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Picture Vergil — *Georgics* 2.483-492

Abstract

Vergil's poems have played important roles in our literary history. In particular, *Georgics* 2.483-492 and the idyllic landscape it contains represents an important element of longing in our aesthetic and literary culture. The poem's form and structure moreover constitute an important dialogue on the relationship between this longing and other forces, whether natural, political, or intellectual. Translations from Latin have kept the poem alive through centuries, conveying these nuances through transformation. This project aims to communicate these changed elements and the constant picture behind them by drawing them together on a single picture plane.




How to Read the Poster



The four columns in the poster each represents one of the four different texts considered in this study: from left to right, respectively Vergil's *Georgics* 2.483-492, John Dryden's translation of the same passage, Cecil Day Lewis's translation, and Peter Fallon's translation. The goal of the images is to reveal layer by layer the features of all four texts simultaneously, facilitating a close reading. Each row represents a different lens through which the texts have been converted to data, as outlined in the diagram below.







<i>Col. 1: Vergil</i>	<i>Col. 2: Dryden</i>	<i>Col. 3: Day Lewis</i>	<i>Col. 4: Fallon</i>
<i>Row 1: Word-to-word equivalence</i>			
<i>Row 2: Image-to-image equivalence; diction and register</i>			
<i>Row 3: Syntax</i>			
<i>Row 4: Metre</i>			

In Row 1, the words of the Latin text are assigned a unique colour and value according to their places in the passage, and the corresponding words in the English translations are given the same colour. Hue changes from line to line while value changes from word to word, growing lighter from left to right. This row shows that translation, while maintaining certain equivalences, also permutes the gradient, introducing fundamental changes to the text's fabric.

In Row 2, the underlying shapes represent the frequency of each word's prevalence respectively in the English and Latin corpuses. This measure approximates a passage's register, with more rare words revealing more literary artifice. A dot • represents a very common word (one that appears about 2/1000 times, such as *in*, *ab*, in Latin, and "I", "the", "that", "some" in English); a vertical line | represents common words (~2/10,000 times, such as *campus* and

anmes in Latin, and “laws” and “cause” in English); triangle  represents core words (~2/100,000-2/1,000,000 times, such as *frigidus* or “cottage”); and square  and trapezoid  respectively represent rare and super rare words (~2/1,000,000 times and below)¹. The coloured highlights locate key images in the respective passages and show their rearrangement or omission.

In Row 3, the words are marked by changes in direction of a single continuous line, which follows the syntax of the sentence according to the following rules: main clauses are traced before dependent clauses; dependent clauses are traced in the order of their first words; prepositional phrases and ablative absolutes are treated as dependent clauses; a line ends when a main clause and all its dependents are traced. Within a clause, words are traced in order of subject, modifiers of subject, verb, modifiers of verb, and object, modifiers of object. The resulting visual displays noun-adjective or verb-adverb units by a doubling back pattern  and special sentence orders by deviant angles such as this one .

In Row 4, the half-ellipse units each represents a single syllable instead of a word. Short syllables in Latin are represented by units of half width in order to maintain the clarity of the hexameter. The syllables which normally receive a natural stress within multi-syllabic words are reinforced by an outline (monosyllabic words are not reinforced, even if they fall on a metrical stress). The orientation of the half ellipse (up or down) reflects the implied prosody:  indicates a metrically stressed syllable, while  indicates a metrically unstressed syllable. In Fallon’s and Day Lewis’s translations, there are no fixed metrical schemes, but rather, a six-stress per line rule in Day Lewis’s case, and a similar but more loosely enforced pattern in Fallon’s. Syllables flanking caesuras in Latin and commas and periods (i.e. speech pauses) in English are represented by compressed ellipses  or  to reveal gaps; a single syllable compressed on both sides results in a knot shape such as  or , as in “happy the man, *who*, studying...”, for example (Dryden 698).




The Passage, Observations, and Results

Georgics 2.483-492 can be roughly divided into three sections: the central four lines (486-489) paint a complex image of an imagined landscape, often called idyllic (Thomas 252 and Fantham n. 487 to Fallon’s translation, page 100); surrounding this image are the narrator’s declarations of his aspirations to and anxieties about philosophical learning. The tone is very literary—simultaneously dramatic, sincere, playful, and a little wistful.

