ɪ.ɑ .kriː.niː.soː .kɔŋ.kɛp.tʊm .fluː.mɪ.nɛ .mɑː.tɛr |
| 5.059 | Muta cum Liquida | poscāmus uentōs atque haec mē sacra quotannīs<br>.pɔs.kɑː.mʊs .wɛn.toː.s ɑt.kʷ hɑɛk .meː .sɑ.krɑ .kʷɔ.tɑn.niːs<br>.pɔs.kɑː.mʊs .wɛn.toː.s ɑt.kʷ hɑɛk .meː .sɑk.rɑ .kʷɔ.tɑn.niːs |
| 5.078 | Muta cum Liquida | fundit humī duo lacte nouō duo sanguine sacrō<br>.fʊn.dɪ.t hʊ.miː .dʊ.ɔ .lɑk.tɛ .nɔ.woː .dʊ.ɔ .sɑŋ.gʷɪ.nɛ .sɑ.kroː<br>.fʊn.dɪ.t hʊ.miː .dʊ.ɔ .lɑk.tɛ .nɔ.woː .dʊ.ɔ .sɑŋ.gʷɪ.nɛ .sɑk.roː |
| 5.083 | Muta cum Liquida | nec tēcum ausonium quīcumque est quaerere thybrim<br>.nɛk .teː.k ɑʊ.sɔ.nɪ.ʊm .kʷiː.kʊm.kʷ ɛst .kʷɑɛ.rɛ.rɛ .tʰʏ.brɪm<br>.nɛk .teː.k ɑʊ.sɔ.nɪ.ʊm .kʷiː.kʊm.kʷ ɛst .kʷɑɛ.rɛ.rɛ .tʰʏb.rɪm |
| 5.097 | Muta cum Liquida | totque suēs totidem nigrantīs terga iuuencōs<br>.tɔt.kʷɛ .sʊ.eːs .tɔ.tɪ.dɛm .nɪ.grɑn.tiːs .tɛr.gɑ .jʊ.wɛŋ.koːs<br>.tɔt.kʷɛ .sʊ.eːs .tɔ.tɪ.dɛm .nɪg.rɑn.tiːs .tɛr.gɑ .jʊ.wɛŋ.koːs |
| 5.100 | Syllabification | nec nōn et sociī quae cuique est cōpia laetī<br>.nɛk .noː.n ɛt .sɔ.kɪ.iː .kʷɑɛ .kʊ.ɪ.kʷ ɛst .koː.pɪ.ɑ .lɑɛ.tiː<br>.nɛk .noː.n ɛt .sɔ.kɪ.iː .kʷɑɛ .kʊɪ.kʷ ɛst .koː.pɪ.ɑ .lɑɛ.tiː |

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| 5.110 | Muta cum Liquida | in mediō sacrī tripodes uiridēsque corōnae<br>.ɪm .mɛ.dɪ.oː .sɑ.kriː .trɪ.pɔ.dɛs .wɪ.rɪ.deː.s.kʷɛ .kɔ.roː.nɑɛ<br>.ɪm .mɛ.dɪ.oː .sɑk.riː .trɪ.pɔ.dɛs .wɪ.rɪ.deː.s.kʷɛ .kɔ.roː.nɑɛ |
| 5.128 | Muta cum Liquida | campus et aprīcīs statiō grātissima mergīs<br>.kɑm.pʊ.s ɛ.t ɑ.priː.kiː.s .stɑ.tɪ.oː .grɑː.tɪs.sɪ.mɑ .mɛr.giː.s<br>.kɑm.pʊ.s ɛ.t ɑp.riː.kiː.s .stɑ.tɪ.oː .grɑː.tɪs.sɪ.mɑ .mɛr.giː.s |
| 5.186 | Semihiatus | nec tōtā tamen ille prior praeeunte carīnā<br>.nɛk .toː.tɑː .tɑ.mɛ.n ɪl.lɛ .prɪ.ɔr .prɑɛ.ɛ.ʊn.tɛ .kɑ.riː.nɑː<br>.nɛk .toː.tɑː .tɑ.mɛ.n ɪl.lɛ .prɪ.ɔr .prɑ.ɛ.ʊn.tɛ .kɑ.riː.nɑː |
| 5.233 | Muta cum Liquida | nī palmās pontō tendēns utrāsque cloanthus<br>.niː .pɑl.mɑː.s .pɔn.toː .tɛn.deː.n.s ʊ.trɑː.s.kʷɛ .klɔ.ɑn.tʰʊs<br>.niː .pɑl.mɑː.s .pɔn.toː .tɛn.deː.n.s ʊt.rɑː.s.kʷɛ .klɔ.ɑn.tʰʊs |
| 5.261 | Hiatus | uictor apud rapidum simoenta sub īliō altō<br>.wɪk.tɔ.r ɑ.pʊd .rɑ.pɪ.dʊm .sɪ.mɔ.ɛn.tɑ .sʊ.b iː.lɪ. ɑl.toː<br>.wɪk.tɔ.r ɑ.pʊd .rɑ.pɪ.dʊm .sɪ.mɔ.ɛn.tɑ .sʊ.b iː.lɪ.o .ɑl.toː |
| 5.284 | Long in Position | ollī serua datur operum haud ignāra mineruae<br>.ɔl.liː .sɛr.wɑ .dɑ.tʊ.r ɔ.pɛ.r hɑʊ.d ɪŋ.nɑː.rɑ .mɪ.nɛr.wɑɛ<br>.ɔl.liː .sɛr.wɑ .dɑ.tʊr. ɔ.pɛ.r hɑʊ.d ɪŋ.nɑː.rɑ .mɪ.nɛr.wɑɛ |
| 5.298 | Muta cum Liquida | hunc salius simul et patrōn quōrum alter acarnān<br>.hʊŋk .sɑ.lɪ.ʊs .sɪ.mʊ.l ɛt .pɑ.troːn .kʷoː.r ɑl.tɛ.r ɑ.kɑr.nɑː.n<br>.hʊŋk .sɑ.lɪ.ʊs .sɪ.mʊ.l ɛt .pɑt.roːn .kʷoː.r ɑl.tɛ.r ɑ.kɑr.nɑː.n |
| 5.301 | Synizesis | adsuētī siluīs comitēs seniōris acestae<br>.ɑt.sʊ.eː.tiː .sɪl.wiː.s .kɔ.mɪ.teː.s .sɛ.nɪ.oː.rɪ.s ɑ.kɛs.tɑɛ<br>.ɑt.swe:.tiː .sɪl.wiː.s .kɔ.mɪ.teː.s .sɛ.nɪ.oː.rɪ.s ɑ.kɛs.tɑɛ |
| 5.333 | Muta cum Liquida | concidit immundōque fimō sacrōque cruōre<br>.kɔŋ.kɪ.dɪ.t ɪm.mʊn.doː.kʷɛ .fɪ.moː .sɑ.kroː.kʷɛ .krʊ.oː.rɛ<br>.kɔŋ.kɪ.dɪ.t ɪm.mʊn.doː.kʷɛ .fɪ.moː .sɑk.roː.kʷɛ .krʊ.oː.rɛ |
