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The Ring Cycle: Journeying Through the Language of Tolkien's Third Age with Corpus Linguistics

Journeying is a master theme in J.R.R. Tolkien's published works.¹ Indeed, Middle-earth could be considered a world of journeys. Its stories are oriented around a series of journeys: including those taken by Thorin Oakenshield's company, in their efforts to reclaim Erebor; by the Nine Walkers, in seeking to destroy Bilbo's ring; and, not least, by the Ring itself – as its centrality and imagined nature unfolded across Tolkien's writings. This article explores the latter journey in greater depth: employing computational methods to assess trends in Tolkien's language use, across *The Hobbit* and *The Lord of the Rings* (*LotR*).

The article feeds into a growing movement towards digital humanities readings of Tolkien's (and other authors') published works. It proposes statistical techniques enabled by recent advances in text programming can help inform our interpretations of significant texts.² Indeed, it argues analysts can employ these techniques to pop the bonnet on language use within such texts: reading materials through alternative (non-human) eyes, and mapping their contents in such a way as to illuminate elusive linguistic and stylistic choices authors make in crafting their worlds, characters, and narratives.³

In the below, I illustrate this contention by considering linguistic/stylistic choices from Tolkien's Third Age writings. I use tools from software-driven corpus linguistics (a method of quantitative text analysis which has made inroads into linguistic,⁴ literary,⁵ pedagogical,⁶ and social scientific⁷ research in

¹ In Brian Rosebury's words, in Tolkien "it is the journey, rather than the quest, which serves as the unifying image" ... Brian Rosebury, *Tolkien: A Cultural Phenomenon* (Basingstoke: Palgrave Macmillan, 2003), p. 29.

² Franco Moretti, *Distant Reading* (London: Verso, 2013); Franco Moretti, *Graphs, Maps, Trees* (London: Verso, 2005); Martin Paul Eve, *Close Reading with Computers: Textual Scholarship, Computational Formalism, and David Mitchell's Cloud Atlas* (Redwood City: Stanford University Press, 2019).

³ Ted Underwood, *Distant Horizons: Digital Evidence and Literary Change* (Chicago: University of Chicago Press, 2019).

⁴ Paul Baker, 'Times May Change, But We Will Always Have Money: Diachronic Variation in Recent British English', *Journal of English Linguistics*, 39.1 (2011), 65–88 <<https://doi.org/10.1177/0075424210368368>>.

⁵ Michaela Mahlberg, *Corpus Stylistics and Dickens's Fiction* (Abingdon: Routledge, 2013).

⁶ Dana Gablasova, Vaclav Brezina, and Tony McEnery, 'Collocations in Corpus-Based Language Learning Research: Identifying, Comparing, and Interpreting the Evidence', *Language Learning*, 67.S1 (2017), 155–79 <<https://doi.org/10.1111/lang.12225>>.

⁷ Amir Salama, 'Ideological Collocation and the Recontextualization of Wahhabi-Saudi Islam Post-9/11: A Synergy of Corpus Linguistics and Critical Discourse Analysis', *Discourse & Society*, 22.3 (2011), 315–42 <<https://doi.org/10.1177/0957926510395445>>; Tony McEnery, Helen Baker, and Vaclav Brezina, 'Slavery and Britain in the 19th Century', in *Time in Languages, Languages in Time*, ed. by Anna Čermáková and others (Amsterdam: John Benjamins, 2021), pp. 9–38.

recent years) to expose the hidden wiring of language use in *The Hobbit*, *The Fellowship of the Ring*, *The Two Towers*, and *The Return of the King*. I consider how Tolkien lexicalised his One Ring (“the central force of his symbolic conception... the most powerful and most dangerous artefact in his imaginary world”⁸) across these texts. Specifically, I employ corpus linguistic methods of keyness and collocation analysis to: a) assess the One Ring’s centrality to Tolkien’s unfolding Third Age narrative; and b) establish how the Ring’s nature might have changed – as the semantic network within which Tolkien operationalised it evolved.

Using these methods, I find the Ring did indeed undergo a significant journey across Tolkien’s Third Age texts. Firstly, the Ring shifted from the centre of the Third Age’s narrative arc to its periphery (as revealed by falling keyness scores between texts). Secondly, the Ring transitioned from being operationalised as an innocent, *magical* device – to one of ominous *power* or *heavy burden* (as illustrated by changing collocation returns, whenever the word *ring* reappeared). Collectively, I suggest these findings illuminate questions of worldly disenchantment in Tolkien’s writings. They point to Middle-earth’s fall, from a state of child-like mystery, adventure, and faerie – to one of darkness, hierarchy, and amnesia. In doing so, they also shed light on possibilities for interpreting Tolkien’s story-telling as a reflection of his (contested) disenchantment with Britain’s industrialisation/modernisation.