In the first and second lines (483-4), Vergil introduces an unusual syntax in which he delays the subject not only to the very end of a phrase but also to a different line, a model which recurs within this excerpt to a plethora of effects. In this first occurrence, it separates and subjugates the *possim...* phrase to the more joyous and imaginary lines about nature which

¹ Corpus data from *Hipparchia* for Latin words and *OED*, for English words

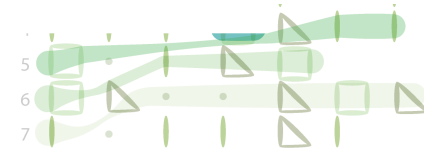
follow, giving the *frigidus sanguis* of the second line momentary authority over not only the narrator's attitude, but his voice and presence in the poem as well (see row 3, col. 1, dependence between 1st and 2nd lines). This grammatical twist begins a transformation where the verses become more and more unusual. Fallon is the only one to attempt to maintain this order of revelation—weakness, the body, and then the world—but does so at the expense of introducing changes to the inherent logic (compare row 2, cols. 1 and 4). By subordinating the “heart's lack of feeling” to a “because”, the unexplained and unexplainable force of *frigidus sanguis* loses a little of its mystery. Dryden and Day Lewis both make the opposite sacrifice, changing the order to begin with “my heavy Blood” (Dryden) and “a sluggishness, a lack of heat in my heart's blood” (Day Lewis). Both then turn to the poem's sonic qualities to catch the reader's attention. Day Lewis uses the multisyllabic “mysteries of the universe” for a memorable soundbite (see row 4, col. 3, second line) and Dryden expands upon the motion word in *accedere* to introduce a triple rhyme of “Flight... Height... Light” (rows 3 and 4 col. 2). Each translation introduces new elements and a new harmony between them, but completes as Vergil does the task of alerting the reader to the passage ahead.

Within the third and fourth lines, Vergil echoes and completes the devices set up in the first. The most prominent subject changes from an inadequate “I” (*ne possim*), to forces of nature and metaphorical agents (*sanguis, rura*), and finally back to “I” again. The absent or passive narrator (*obstiterit* and *mihi* in 2nd and 3rd lines), after a truly long delay, finally becomes simultaneously powerful and present only when he turns up as *inglorius*. As the real subject, object, and dreamer of *amem*, he is ready, or perhaps rushed into the subsequent landscape. This journey is a complicated one for the fixed English sentence order to follow: in particular, the joint effect of delayed revelation and grammatical involution cannot be rendered by either aspect alone. Dryden, consistent with his directional approach taken in the first two lines, spends two full lines enumerating the various significations of *inglorius* before diving into the country, valleys, and rivers in an strikingly symmetrical couplet (see row 3, col. 2, 6th-7th lines) as a sort of direct but gradual entry into the fantasy realm. The uncomfortable proximity of *inglorius* to *ubi* in Latin becomes uncomfortable distance in Dryden's verse (see row 2), and the simple and generic images of *rura, flumina* are cast as a sort of banner . It partly acts as a point of reference, partly as a transition into the fantasy realm ahead. Both Day Lewis and Fallon maintain the formal features of the Latin as much as possible (as can be seen in the gradient overview of row 1, where lines maintain the dark to light sequence, though the line changes are moved to the middle of the English line), and naturally both delay and isolate *inglorius*. In doing so, they naturally inherit some of the Latin's impressions, including its resolute yet ironic tone and its straddling of both high and low diction (see for example the very simple words of Fallon  which decompose *inglorius*  back down to its very common parts—*in + gloria*). The freer verse with its liberal pauses midline gives Fallon's and Day Lewis's soundbites even more force and playfulness than the Latin might render with its

single word (compare rows 2 and 4, cols. 3 and 4). Considering the first 4 lines together, we realize that the success or failure of translations rests not on its equivalence with the source text, but in its self-coherence, measured simultaneously in all different aspects of language.