| 5.337 | Long in Position | ēmicat euryalus et mūnere uictor amīcī<br>.eː.mɪ.kɑ.t ɛʊ.rʏ.ɑ.lʊ.s ɛt .muː.nɛ.rɛ .wɪk.tɔ.r ɑ.miː.kiː<br>.eː.mɪ.kɑ.t ɛʊ.rʏ.ɑ.lʊs. ɛt .muː.nɛ.rɛ .wɪk.tɔ.r ɑ.miː.kiː |
| 5.352 | Contraction | dat saliō uillīs onerōsum atque unguibus aureīs<br>.dɑt .sɑ.lɪ.oː .wɪl.liː.s ɔ.nɛ.roː.s ɑt.kʷ ʊŋ.gʷɪ.bʊ.s ɑʊ.rɛ.iː.s<br>.dɑt .sɑ.lɪ.oː .wɪl.liː.s ɔ.nɛ.roː.s ɑt.kʷ ʊŋ.gʷɪ.bʊ.s ɑʊ.rɛiː.s |
| 5.360 | Muta cum Liquida | neptūnī sacrō danaīs dē poste refīxum<br>.nɛp.tuː.niː .sɑ.kroː .dɑ.nɑ.iː.s .deː .pɔs.tɛ .rɛ.fiː.k.sʊm<br>.nɛp.tuː.niː .sɑk.roː .dɑ.nɑ.iː.s .deː .pɔs.tɛ .rɛ.fiː.k.sʊm |
| 5.373 | Muta cum Liquida | bebryciā ueniēns amycī dē gente ferēbat<br>.bɛ.brʏ.kɪ.ɑː .wɛ.nɪ.eː.n.s ɑ.mʏ.kiː .deː .gɛn.tɛ .fɛ.reː.bɑt<br>.bɛb.rʏ.kɪ.ɑː .wɛ.nɪ.eː.n.s ɑ.mʏ.kiː .deː .gɛn.tɛ .fɛ.reː.bɑt |
| 5.402 | Synizesis | prōiēcit quibus ācer eryx in proelia suētus<br>.proː.jeː.kɪt .kʷɪ.bʊ.s ɑː.kɛ.r ɛ.rʏk.s ɪm .prɔɛ.lɪ.ɑ .sʊ.eː.tʊs<br>.proː.jeː.kɪt .kʷɪ.bʊ.s ɑː.kɛ.r ɛ.rʏk.s ɪm .prɔɛ.lɪ.ɑ .sweː.tʊs |

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| 5.413 | Muta cum Liquida | sanguine cernis adhūc sparsōque īnfecta cerebrō<br>.saŋ.gʷɪ.nɛ .kɛr.nɪ.s ɑ.dhuː.k .spar.soː.kʷ iːŋ.fɛk.tɑ .kɛ.rɛ.broː<br>.saŋ.gʷɪ.nɛ .kɛr.nɪ.s ɑ.dhuː.k .spar.soː.kʷ iːŋ.fɛk.tɑ .kɛ.rɛb.roː |
| 5.414 | Synizesis | hīs magnum alcīden contrā stetit hīs ego suētus<br>.hiːs .maŋ.n ɑl.kiː.dɛn .kɔn.traː s.tɛ.tɪ.t hiː.s ɛ.gɔ .sʊ.eː.tʊs<br>.hiːs .maŋ.n ɑl.kiː.dɛn .kɔn.traː s.tɛ.tɪ.t hiː.s ɛ.gɔ .sweː.tʊs |
| 5.417 | Synizesis | sed sī nostra darēs haec trōius arma recūsat<br>.sɛd .siː .nɔs.trɑ .dɑ.reː.s haɛk .troːj.jʊ.s ɑr.mɑ .rɛ.kuː.sɑt<br>.sɛd .siː .nɔs.trɑ .dɑ.reː.s haɛk .troː.ɪ.ʊ.s ɑr.mɑ .rɛ.kuː.sɑt |
| 5.421 | Vowel Length | haec fātus duplicem ex umerīs reiēcit amictum<br>.haɛk .faː.tʊs .dʊ.plɪ.k ɛk.s ʊ.mɛ.riː.s .rɛ.jeː.kɪ.t ɑ.mɪk.tʊm<br>.haɛk .faː.tʊs .dʊ.plɪ.k ɛk.s ʊ.mɛ.riː.s .reː.jeː.kɪ.t ɑ.mɪk.tʊm |
| 5.422 | Hypermetric Verse | et magnōs membrōrum artūs magna ossa lacertōsque<br>.ɛt .maŋ.noːs .mɛm.broː.r ɑr.tuː.s .maŋ.n ɔs.sɑ .lɑ.kɛr.toːs.kʷɛ<br>.ɛt .maŋ.noːs .mɛm.broː.r ɑr.tuː.s .maŋ.n ɔs.sɑ .lɑ.kɛr.toːskʷ |
| 5.432 | Synizesis | genua labant uastōs quatit aeger anhēlitus artūs<br>.gɛ.nʊ.ɑ .lɑ.bɑnt .wɑs.toːs .kʷɑ.tɪ.t ɑɛ.gɛ.r ɑ.nheː.lɪ.tʊ.s ɑr.tuːs<br>.gɛn.wɑ .lɑ.bɑnt .wɑs.toːs .kʷɑ.tɪ.t ɑɛ.gɛ.r ɑ.nheː.lɪ.tʊ.s ɑr.tuːs |
| 5.450 | Muta cum Liquida | cōnsurgunt studiīs teucrī et trīnacria pūbēs<br>.koːn.sʊr.gʊnt .stʊ.dɪ.iːs .tɛʊ.kr ɛt .triː.nɑ.krɪ.ɑ .puː.beːs<br>.koːn.sʊr.gʊnt .stʊ.dɪ.iːs .tɛʊ.kr ɛt .triː.nɑk.rɪ.ɑ .puː.beːs |
| 5.469 | Muta cum Liquida | iactantemque utrōque caput crassumque cruōrem<br>.jɑk.tɑn.tɛm.kʷ ʊ.troː.kʷɛ .kɑ.pʊt .krɑs.sʊm.kʷɛ .krʊ.oː.rɛm<br>.jɑk.tɑn.tɛm.kʷ ʊt.roː.kʷɛ .kɑ.pʊt .krɑs.sʊm.kʷɛ .krʊ.oː.rɛm |
