How to Scan: A step-by-step guide (to hexameter)

- NB This document only contains instructions for scansion. For an explanation of how Latin poetry works (i.e., what meter is), and what the various technical terms mean, please see the relevant handout.
- A quick reminder: Scansion is the technical analysis of poetic meter, or rhythmical structure. When you scan, the output is a visual representation of syllabic length/weight, along with the organization of those syllables into metrically significant units (spondees, dactyls, etc.). In the case of the metrical search tool we hope to create, the ultimate goal is to automate the scansion process and to be able to identify metrical resemblances both within and even across poetic meters.
- Note, the following guide explains how humans do scansion there may be different, and perhaps better, computational methods!
- This guide does not discuss caesurae or diaereses at present since these are not of primary importance for the intermetricality tool.
- A bare bones reference list of the tasks involved in scansion can be found at the
 end of this document. That may be the most useful basis for coding the rules of
 scansion.

Example 1

This is the sixth line of the first book of Vergil's *Aeneid*:

inferretque deos Latio, genus unde Latinum

Because the *Aeneid* is an epic its meter is the dactylic hexameter, which can contain between 12 and 17 syllables (six two-syllable spondees or five three-syllable dactyls plus a final spondee), which have to be divided among the six feet of the hexameter

Since the nuclei of syllables are typically vowels we can count sixteen syllables in the line above. We can already deduce, then, that the line will consist of four dactyls (12 syllables) and two spondees (4 syllables).

If we apply the rule that a vowel followed by two consonants creates a long/heavy syllable (except on occasion for a stop + liquid/f), we can see that the first syllable is a spondee as well as noting some other weights/lengths:

inferretque deos Latio, genus unde Latinum

One spondee will necessarily occur at the end of the line, so we can mark that too:

inferretque deos Latio, genus unde Latinum

We can then fill out the remaining syllables, which will all follow a dactylic pattern (helpfully copied from a site with far better formatting!):

īnfēr|rētquĕ dĕ|ōs Lătĭ|ō, gĕnŭs | ūndĕ Lă|tīnūm

Note that the foot divisions have been marked here as well as the syllable weight/lengths.

Some of these long syllables include naturally long vowels, such as the 'o's of 'deos' and 'Latio' (these inflectional endings always have the same vowel lengths), or the 'i' of 'Latinum'. Words in which a naturally long vowel is part of the stem rather than the ending will appear in most dictionaries with the naturally long vowel marked (e.g., 'Latīnus'). Some texts will also show these natural long vowel markings. If there is any way for the search tool to include this data it will make the scansion vastly easier, since the naturally long vowels will significantly reduce the number of variables (i.e., syllables of uncertain quantity) to work with.

Example 2

Why start with line 6? Because it's relatively straightforward and doesn't require knowledge of several of the other rules pertaining to scansion. Line 5 illustrates one of those rules:

multa quoque et bello passus, dum conderet urbem

This line contains fourteen, not fifteen, syllables because the final syllable of 'quoque' is elided (because it's followed by another vowel, the 'e' of 'et'). Fourteen syllables entails a line of four spondees (8) and two dactyls (+6 = 14). The spondees are easily identified because of the rule about vowels lengthened by position:

multa quoq(ue) et bello passus, dum conderet urbem

We can deduce, then, that the dactyls must be at the beginning and in the fifth foot (the latter standardly, though not always, a dactyl):

mūltă quŏ|que ēt bēl|lō pās|sūs, dūm | cōndĕrĕt | ūrbēm

If the metrical tool contained data about long vowels, it would know from the beginning that 'bello' and 'passus' had long final syllables (because those inflectional endings contain long vowels).

Example 3

Line 7 illustrates a number of rules:

Albanique patres, atque altae moenia Romae

As with line 6, we can see here that 'atque' is elided because of the 'a' at the beginning of 'altae'. Another rule: the words 'altae', 'moenia', and 'Romae' contain diphthongs - 'ae', 'oe' - which count as only one vowel sound and therefore only one syllable; all syllables containing diphthongs scan long. There are, then, a total of fourteen syllables in this line (i.e., four spondees and two dactyls):

Albanique patres, atq(ue) altae moenia Romae

This line also offers an example of one of the exceptions to the vowel lengthened by position rule: the first syllable of 'patres' does not scan long (though it can and does in other instances) because the consonant cluster consists of a stop ('t') followed by a liquid ('r'). Once we factor in the other vowels lengthened by position we have the following:

Albanique patres, atq(ue) altae moenia Romae

It is at this stage that knowing the intrinsic vowel lengths is crucial, such as the long middle 'a' in 'Albani', or the long 'e' in 'patres', or the short 'e' at the end of 'que', or the short 'a' at the end of 'moenia'. This information yields the following result for the line:

Ālbā|nīquĕ pă|trēs āt|que āltæ | mœnĭă | Rōmæ

Some miscellaneous observations from Aen. 1.1-7 to note:

ārmă vĭ|rūmquĕ că|nō Trō|iæ quī | prīmŭs ăb | ōrīs [note that Trōiæ is really Trōjæ, "i" is not a vowel]

lītŏră, | mūlt(um) īl|le ēt tēr|rīs iāc|tātŭs ĕt | āltō [note that the end of "multum" elides; iactatus is really jactatus, "i" is not a vowel]

vī sŭpĕ|rūm sæ|væ měmŏ|rēm Iū|nōnĭs ŏb | īrām [note that Iunonis is really Junonis, "i" is not a vowel]

One common inconsistency in the printing of Latin texts is the use of the letter 'v'. The Romans had one letter to do the job of two sounds, one a vowel the other a semivowel. Modern texts are pretty much evenly split with some using 'u' in both cases and others

using 'v' to distinguish the semivowel. Hence, many modern books quote the first line of the *Aeneid* as beginning 'arma uirumque', where 'uirum' begins with a semivowel. The same would be true for 'i' vs 'j' (e.g., "Junonis"), though most modern texts ceased to use 'j' a long time ago, so nowadays 'i' is pretty much used throughout. For the purposes of automated scansion, then, one has to be very careful to distinguish 'u' qua vowel from 'u' qua semivowel. I'm not sure how one could do this computationally.

Quick guide:

- 1) Eliminate elisions or prodelisions from scansion.
- 2) Scan diphthongs as long
- 3) Scan syllables containing naturally long vowels as long
- 4) Scan syllables containing vowels lengthened by position as long (bearing in mind exceptions)
- 5) Scan the last foot as a spondee (or long plus anceps, if you prefer)
- 6) Scan remaining syllables as short
- 7) Divide verse into feet the divisions (single vertical line) should be positioned between words or syllables, as relevant.
- 8) [Mark caesura not relevant for now]