Compared to the plain diction of the 3rd and 4th lines (*rura, amnes, flumina, and silvas*), the fanciful imagery of the 5th to 7th lines seem to be bustling with innumerable foreign names, actions, characters, places, and perhaps reminiscences. In particular, the triple parallel enjambments of the phrases *campi | Spercheosque...*,

baccata ... | Taygeta, and *qui me ... | sistat* create a simultaneously self-reinforcing and disorienting effect. The metrical resolutions of the fifth and sixth feet are maintained throughout the passage, (see row 4, col. 1 line



endings), so the delayed, or rather impatiently overflowing, images tumble over one another, forming one almost hallucinatory moment. Translating this passage is a little like translating a dream. The several outstanding words that act as anchors (see squares and trapezoids of row 2) also decrease the passage's accessibility² and do not themselves bear close scrutiny³. The images may be idyllic, in a sort of juxtaposition to the anxiety of *inglorius*, but its adjectives, *baccata*, *gelida*, and *ingens* are sensory and neutral. The judgments and impressions of this fantasy world must be formed by the reader. Dryden perhaps acknowledges the dreamlike quality of the passage when he begins, "Some God conduct me..." (8th line), making explicit the supernatural setting. The landmarks that sustain Dryden's poem are not foreign words, but rather the anaphora of "where... or.... or... or... and..." at the beginning of each line. These understated signposts both ground the poem in clarity and lend it the necessary tension between formal orthodoxy and sung freedom (rows 2 and 3, col. 2). The smoothness of the verse is crucial to integrating this effect: all three couplets are the only ones to have no breaks midline (see row 4, col. 2, 8th-13th lines). Fallon and Day Lewis both keep their structural interventions very minimal. Perhaps because the subject matter is itself very associative and free, the fits are remarkably close. For example, substitution of the metrically similar "Oh for the..." for "*o ubi...*" is a simple solution and nearly perfect on many fronts, because the sentence has no verb. However, extra care is required to distinguish this passage in register and style. Both writers use similar enjambments as the Latin to accomplish this, though Day Lewis' are a little more noticeable because his relatively shorter lines allow for the rushed and compressed nature of the passage to shine through. In addition, by sacrificing many details, he again achieves the vivid flashes of imagery


² The words become even more special in today's English corpus than they were in Latin (from rare ~2/1,000,000 to very rare <2/1,000,000).

³ The wide geographical span and geological diversity of the three references (respectively river, mountain, and mountain range, for *Spercheos*, *Taygeta*, and *Haemus*; Thomas 252) make the scene very difficult to picture and parse. Even the associations and references, as Thomas notes, do not appear to have other ties with the Georgics (ibid.).

and soundbite, using plain words to paint the picture, and leaving the fossilized place names to simply lend the necessary sense of foreignness. For example, he neither tells us that the Spercheus is in fact a river and not exactly a region, nor suggests that the Haemus is a mountain range, nor even mentions Bacchus, and yet the simple, enjambed, “Girls run mad!” which begins the 6th line, aptly, memorably, and cleverly encapsulates character, sentiment, setting, and magic using the simplest vocabulary. Fallon, while also adhering to the Latin’s form, pursues the opposite route, preserving as many details as the English can possibly contain. For example, “along the Spercheus” is used to tell us that we are looking at a field by a river, and “Haemus range” is carefully distinguished from “mountains of Taygetus”. By keeping the enjambment fairly subtle, that is, not separating closely tied noun-adjective pairs like “Spartan maidens”, for example, (compare density of connections row 3, cols. 4 and 5), he secures the reader’s attention on the diction and associations within the passage. This invites us to dive deep and to revisit the translation again and again the way we would the original. Perhaps this is the basis that allows him to extend his poetic line so long that it risks falling apart altogether (compare effects of his mock hexameter with Day Lewis’s; row 4 cols. 3-4). Perhaps this is also the reason he is able to dig into and make explicit associations that may have not been top of mind even for Vergil, translating *baccata* as “ripe for the picking!” (488). Like Fallon says in his Translator’s Preface, there are certain parts of the poem that remain puzzling despite the closest reading (xxxv), whether because we are not in Vergil’s time, or because the realities and imagined worlds are simply too complex. In these cases, a comparison of strategies is perhaps most helpful, as it can reveal the common ground, even if very small and difficult to articulate.