| 5.480 | Muta cum Liquida | arduus effrāctōque inlīsit in ossa cerebrō<br>.ɑr.dʊ.ʊ.s ɛf.frɑː.k.toː.kʷ ɪn.liː.sɪ.t ɪ.n ɔs.sɑ .kɛ.rɛ.broː<br>.ɑr.dʊ.ʊ.s ɛf.frɑː.k.toː.kʷ ɪn.liː.sɪ.t ɪ.n ɔs.sɑ .kɛ.rɛb.roː |
| 5.501 | Muta cum Liquida | prō sē quisque uirī et dēprōmunt tēla pharetrīs<br>.proː .seː .kʷɪs.kʷɛ .wɪ.r ɛt .deː.proː.mʊnt .teː.lɑ .pʰɑ.rɛ.triːs<br>.proː .seː .kʷɪs.kʷɛ .wɪ.r ɛt .deː.proː.mʊnt .teː.lɑ .pʰɑ.rɛt.riːs |
| 5.512 | Muta cum Liquida | illa notōs atque atra uolāns in nūbila fūgit<br>.ɪl.lɑ .nɔ.toː.s ɑt.kʷ ɑ.trɑ .wɔ.lɑː.n.s ɪn .nuː.bɪ.lɑ .fuː.gɪt<br>.ɪl.lɑ .nɔ.toː.s ɑt.kʷ ɑt.rɑ .wɔ.lɑː.n.s ɪn .nuː.bɪ.lɑ .fuː.gɪt |
| 5.516 | Muta cum Liquida | plaudentem nigrā fīgit sub nūbe columbam<br>.plɑʊ.dɛn.tɛm .nɪ.grɑː .fiː.gɪt .sʊb .nuː.bɛ .kɔ.lʊm.bɑm<br>.plɑʊ.dɛn.tɛm .nɪg.rɑː .fiː.gɪt .sʊb .nuː.bɛ .kɔ.lʊm.bɑm |
| 5.520 | Vowel Length | qui tamen āeriās tēlum contendit in aurās<br>.kʷɪ .tɑ.mɛ.n ɑː.ɛ.rɪ.ɑːs .teː.lʊm .kɔn.tɛn.dɪ.t ɪ.n ɑʊ.rɑːs<br>.kʷiː .tɑ.mɛ.n ɑː.ɛ.rɪ.ɑːs .teː.lʊm .kɔn.tɛn.dɪ.t ɪ.n ɑʊ.rɑːs |
| 5.521 | Long in Position | ostentāns artemque pater arcumque sonantem<br>.ɔs.tɛn.tɑː.n.s ɑr.tɛm.kʷɛ .pɑ.tɛ.r ɑr.kʊm.kʷɛ .sɔ.nɑn.tɛm<br>.ɔs.tɛn.tɑː.n.s ɑr.tɛm.kʷɛ .pɑ.tɛr. ɑr.kʊm.kʷɛ .sɔ.nɑn.tɛm |

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| 5.589 | Synizesis | parietibus textum caecīs iter ancipitemque<br>.pɑ.rɪ.ɛ.tɪ.bʊs .tɛks.tʊm .kɑɛ.ki:.s ɪ.tɛ.r ɑŋ.kɪ.pɪ.tɛm.kʷɛ<br>.pɑr.jɛ.tɪ.bʊs .tɛks.tʊm .kɑɛ.ki:.s ɪ.tɛ.r ɑŋ.kɪ.pɪ.tɛm.kʷɛ |
| 5.599 | Synizesis | quō puer ipse modō sēcum quō trōia pūbēs<br>.kʷo: .pʊ.ɛ.r ɪp.sɛ .mɔ.do: .se:.kʊm .kʷo: .tro:j.jɑ .pu:.be:s<br>.kʷo: .pʊ.ɛ.r ɪp.sɛ .mɔ.do: .se:.kʊm .kʷo: .tro:.ɪ.ɑ .pu:.be:s |
| 5.603 | Muta cum Liquida | hāc celebrāta tenus sānctō certāmina patrī<br>.hɑ:k .kɛ.lɛ.brɑ:.tɑ .tɛ.nʊs .sɑ:ŋk.to: .kɛr.tɑ:.mɪ.nɑ .pɑ.tri:<br>.hɑ:k .kɛ.lɛ.brɑ:.tɑ .tɛ.nʊs .sɑ:ŋk.to: .kɛr.tɑ:.mɪ.nɑ .pɑt.ri: |
| 5.604 | Transcription | hinc prīmum fortūna fidem mūtāta nouāuit<br>.hɪŋk .pri:.mʊm .fɔr.tu:.nɑ .fɪ.dɛm .mu:.tɑ:.tɑ .nɔ.wɑ:.ʊ.ɪt<br>.hɪŋk .pri:.mʊm .fɔr.tu:.nɑ .fɪ.dɛm .mu:.tɑ:.tɑ .nɔ.wɑ:.wɪt |
| 5.620 | Muta cum Liquida | fit beroē tmariī coniūnx longaeua doryclī<br>.fɪt .bɛ.rɔ.e: .tmɑ.rɪ.i: .kɔn.ju:ŋks .lɔŋ.gɑɛ.wɑ .dɔ.rʏ.kli:<br>.fɪt .bɛ.rɔ.e: .tmɑ.rɪ.i: .kɔn.ju:ŋks .lɔŋ.gɑɛ.wɑ .dɔ.rʏk.li: |
| 5.663 | Synizesis | trānstra per et rēmōs et pictās abiete puppīs<br>.trɑ:ns.trɑ .pɛ.r ɛt .re:.mo:.s ɛt .pɪk.tɑ:.s ɑ.bɪ.ɛ.tɛ .pʊp.pi:s<br>.trɑ:ns.trɑ .pɛ.r ɛt .re:.mo:.s ɛt .pɪk.tɑ:.s ɑb.jɛ.tɛ .pʊp.pi:s |
| 5.687 | Vowel Length | iuppiter omnipotēns si nōndum exōsus ad ūnum<br>.jʊp.pɪ.tɛ.r ɔm.nɪ.pɔ.te:ns .sɪ .no:n.d ɛk.so:.sʊ.s ɑ.d u:.nʊm<br>.jʊp.pɪ.tɛ.r ɔm.nɪ.pɔ.te:ns .si: .no:n.d ɛk.so:.sʊ.s ɑ.d u:.nʊm |
| 5.735 | Hiatus | concilia ēlysiumque colō hūc casta sibylla<br>.kɔŋ.kɪ.lɪ. e:.lʏ.sɪ.ʊm.kʷɛ .kɔ.l hu:k .kɑs.tɑ .sɪ.bʏl.lɑ<br>.kɔŋ.kɪ.lɪ. e:.lʏ.sɪ.ʊm.kʷɛ .kɔ.lo: .hu:k .kɑs.tɑ .sɪ.bʏl.lɑ |
| 5.736 | Muta cum Liquida | nigrārum multō pecudum tē sanguine dūcet<br>.nɪ.grɑ:.rʊm .mʊl.to: .pɛ.kʊ.dʊm .te: .sɑŋ.gʷɪ.nɛ .du:.kɛt<br>.nɪg.rɑ:.rʊm .mʊl.to: .pɛ.kʊ.dʊm .te: .sɑŋ.gʷɪ.nɛ .du:.kɛt |
| 5.753 | Hypermetric Verse | rōbora nāuigiīs aptant rēmōsque rudentīsque<br>.ro:.bɔ.rɑ .nɑ:.wɪ.gɪ.i:.s ɑp.tɑnt .re:.mo:s.kʷɛ .rʊ.dɛn.ti:s.kʷɛ<br>.ro:.bɔ.rɑ .nɑ:.wɪ.gɪ.i:.s ɑp.tɑnt .re:.mo:s.kʷɛ .rʊ.dɛn.ti:skʷ |
| 5.797 | Muta cum Liquida | uēla tibī liceat laurentem attingere thybrim<br>.we:.lɑ .tɪ.bi: .lɪ.kɛ.ɑt .lɑʊ.rɛn.t ɑt.tɪŋ.gɛ.rɛ .tʰʏ.brɪm<br>.we:.lɑ .tɪ.bi: .lɪ.kɛ.ɑt .lɑʊ.rɛn.t ɑt.tɪŋ.gɛ.rɛ .tʰʏb.rɪm |
| 5.804 | Synizesis | aenēae mihi cūra tuī cum trōia achillēs<br>.ɑɛ.ne:.ɑɛ .mɪ.hɪ .ku:.rɑ .tʊ.i: .kʊm .tro:j.j ɑ.kʰɪl.le:s<br>.ɑɛ.ne:.ɑɛ .mɪ.hɪ .ku:.rɑ .tʊ.i: .kʊm .tro:.ɪ. ɑ.kʰɪl.le:s |
| 5.853 | Long in Position | nūsquam āmittēbat oculōsque sub astra tenēbat<br>.nu:s.kʷ ɑ:.mɪt.te:.bɑ.t ɔ.kʊ.lo:s.kʷɛ .sʊ.b ɑs.trɑ .tɛ.ne:.bɑt<br>.nu:s.kʷ ɑ:.mɪt.te:.bɑt. ɔ.kʊ.lo:s.kʷɛ .sʊ.b ɑs.trɑ .tɛ.ne:.bɑt |
| 5.855 | Muta cum Liquida | uīque sopōrātum stygiā super utraque quassat<br>.wi:.kʷɛ .sɔ.po:.rɑ:.tʊm s.tʏ.gɪ.ɑ: .sʊ.pɛ.r ʊ.trɑ.kʷɛ .kʷɑs.sɑt<br>.wi:.kʷɛ .sɔ.po:.rɑ:.tʊm s.tʏ.gɪ.ɑ: .sʊ.pɛ.r ʊt.rɑ.kʷɛ .kʷɑs.sɑt |

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| 6.016 | Synizesis | īnsuētum per iter gelidās ēnāuit ad arctōs<br>.iːn.sʊ.eː.tʊm .pɛ.r ɪ.tɛr .gɛ.lɪ.dɑː.s eː.nɑː.wɪ.t ɑ.d ɑrk.toːs<br>.iːn.sweː.tʊm .pɛ.r ɪ.tɛr .gɛ.lɪ.dɑː.s eː.nɑː.wɪ.t ɑ.d ɑrk.toːs |
| 6.021 | Muta cum Liquida | cecropidae iussī miserum septēna quotannīs<br>.kɛ.krɔ.pɪ.dɑɛ .jʊs.siː .mɪ.sɛ.rʊm .sɛp.teː.nɑ .kʷɔ.tɑn.niːs<br>.kɛk.rɔ.pɪ.dɑɛ .jʊs.siː .mɪ.sɛ.rʊm .sɛp.teː.nɑ .kʷɔ.tɑn.niːs |
| 6.033 | Synizesis | bis patriae cecidēre manūs quīn prōtinus omnia<br>.bɪs .pɑ.trɪ.ɑɛ .kɛ.kɪ.deː.rɛ .mɑ.nuːs .kʷiːn .proː.tɪ.nʊ.s ɔm.nɪ.ɑ<br>.bɪs .pɑ.trɪ.ɑɛ .kɛ.kɪ.deː.rɛ .mɑ.nuːs .kʷiːn .proː.tɪ.nʊ.s ɔm.njɑ |
| 6.040 | Muta cum Liquida | tālibus adfāta aenēān nec sacra morantur<br>.tɑː.lɪ.bʊ.s ɑt.fɑː.t ɑɛ.neː.ɑːn .nɛk .sɑ.krɑ .mɔ.rɑn.tʊr<br>.tɑː.lɪ.bʊ.s ɑt.fɑː.t ɑɛ.neː.ɑːn .nɛk .sɑk.rɑ .mɔ.rɑn.tʊr |
| 6.042 | Vowel Length | excīsum euboīcae latus ingēns rūpis in antrum<br>.ɛks.kiː.s ɛʊ.bɔ.iː.kɑɛ .lɑ.tʊ.s ɪŋ.geːns .ruː.pɪ.s ɪ.n ɑn.trʊm<br>.ɛks.kiː.s ɛʊ.bɔ.ɪ.kɑɛ .lɑ.tʊ.s ɪŋ.geːns .ruː.pɪ.s ɪ.n ɑn.trʊm |
| 6.075 | Muta cum Liquida | nē turbāta uolent rapidīs lūdibria uentīs<br>.neː .tʊr.bɑː.tɑ .wɔ.lɛnt .rɑ.pɪ.diːs .luː.dɪ.brɪ.ɑ .wɛn.tiːs<br>.neː .tʊr.bɑː.tɑ .wɔ.lɛnt .rɑ.pɪ.diːs .luː.dɪb.rɪ.ɑ .wɛn.tiːs |
| 6.087 | Muta cum Liquida | et thybrim multō spūmantem sanguine cernō<br>.ɛt .tʰʏ.brɪm .mʊl.toː s.puː.mɑn.tɛm .sɑŋ.gʷɪ.nɛ .kɛr.noː<br>.ɛt .tʰʏb.rɪm .mʊl.toː s.puː.mɑn.tɛm .sɑŋ.gʷɪ.nɛ .kɛr.noː |
| 6.109 | Muta cum Liquida | contingat doceās iter et sacra ōstia pandas<br>.kɔn.tɪŋ.gɑt .dɔ.kɛ.ɑː.s ɪ.tɛ.r ɛt .sɑ.kr oːs.tɪ.ɑ .pɑn.dɑs<br>.kɔn.tɪŋ.gɑt .dɔ.kɛ.ɑː.s ɪ.tɛ.r ɛt .sɑk.r oːs.tɪ.ɑ .pɑn.dɑs |
| 6.134 | Muta cum Liquida | bis stygiōs innāre lacūs bis nigra uidēre<br>.bɪs .stʏ.gɪ.oː.s ɪn.nɑː.rɛ .lɑ.kuːs .bɪs .nɪ.grɑ .wɪ.deː.rɛ<br>.bɪs .stʏ.gɪ.oː.s ɪn.nɑː.rɛ .lɑ.kuːs .bɪs .nɪg.rɑ .wɪ.deː.rɛ |