By the time we finally return to the initial image of intellectual pursuits and its aims and anxieties in the last three lines (compare *rerum cognoscere causas* 489 and the earlier *naturae accedere partis* 483), both diction and syntax take on a legal and prose-like quality. If the specific changes when going into dreamscape is towards confusion and compression (see the addition of elisions building *inglorius. o...* into the elided *Taygeta. o...*) the philosophical frame seems to move towards clarity and greater distinction. In this discussion of fate and the upcoming discussion of gods, the idyllic dreamscape’s franticness makes any structure, even a tricolon of fear, fate and the howl of hell, seem like a comfort by comparison, some sort of certainty. Fallon’s choice to distend *rerum causas* into two lines as “what makes the world | tick,” is interesting, not only because this enjambment is not found in the original or either of the other translations, but because it seems to run counter to the overall agenda of this section (compare rows 1 and 2, second-last lines). Perhaps he does this simply to render the two meanings of *rerum* as both matter and its works⁴, but perhaps it is also an intentional choice to disturb an otherwise very rigid, symmetrical, and still passage (see shapes row 2, col. 4). The effect of this disturbance is that *cognoscere rerum causas*, like its twin from the passage’s start, and its predecessor in Lucretius or Aristotle, are never fully resolved, while by contrast, the more

⁴ *OLD res*, sense 4 and 6

mythical second half of the claim is made comfortably. Dryden uses a couplet split equally down the middle ¹⁶  ¹⁷ to similar and surprising effect: the four part description sounds well considered and deliberate, though perhaps just as Fallon tries to suggest with his enjambment, what we have been enlightened with is still a bit unclear. As Dryden writes, “His Mind possessing,” ... the object does not matter (16th line). Like Dryden, Day Lewis refrains from rendering *Acheron* as a river, though he gives this supernatural and sensory phrase its own line as a sort of rhythmic conclusion, vivid and memorable. Ultimately, the extent to which a poem can help us understand and access the truth behind the world is perhaps determined by neither its density of information nor elegance of expression alone; each strategy calls for its own coherence.

Reflections on the Method of Pictures

Converting textual data into visuals has been very helpful at several stages of the analysis, though it has also posed many unexpected difficulties. The iterative process of drafting and fixing images often provided a valuable source of feedback while testing various readings. As an almost trivial but important example, consider this process of deduction. Due to space limitations on the page, line 486 of Fallon’s translation was printed with the “Oh for the open countryside” on a new line and indented to show its continuation of the line above. At a first reading, especially if out loud, it might be unclear to what degree the author intended this effect, since there is naturally a long pause between two sentences which are so different: could this be a sort of soft new line. Yet, panoramically comparing this feature to both the Latin and other translations reveals at a glance that this very long line is indeed completely intentionally connected, gluing together the *inglorius* and *o* examined above. Although this could have been resolved just as easily by normal close reading, the panoptic visual impact also allows the eye to simultaneously pick up other pieces of information, such as the line’s relative length to its surrounding lines, the range and extent of variation from line to line, its relative proportion to the Latin by words or by syllables, as well as in this case comparisons with other translations.

Perhaps the two most challenging aspects encountered while designing this image are, firstly, colour and, secondly, the grid. Initially, the goal as outlined in the proposal was to “project” different texts onto a single visual field, layering and mixing all the different visual attributes into something the eye would decode. However, after many experiments, it was found that when two very different data measures (e.g. rhythm and diction) are mixed into a single swatch, the eye has almost no way to extract the information. Edward Tufte, in his classical text on data visualization, calls such unsuccessful graphics “visual puzzles”, meaning images that require the viewer to constantly refer back to a verbal decoder to make sense of, giving as negative example exactly such an effort to map two numeric dimensions onto a colour grid (153). The grid layout poses a similar challenge that threatens to make the visual pointless: if each shape is simply a word or a syllable, why not just read the poem instead? The solution to

both challenges emerged accidentally in a pigheaded attempt to continue using colour as a continuous variable, albeit in a much simpler way. Many visualization theories recommend restricting the use of colour to the coding of categorical variables because it doesn't present a natural order to the eye, but the problem is somewhat mitigated when only considering one half of the colour wheel (Scavetta *et al.* 2:26). In the final image, this solution appears in the form of a sort of global tagging of the passage sections or lines: blue for the deliberate opening, green for the dreamscape, and reds for Lucretius at the end. On the one hand this seems like a waste of an extremely rich and expressive dimension of the image on something very trivial (the fact that all translations, no matter what their choices, general follow the original poem's arc is something we hardly need to think about), on the other, it has proved crucial for enabling comparisons across rows and columns. Tufte teaches that "Graphics can be designed to have at least three viewing depths: (1) what is seen from a distance, ...; (2) what is seen up close and in detail, ...; and (3) what is seen implicitly, underlying the graphic" (155). This use of colour essentially allows the sequential progression of the poem, a most fundamental property of language that a blank grid does not necessarily share, to enter the first viewing depth. When it is possible to know at a glance where in the poem a feature is, not only is it easier refer back to the text, but we are also constantly developing a sense of the author and translators' different choices with respect to pace and weight while scanning the image, judging for ourselves how they felt about each part.

A key limitation to this method is that it is currently somewhat labor intensive. The digital vector graphics medium with its automatic alignment of shapes and groups is very helpful, but in order to scale this tool, a more efficient grid-based drawing platform would be very important, whether as a web application with more interactivity or more contributors or simply to make it easier to replicate with other authors and texts. Ultimately, as a collection of human judgements when reading, it differs from data visualization in its flexibility and imprecision. Yet, just as with real data, the underlying meaning is made a little more familiar and welcoming at every attempt to excavate it.

Conclusions and Further Studies

Two important next steps stand out. The first is the re-imagination of how the pictures are presented for reading. Will studying more lines at once, or fewer, require a wholly new approach? Would a sequential presentation, as if in a book or slideshow allow this sort of comparison to stack, and perhaps one day encompass an entire poem or one of its books, or allow us to study the author's works side by side? The second is the re-imagination of datatypes. Diction, syntax, and metre are the heart and soul of literary analysis, but the visual language also shows most strength in more traditional aspects like geographical maps, or time series. Would it be possible to reveal relationships between this constructed, fantasy landscape of the poem's grids and the other fantasy landscape of "Haemus' l Cool glens"? Would it be possible to teach

English or Latin the way we teach geography in the future? Only with repeated excursions across a familiar land do discoveries emerge.

Technology related efficiencies turned out to be less immediate and effective in this project than expected. In the course of experimenting for this project, the scansion rules were digitized and an automatic hexameter scanner was created. However, because, as the first series of questions above reveal, in the absence of a visual plan for exhibiting and communicating information about longer passages of the poem, the time efficiency has not yet yielded anything which humans could not do by really reading the poem. Perhaps in time, it will come into use for quickly finding all the hypermetric lines in the poem, or all the instances of fifth foot spondees, for example, but some of its greater potentials such as machine translation or other learning methods which may generate insight may even benefit from the development of a better system for abstracting features of text.

Before all this, it is important to recall that *Georgics* 2.483-492 is a small portion of a nature, philosophy, politics poem. Before Vergil, Lucretius also praised the landscape (Keith 67). Human love for the nature around us is very broad and universal and helps the poem remain accessible to us today. Perhaps to warn against an abuse of this universal and general love, Thomas quotes from George Crabbe's poem "The Village" as the epigraph to his commentary,

Ye gentle souls, who dream of rural ease,
Whom the smooth stream and smoother sonnet please;
Go! if the peaceful cot your praises share,
Go, look within, and ask if peace be there. (viii)

It is as if to answer this objection that Vergil crafted 2.483-492 the way he did. Peace is there, even where there is destitution and hard work, and not because it is apolitical, but because the idyllic dream itself for pure language is a tumultuous one, and every return from the dangerous, dreamed of place is peaceful and rewarding.