| 6.153 | Muta cum Liquida | dūc nigrās pecudēs ea prīma piācula suntō<br>.duːk .nɪ.grɑːs .pɛ.kʊ.deː.s ɛ.ɑ .priː.mɑ .pɪ.ɑː.kʊ.lɑ .sʊn.toː<br>.duːk .nɪg.rɑːs .pɛ.kʊ.deː.s ɛ.ɑ .priː.mɑ .pɪ.ɑː.kʊ.lɑ .sʊn.toː |
| 6.213 | Muta cum Liquida | flēbant et cinerī ingrātō suprēma ferēbant<br>.fleː.bɑn.t ɛt .kɪ.nɛ.r ɪŋ.grɑː.toː .sʊ.preː.mɑ .fɛ.reː.bɑnt<br>.fleː.bɑn.t ɛt .kɪ.nɛ.r ɪŋ.grɑː.toː .sʊp.reː.mɑ .fɛ.reː.bɑnt |
| 6.222 | Muta cum Liquida | coniciunt pars ingentī subiēre feretrō<br>.kɔn.jɪ.kɪ.ʊnt .pɑr.s ɪŋ.gɛn.tiː .sʊ.bɪ.eː.rɛ .fɛ.rɛ.troː<br>.kɔn.jɪ.kɪ.ʊnt .pɑr.s ɪŋ.gɛn.tiː .sʊ.bɪ.eː.rɛ .fɛ.rɛt.roː |
| 6.238 | Muta cum Liquida | scrūpea tūta lacū nigrō nemorumque tenebrīs<br>.skruː.pɛ.ɑ .tuː.tɑ .lɑ.kuː .nɪ.groː .nɛ.mɔ.rʊm.kʷɛ .tɛ.nɛ.briːs<br>.skruː.pɛ.ɑ .tuː.tɑ .lɑ.kuː .nɪg.roː .nɛ.mɔ.rʊm.kʷɛ .tɛ.nɛb.riːs |
| 6.242 | Transcription | unde locum graī dīxērunt nōmine aornum<br>.ʊn.dɛ .lɔ.kʊm .grɑ.iː .diːk.seː.rʊnt .noː.mɪ.n ɑ.ɔr.nʊm<br>.ʊn.dɛ .lɔ.kʊm .grɑj.jiː .diːk.seː.rʊnt .noː.mɪ.n ɑ.ɔr.nʊm |

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|---|---|---|
| 6.243 | Muta cum Liquida | quattuor hīc prīmum nigrantīs terga iuuencōs<br>.kʷɑt.tʊ.ɔ.r hiːk .priː.mʊm .nɪ.grɑn.tiːs .tɛr.gɑ .jʊ.wɛŋ.koːs<br>.kʷɑt.tʊ.ɔ.r hiːk .priː.mʊm .nɪg.rɑn.tiːs .tɛr.gɑ .jʊ.wɛŋ.koːs |
| 6.246 | Muta cum Liquida | ignibus impōnit sacrīs lībāmina prīma<br>.ɪŋ.nɪ.bʊ.s ɪm.poː.nɪt .sɑ.kriːs .liː.bɑː.mɪ.nɑ .priː.mɑ<br>.ɪŋ.nɪ.bʊ.s ɪm.poː.nɪt .sɑk.riːs .liː.bɑː.mɪ.nɑ .priː.mɑ |
| 6.254 | Long in Position | pingue super oleum fundēns ardentibus extīs<br>.pɪŋ.gʷɛ .sʊ.pɛ.r ɔ.lɛ.ʊm .fʊn.deːn.s ɑr.dɛn.tɪ.bʊ.s ɛks.tiːs<br>.pɪŋ.gʷɛ .sʊ.pɛr. ɔ.lɛ.ʊm .fʊn.deːn.s ɑr.dɛn.tɪ.bʊ.s ɛks.tiːs |
| 6.276 | Synizesis | et metus et malesuāda famēs ac turpis egestās<br>.ɛt .mɛ.tʊ.s ɛt .mɑ.lɛ.sʊ.ɑː.dɑ .fɑ.meː.s ɑk .tʊr.pɪ.s ɛ.gɛs.tɑːs<br>.ɛt .mɛ.tʊ.s ɛt .mɑ.lɛ.swɑː.dɑ .fɑ.meː.s ɑk .tʊr.pɪ.s ɛ.gɛs.tɑːs |
| 6.280 | Contraction | ferreīque eumenidum thalamī et discordia dēmēns<br>.fɛr.rɛ.iː.kʷ ɛʊ.mɛ.nɪ.dʊm .tʰɑ.lɑ.m ɛt .dɪs.kɔr.dɪ.ɑ .deː.meːns<br>.fɛr.rɛiː.kʷ ɛʊ.mɛ.nɪ.dʊm .tʰɑ.lɑ.m ɛt .dɪs.kɔr.dɪ.ɑ .deː.meːns |
| 6.403 | Synizesis | trōius aenēās pietāte īnsignis et armīs<br>.troːj.jʊ.s ɑɛ.neː.ɑːs .pɪ.ɛ.tɑː.t iːn.sɪŋ.nɪ.s ɛ.t ɑr.miːs<br>.troː.ɪ.ʊ.s ɑɛ.neː.ɑːs .pɪ.ɛ.tɑː.t iːn.sɪŋ.nɪ.s ɛ.t ɑr.miːs |
| 6.412 | Synizesis | dēturbat laxatque forōs simul accipit alueō<br>.deː.tʊr.bɑt .lɑk.sɑt.kʷɛ .fɔ.roːs .sɪ.mʊ.l ɑk.kɪ.pɪ.t ɑl.wɛ.oː<br>.deː.tʊr.bɑt .lɑk.sɑt.kʷɛ .fɔ.roːs .sɪ.mʊ.l ɑk.kɪ.pɪ.t ɑl.wɛoː |
| 6.419 | Muta cum Liquida | cui uātēs horrēre uidēns iam colla colubrīs<br>.kʊɪ .wɑː.teː.s hɔr.reː.rɛ .wɪ.deːns .jɑm .kɔl.lɑ .kɔ.lʊ.briːs<br>.kʊɪ .wɑː.teː.s hɔr.reː.rɛ .wɪ.deːns .jɑm .kɔl.lɑ .kɔ.lʊb.riːs |
| 6.439 | Syllabification | alligat et nouiēs styx interfūsa coercet<br>.ɑl.lɪ.gɑ.t ɛt .nɔ.wɪ.eːs .stʏk.s ɪn.tɛr.fuː.sɑ .kɔɛr.kɛt<br>.ɑl.lɪ.gɑ.t ɛt .nɔ.wɪ.eːs .stʏk.s ɪn.tɛr.fuː.sɑ .kɔ.ɛr.kɛt |
| 6.445 | Muta cum Liquida | hīs phaedram procrimque locīs maestamque eriphȳlēn<br>.hiːs .pʰɑɛ.drɑm .prɔ.krɪm.kʷɛ .lɔ.kiːs .mɑɛs.tɑm.kʷ ɛ.rɪ.pʰy:.leːn<br>.hiːs .pʰɑɛd.rɑm .prɔ.krɪm.kʷɛ .lɔ.kiːs .mɑɛs.tɑm.kʷ ɛ.rɪ.pʰy:.leːn |
| 6.451 | Synizesis | errābat siluā in magnā quam trōius hērōs<br>.ɛr.rɑː.bɑt .sɪl.w ɪm .mɑŋ.nɑː .kʷɑm .troːj.jʊ.s heː.roːs<br>.ɛr.rɑː.bɑt .sɪl.w ɪm .mɑŋ.nɑː .kʷɑm .troː.ɪ.ʊ.s heː.roːs |
| 6.464 | Vowel Length | hunc tantum tibi me discessū ferre dolōrem<br>.hʊŋk .tɑn.tʊm .tɪ.bɪ .mɛ .dɪs.kɛs.suː .fɛr.rɛ .dɔ.loː.rɛm<br>.hʊŋk .tɑn.tʊm .tɪ.bɪ .meː .dɪs.kɛs.suː .fɛr.rɛ .dɔ.loː.rɛm |
| 6.489 | Syllabification | at danaum procerēs agamemnoniaeque phalanges<br>.ɑt .dɑ.nɑʊm .prɔ.kɛ.reː.s ɑ.gɑ.mɛm.nɔ.nɪ.ɑɛ.kʷɛ .pʰɑ.lɑŋ.gɛs<br>.ɑt .dɑ.nɑ.ʊm .prɔ.kɛ.reː.s ɑ.gɑ.mɛm.nɔ.nɪ.ɑɛ.kʷɛ .pʰɑ.lɑŋ.gɛs |
| 6.507 | Semihiatus | nōmen et arma locum seruant tē amīce nequīuī<br>.noː.mɛ.n ɛ.t ɑr.mɑ .lɔ.kʊm .sɛr.wɑnt .t ɑ.miː.kɛ .nɛ.kʷiː.wiː<br>.noː.mɛ.n ɛ.t ɑr.mɑ .lɔ.kʊm .sɛr.wɑnt .te .ɑ.miː.kɛ .nɛ.kʷiː.wiː |

| | | |
|---|---|---|
| 6.513 | Muta cum Liquida | namque ut suprēmam falsa inter gaudia noctem<br>.nɑm.kʷ ʊt .sʊ.preː.mɑm .fɑl.s ɪn.tɛr .gɑʊ.dɪ.ɑ .nɔk.tɛm<br>.nɑm.kʷ ʊt .sʊp.reː.mɑm .fɑl.s ɪn.tɛr .gɑʊ.dɪ.ɑ .nɔk.tɛm |
| 6.529 | Transcription | hortātor scelerum aeolidēs dī tālia graīs<br>.hɔr.tɑː.tɔr s.kɛ.lɛ.r ɑɛ.ɔ.lɪ.deːs .diː .tɑː.lɪ.ɑ .grɑ.iːs<br>.hɔr.tɑː.tɔr s.kɛ.lɛ.r ɑɛ.ɔ.lɪ.deːs .diː .tɑː.lɪ.ɑ .grɑj.jiːs |
| 6.545 | Muta cum Liquida | discēdam explēbō numerum reddarque tenebrīs<br>.dɪs.keː.d ɛks.pleː.boː .nʊ.mɛ.rʊm .rɛd.dɑr.kʷɛ .tɛ.nɛ.briːs<br>.dɪs.keː.d ɛks.pleː.boː .nʊ.mɛ.rʊm .rɛd.dɑr.kʷɛ .tɛ.nɛb.riːs |
| 6.573 | Muta cum Liquida | tum dēmum horrisonō strīdentēs cardine sacrae<br>.tʊm .deː.m hɔr.rɪ.sɔ.noː s.triː.dɛn.teːs .kɑr.dɪ.nɛ .sɑ.krɑɛ<br>.tʊm .deː.m hɔr.rɪ.sɔ.noː s.triː.dɛn.teːs .kɑr.dɪ.nɛ .sɑk.rɑɛ |
| 6.576 | Muta cum Liquida | quīnquāgintā ātrīs immānis hiātibus hydra<br>.kʷiːŋ.kʷɑː.gɪn.t ɑː.triː.s ɪm.mɑː.nɪ.s hɪ.ɑː.tɪ.bʊ.s hʏ.drɑ<br>.kʷiːŋ.kʷɑː.gɪn.t ɑː.triː.s ɪm.mɑː.nɪ.s hɪ.ɑː.tɪ.bʊ.s hʏd.rɑ |
| 6.600 | Muta cum Liquida | pectore nec fibrīs requiēs datur ūlla renātīs<br>.pɛk.tɔ.rɛ .nɛk .fɪ.briːs .rɛ.kʷɪ.eːs .dɑ.tʊ.r uːl.lɑ .rɛ.nɑː.tiːs<br>.pɛk.tɔ.rɛ .nɛk .fɪb.riːs .rɛ.kʷɪ.eːs .dɑ.tʊ.r uːl.lɑ .rɛ.nɑː.tiːs |
| 6.602 | Hypermetric Verse | quōs super ātra silex iam iam lāpsūra cadentīque<br>.kʷoːs .sʊ.pɛ.r ɑː.trɑ .sɪ.lɛks .jɑm .jɑm .lɑːp.suː.rɑ .kɑ.dɛn.tiː.kʷɛ<br>.kʷoːs .sʊ.pɛ.r ɑː.trɑ .sɪ.lɛks .jɑm .jɑm .lɑːp.suː.rɑ .kɑ.dɛn.tiːkʷ |
| 6.630 | Muta cum Liquida | accelerēmus ait cyclōpum ēducta camīnīs<br>.ɑk.kɛ.lɛ.reː.mʊ.s ɑ.ɪt .kʏ.kloː.p eː.dʊk.tɑ .kɑ.miː.niːs<br>.ɑk.kɛ.lɛ.reː.mʊ.s ɑ.ɪt .kʏk.loː.p eː.dʊk.tɑ .kɑ.miː.niːs |
| 6.637 | Vowel Length | hīs demum exāctīs perfectō mūnere dīuae<br>.hiːs .dɛ.m ɛk.sɑː.k.tiːs .pɛr.fɛk.toː .muː.nɛ.rɛ .diː.wɑɛ<br>.hiːs .deː.m ɛk.sɑː.k.tiːs .pɛr.fɛk.toː .muː.nɛ.rɛ .diː.wɑɛ |