Appendix: Texts

Latin Text: *Georgics* 2.483-492

sin has ne possim naturae accedere partis
frigidus obstiterit circum praecordia sanguis, 485
rura mihi et rigui placeant in uallibus amnes,
flumina amem siluasque inglorius. o ubi campi
Spercheosque et uirginibus bacchata Lacaenis
Taygeta! o qui me gelidis conuallibus Haemi
sistat, et ingenti ramorum protegat umbra!
felix qui potuit rerum cognoscere causas 490
atque metus omnis et inexorabile fatum
subiecit pedibus strepitumque Acherontis auari:

Dryden Translation: 685-701

But if my heavy Blood restrain the Flight 685
Of my free Soul, aspiring to the Height
Of Nature, and unclouded Fields of Light:
My next Desire is, void of Care and Strife,
To lead a soft, secure, inglorious Life.
A Country Cottage near a Crystal Flood, 690
A winding Vally, and a lofty Wood.
Some God conduct me to the sacred Shades,
Where Bacchanals are sung by Spartan Maids.
Or lift me high to Hemus hilly Crown;
Or in the Plains of Tempe lay me down: 695
Or lead me to some solitary Place,
And cover my Retreat from Human Race.
Happy the Man, who, studying Nature's Laws,
Thro' known Effects can trace the secret Cause.
His Mind possessing, in a quiet state, 700
Fearless of Fortune, and resign'd to Fate.

Day Lewis Translation:

*But if a sluggishness, a lack of heat in my heart's blood
Denies me access to these mysteries of the universe,
Then let the country charm me, the rivers that channel its valleys,
Then may I love its forest and stream, and let fame go hang.
Oh for the plain of Spercheus, Taygeta where Spartan
Girls run mad! And oh for one to stay me in Haemus'
Cool glens, and comfort me in a world of branchy shade!
Lucky is he who can learn the roots of the universe,
Has mastered all his fears and fate's intransigence
And the hungry clamour of hell.*

(page 38)

Fallon Translation: 483-492

*But if I am not the one to sound the ways of the world
because my heart's lack of feeling stands in the way,
then let me be satisfied with rural beauty, streams bustling through the glens; 485
let me love woods and running water—though I'll have failed. Oh for the open countryside
along the Spercheus, or the mountains of Taygetus, its horde of Spartan maidens
ripe for the picking! Oh for one who'd lay me down to rest
in cool valleys of the Haemus range and mind me in the shade of mighty branches!
That man has all the luck who can understand what makes the world 490
tick, who has crushed underfoot his fears about
what's laid out in store for him and stilled the roar of Hell's esurient river.*

Works Cited

- Benjamin, Walter. "The Task of the Translator: An Introduction to the Translation of Baudelaire's *Tableaux Parisiens*" 1923, in *The Translation Studies Reader*, 2nd ed. edited by Lawrence Venuti, Routledge, 2004. 75-85.
- Dryden, John. *The Poems of John Dryden*. Edited by James Kinsley, Oxford: Clarendon Press, 1958.
- Gunderson, Erik. *Hipparchia*, v1.6.1, 2020.
- Keith, Alison. *Virgil*. Bloomsbury Academic, 2020.
- Scavetta, Rick, Vincent Vankrunkelsven, and Filip Schouwenaars. "Aesthetics Best Practices" *Data Visualization with ggplot2 (Part 1)*, Chapter 3 "Aesthetics", Datacamp, <https://campus.datacamp.com/courses/data-visualization-with-ggplot2-1/chapter-3-aesthetics?ex=12> .
- Tufte, Edward R.. *The Visual Display of Quantitative information*. Second ed., eighth printing, Graphics Press LLC, 2013.
- Virgil. *Georgics* vol. 1: Books I-II, Edited by Richard F. Thomas, Cambridge University Press, 1988.
- Virgil. *Georgics*. Translated by Peter Fallon with an Introduction and Notes by Elaine Fantham, Oxford University Press, 2004.
- Virgil. *P. Vergili Maronis: Opera*. Edited by R. A. B. Mynors, Oxford Classical Texts. Oxford: Oxford University Press, 1969. Oxford Scholarly Editions Online, 1 Jul. 2015. Web. 1 Jul. 2015.
- Virgil. *The Georgics*. Translated by C. Day Lewis with an Introduction by Louis Bromfield, Oxford University Press, 1947.