| 6.678 | Contraction | dēsuper ostentat dehinc summa cacūmina linquunt<br>.deː.sʊ.pɛ.r ɔs.tɛn.tɑt .dɛ.hɪŋk .sʊm.mɑ .kɑ.kuː.mɪ.nɑ .lɪŋ.kʷʊnt<br>.deː.sʊ.pɛ.r ɔs.tɛn.tɑt .dɛɪŋk .sʊm.mɑ .kɑ.kuː.mɪ.nɑ .lɪŋ.kʷʊnt |
| 6.685 | Muta cum Liquida | aenēān alacris palmās utrāsque tetendit<br>.ɑɛ.neː.ɑː.n ɑ.lɑ.krɪs .pɑl.mɑː.s ʊ.trɑː.s.kʷɛ .tɛ.tɛn.dɪt<br>.ɑɛ.neː.ɑː.n ɑ.lɑ.krɪs .pɑl.mɑː.s ʊt.rɑː.s.kʷɛ .tɛ.tɛn.dɪt |
| 6.695 | Vowel Length | ille autem tua me genitor tua trīstis imāgō<br>.ɪl.l ɑʊ.tɛm .tʊ.ɑ .mɛ .gɛ.nɪ.tɔr .tʊ.ɑ .triːs.tɪ.s ɪ.mɑː.goː<br>.ɪl.l ɑʊ.tɛm .tʊ.ɑ .meː .gɛ.nɪ.tɔr .tʊ.ɑ .triːs.tɪ.s ɪ.mɑː.goː |
| 6.735 | Muta cum Liquida | quīn et suprēmō cum lūmine ūīta relīquit<br>.kʷiː.n ɛt .sʊ.preː.moː .kʊm .luː.mɪ.nɛ .wiː.tɑ .rɛ.liː.kʷɪt<br>.kʷiː.n ɛt .sʊp.reː.moː .kʊm .luː.mɪ.nɛ .wiː.tɑ .rɛ.liː.kʷɪt |
| 6.768 | Long in Position | et capys et numitor et quī tē nōmine reddet<br>.ɛt .kɑ.pʏ.s ɛt .nʊ.mɪ.tɔ.r ɛt .kʷiː .teː .noː.mɪ.nɛ .rɛd.dɛt<br>.ɛt .kɑ.pʏ.s ɛt .nʊ.mɪ.tɔr. ɛt .kʷiː .teː .noː.mɪ.nɛ .rɛd.dɛt |

| | | |
|---|---|---|
| 6.791 | Geminate | hic uir hic est tibi quem prōmittī saepius audīs<br>.hɪk .wɪ.r hɪk.k ɛst .tɪ.bɪ .kʷɛm .proː.mɪt.tiː .sɑɛ.pɪ.ʊ.s ɑʊ.diː.s<br>.hɪk .wɪ.r hɪ.k ɛst .tɪ.bɪ .kʷɛm .proː.mɪt.tiː .sɑɛ.pɪ.ʊ.s ɑʊ.diː.s |
| 6.793 | Vowel Length | saecula quī rūrsus latiō rēgnata per arua<br>.sɑɛ.kʊ.lɑ .kʷiː .ruː.r.sʊs .lɑ.tɪ.oː .reː.ŋ.nɑ.tɑ .pɛ.r ɑr.wɑ<br>.sɑɛ.kʊ.lɑ .kʷiː .ruː.r.sʊs .lɑ.tɪ.oː .reː.ŋ.nɑː.tɑ .pɛ.r ɑr.wɑ |
| 6.805 | Muta cum Liquida | līber agēns celsō nȳsae dē uertice tigrīs<br>.liː.bɛ.r ɑ.geː.ns .kɛl.soː .nyː.sɑɛ .deː .wɛr.tɪ.kɛ .tɪ.griː.s<br>.liː.bɛ.r ɑ.geː.ns .kɛl.soː .nyː.sɑɛ .deː .wɛr.tɪ.kɛ .tɪg.riː.s |
| 6.809 | Muta cum Liquida | sacra ferēns nōscō crīnīs incānaque menta<br>.sɑ.krɑ .fɛ.reː.ns .noː.s.koː .kriː.niː.s ɪŋ.kɑː.nɑ.kʷɛ .mɛn.tɑ<br>.sɑk.rɑ .fɛ.reː.ns .noː.s.koː .kriː.niː.s ɪŋ.kɑː.nɑ.kʷɛ .mɛn.tɑ |
| 6.814 | Synizesis | tullus in arma uirōs et iam dēsuēta triumphīs<br>.tʊl.lʊ.s ɪ.n ɑr.mɑ .wɪ.roː.s ɛt .jɑm .deː.sʊ.eː.tɑ .trɪ.ʊm.pʰiː.s<br>.tʊl.lʊ.s ɪ.n ɑr.mɑ .wɪ.roː.s ɛt .jɑm .deː.swe:.tɑ .trɪ.ʊm.pʰiː.s |
| 6.832 | Synizesis | nē puerī nē tanta animīs adsuēscite bella<br>.neː .pʊ.ɛ.riː .neː .tɑn.t ɑ.nɪ.miː.s ɑt.sʊ.eː.s.kɪ.tɛ .bɛl.lɑ<br>.neː .pʊ.ɛ.riː .neː .tɑn.t ɑ.nɪ.miː.s ɑt.swe:s.kɪ.tɛ .bɛl.lɑ |
| 6.844 | Muta cum Liquida | fabricium uel tē sulcō serrāne serentem<br>.fɑ.brɪ.kɪ.ʊm .wɛl .teː .sʊl.koː .sɛr.rɑː.nɛ .sɛ.rɛn.tɛm<br>.fɑb.rɪ.kɪ.ʊm .wɛl .teː .sʊl.koː .sɛr.rɑː.nɛ .sɛ.rɛn.tɛm |
| 6.852 | Vowel Length | hae tibi erunt artēs pācique impōnere mōrem<br>.hɑɛ .tɪ.b ɛ.rʊn.t ɑr.teːs .pɑː.kɪ.kʷ ɪm.poː.nɛ.rɛ .moː.rɛm<br>.hɑɛ .tɪ.b ɛ.rʊn.t ɑr.teːs .pɑː.kiː.kʷ ɪm.poː.nɛ.rɛ .moː.rɛm |
| 6.900 | Syllabification | tum sē ad caiētae rēctō fert līmite portum<br>.tʊm .s ɑd .kɑ.ɪ.eː.tɑɛ .reːk.toː .fɛrt .liː.mɪ.tɛ .pɔr.tʊm<br>.tʊm .s ɑd .kɑɪ.eː.tɑɛ .reːk.toː .fɛrt .liː.mɪ.tɛ .pɔr.tʊm |

## APPENDIX C: Sample Transcription and Syllabification

| Verse | Transcription and Syllabification |
|---|---|
| 1.065 | .ɑɛ.ɔ.lɛ .nɑm.kʷɛ .tɪ.biː .diː.wʊm .pɑ.tɛ.r ɑt.kʷ hɔ.mɪ.nʊm .reː.ks |
| 1.066 | .ɛt .mʊl.keː.rɛ .dɛ.dɪt .fluː.k.tuː.s ɛt .tɔl.lɛ.rɛ .wɛn.toː |
| 1.067 | .geː.n.s ɪ.nɪ.miː.kɑ .mɪ.hiː .tʏr.reː.nʊm .nɑː.wɪ.gɑ.t ɑɛ.kʷɔr |
| 1.068 | .iː.lɪ. ɪ.n iː.tɑ.lɪ.ɑm .pɔr.tɑː.ns .wɪk.toː.s.kʷɛ .pɛ.nɑː.tiː.s |
| 1.069 | .ɪŋ.kʊ.tɛ .wɪm .wɛn.tiː.s .sʊb.mɛr.sɑː.s.kʷ ɔb.rʊ.ɛ .pʊp.piː.s |
| 1.070 | .ɑʊ.t ɑ.gɛ .diː.wɛr.soː.s ɛt .dɪs.sɪ.kɛ .kɔr.pɔ.rɑ .pɔn.toː |
| 1.071 | .sʊnt .mɪ.hɪ .bɪs .sɛp.tɛm .prɑɛs.tɑn.tiː .kɔr.pɔ.rɛ .nʏm.pʰɑɛ |
| 1.072 | .kʷɑː.rʊm .kʷɑɛ .fɔr.mɑː .pʊl.kʰɛr.rɪ.mɑ .deː.ɪ.ɔ.peː.ɑ |
| 1.073 | .koː.nuː.b.joː .jʊŋ.gɑm s.tɑ.bɪ.liː .prɔ.prɪ.ɑm.kʷɛ .dɪ.kɑː.boː |
| 1.074 | .ɔm.niː.s ʊt .teː.kʊm .mɛ.rɪ.tiː.s .proː .tɑː.lɪ.bʊ.s ɑn.noː.s |
| 1.075 | .ɛk.sɪ.gɑ.t ɛt .pʊl.kʰrɑː .fɑ.kɪ.ɑt .teː .proː.lɛ .pɑ.rɛn.tɛm |
| 1.076 | .ɑɛ.ɔ.lʊ.s hɑɛk .kɔn.trɑː .tʊ.ʊ.s oː .reː.giː.nɑ .kʷɪ.d ɔp.teː.s |
| 1.077 | .ɛks.ploː.rɑː.rɛ .lɑ.bɔr .mɪ.hɪ .jʊs.sɑ .kɑ.pɛs.sɛ.rɛ .fɑː.s ɛst |
| 1.078 | .tuː .mɪ.hɪ .kʷɔt.kʊm.kʷ hɔk .reː.ŋ.niː .tuː s.keːp.trɑ .jɔ.wɛm.kʷɛ |
| 1.079 | .kɔŋ.kɪ.lɪ.ɑː.s .tuː .dɑː.s ɛ.pʊ.liː.s ɑk.kʊm.bɛ.rɛ .diː.wʊm |
| 1.080 | .nɪm.boː.rʊm.kʷɛ .fɑ.kɪs .tɛm.pɛs.tɑː.tʊm.kʷɛ .pɔ.tɛn.tɛm |
| 1.081 | .hɑɛ.k ʊ.bɪ .dɪk.tɑ .kɑ.wʊm .kɔn.wɛr.sɑː .kʊs.pɪ.dɛ .mɔn.tɛm |
| 1.082 | .ɪm.pʊ.lɪ.t ɪn .lɑ.tʊ.s ɑk .wɛn.tiː .wɛ.lʊ.t ɑg.mɪ.nɛ .fɑk.toː |
| 1.083 | .kʷɑː .dɑ.tɑ .pɔr.tɑ .rʊ.ʊn.t ɛt .tɛr.rɑː.s .tʊr.bɪ.nɛ .pɛr.flɑnt |
| 1.084 | .ɪŋ.kʊ.bʊ.eː.rɛ .mɑ.riː .toː.tʊm.kʷ ɑː .seː.dɪ.bʊ.s iː.miː.s |
| 1.085 | .uː.n ɛʊ.rʊs.kʷɛ .nɔ.tʊs.kʷɛ .rʊ.ʊnt .kreː.bɛr.kʷɛ .prɔ.kɛl.liː.s |
| 1.086 | .ɑː.frɪ.kʊ.s ɛt .wɑs.toː.s .wɔl.wʊn.t ɑd .liː.tɔ.rɑ .fluː.k.tuː.s |
| 1.087 | .iː.n.sɛ.kʷɪ.tʊr .klɑː.mɔr.kʷɛ .wɪ.rʊm s.triː.dɔr.kʷɛ .rʊ.dɛn.tʊm |
| 1.088 | .eː.rɪ.pɪ.ʊnt .sʊ.bɪ.toː .nuː.beː.s .kɑɛ.lʊm.kʷɛ .dɪ.ɛm.kʷɛ |
| 1.089 | .tɛʊ.kroː.r ɛk.s ɔ.kʊ.liː.s .pɔn.toː .nɔk.s ɪŋ.kʊ.bɑ.t ɑː.trɑ |
| 1.090 | .ɪn.tɔ.nʊ.eː.rɛ .pɔ.l ɛt .kreː.briː.s .mɪ.kɑ.t ɪŋ.nɪ.bʊ.s ɑɛ.tʰeː.r |
| 1.091 | .prɑɛ.sɛn.tɛm.kʷɛ .wɪ.riː.s ɪn.tɛn.tɑn.t ɔm.nɪ.ɑ .mɔr.tɛm |
| 1.092 | .ɛks.tɛm.pl ɑɛ.neː.ɑɛ .sɔl.wʊn.tʊr .friː.gɔ.rɛ .mɛm.brɑ |
| 1.093 | .ɪŋ.gɛ.mɪ.t ɛt .dʊ.plɪ.kiː.s .tɛn.deː.n.s ɑd .siː.dɛ.rɑ .pɑl.mɑː.s |
| 1.094 | .tɑː.lɪ.ɑ .woː.kɛ .rɛ.fɛr.t oː .tɛr.kʷɛ .kʷɑ.tɛr.kʷɛ .bɛ.ɑː.tiː |
| 1.095 | .kʷiː.s ɑn.t oː.rɑ .pɑ.trʊm .trɔj.jɑɛ .sʊb .mɔɛ.nɪ.bʊ.s ɑl.tiː.s |
| 1.096 | .kɔn.tɪ.gɪ.t ɔp.pɛ.tɛ.r oː .dɑ.nɑ.ʊm .fɔr.tɪs.sɪ.mɛ .gɛn.tɪs |
| 1.097 | .tyː.diː.deː .meː.n iː.lɪ.ɑ.kiː.s ɔk.kʊm.bɛ.rɛ .kɑm.piː.s |
| 1.098 | .noːn .pɔ.tʊ.ɪs.sɛ .tʊ.ɑː.kʷ ɑ.nɪ.m hɑŋ.k ɛf.fʊn.dɛ.rɛ .dɛks.trɑː |
| 1.099 | .sɑɛ.wʊ.s ʊ.b ɑɛ.ɑ.kɪ.dɑɛ .teː.loː .jɑ.kɛ.t hɛk.tɔ.r ʊ.b ɪŋ.geːns |
| 1.100 | .sɑr.peː.doː.n ʊ.bɪ .tɔt .sɪ.mɔ.iː.s .kɔr.rɛp.tɑ .sʊ.b ʊn.diː.s |
| 1.101 | .skuː.tɑ .wɪ.rʊm .gɑ.lɛ.ɑː.s.kʷ ɛt .fɔr.tɪ.ɑ .kɔr.pɔ.rɑ .wɔl.wɪt |