Such is the argument I make vis-à-vis Tolkien’s writings. This argument manifests a useful contribution to Tolkien studies: feeding into a digital turn in Middle-earth scholarship, in its use of computational methods to advance the interpretation of Tolkien’s legendarium. This argument also contributes to literary studies more broadly: elaborating how readers might combine statistical techniques with human-led interpretations, in evolving our sensitivity to patterns of language use and authorial style.

The article began as an experiment with a friend. One lunchtime, following a conversation in which I sought to convince that friend of corpus linguistic softwares’ ease-of-use and analytical potential, I decided to run an analysis of texts we both love (namely, *The Hobbit* and *The Lord of the Rings*). This experimental study’s outcomes were surprisingly illuminating. They both confirmed and challenged, deepened and reoriented, interpretations we had intuited from our own private human readings. Hence, my decision to share these outcomes more widely. During the experiment, I sought to answer two research questions:

1. How does the One Ring’s centrality to the Middle-earth story evolve, over its lifetime?
2. Do the Ring’s imagined qualities change, as Tolkien’s Third Age writings unfold?

⁸ Adam Roberts, ‘The One Ring’, in *Reading The Lord of the Rings: New Writings on Tolkien’s Classic*, ed. by Robert Eaglestone (London: Continuum, 2005), pp. 59–72 (p. 59).

These questions remain the basis for the present article. The article begins by reviewing scholarly literatures. I consider recent shifts in Tolkien studies – away from abstracted contests concerning Tolkien’s status within the literary canon, and towards more detailed assessments of style and lexis. I introduce the scope for corpus linguistic/digital humanities approaches to contribute to these shifts, and reflect on insights derived from the handful of works undertaking such contribution. I outline the methodology I employed to answer my two research questions: noting my study’s conceptual and logistical parameters, and flagging important weaknesses in computer-led readings (emphasising the necessity of combining computational readings *with*, rather than treating them as a substitute *for*, qualitative readings). Having set out my research design, I divulge my findings: considering the One Ring’s growing peripheralization across Third Age texts (as measured by keyness returns), as well as the transformation of its meaning profile (per collocation returns). I conclude by noting these findings’ import for assessing Tolkien’s changing language use (the disenchantment of Tolkien’s legendarium, as it evolved), as well as what such changes imply for our efforts to interpret Middle-earth.

Tolkien studies: in the beginning was the word

I begin by situating this article in relation to literatures on Tolkien’s legendarium, and on the use of corpus linguistics in literary studies. I argue conventional critical reception of Tolkien’s works has become lost in debates around their literary value (or lack thereof). These debates often become cyclical, and shed little light on the work itself – the production of rich, affective stories through specific techniques of style and lexis. More recently, and in response to this circularity, Tolkien scholars have proposed a descent to the level of word and language: foregoing attacks on/defence of Tolkienian texts’ status as “literature” – in favour of a more specific assessment of their technical parameters. I suggest corpus linguistics can add value in this descent to word. I introduce corpus linguistics as a particular method for reading texts – which, when combined with human readings, can illuminate questions of style/lexis in interesting and unexpected ways. I illustrate this value-add by referencing the handful of works which have undertaken corpus linguistic Tolkien studies, and considering insights their authors have delivered.

Historically, contests over his works’ literary value have been a major feature of Tolkien’s critical reception. Indeed, in reviewing past scholarship at the turn of the century, Michael D. C. Drout and Hilary Wynne identified “defence of Tolkien” as one of four major strands within Tolkien studies.⁹ According to this tendency, critical work on Tolkien divides between two

⁹ Michael D. C. Drout and Hilary Wynne, ‘Tom Shippey’s J.R.R. Tolkien: Author of the Century and a Look Back at Tolkien Criticism since 1982’, *Envoi*, 9.2 (2000), 101–67 (pp. 113–17).

antagonistic schools. On the one hand, Tolkien's "detractors"¹⁰ amongst "contemporary literary studies, modernist and post-modernist [schools] base their dismissal of Tolkien's work as unworthy of study based on his supposedly 'poor writing'".¹¹ Burton Raffel's early claim that *LotR*, for all its "magnificent performance, full of charm, excitement and affection", was not "literature"¹² set the tone in this regard. Operationalising an exclusive (yet also non-measurable, and therefore simultaneously *elusive*) standard for literature, Raffel found *LotR* fell short of standing alongside texts like "*The Iliad* or *The Odyssey*... *Paradise Lost*, or *The Great Gatsby*"¹³ – on grounds that Tolkien's writing was "embarrassingly bad", or enjoyed "almost no independent literary merit".¹⁴ For scholars of Raffel's school, Tolkien's sustained popularity had less to do with "correct and proper [literary] taste" – than with "a kind of literary disease, whose sufferers... should be scorned, pitied, or rehabilitated"¹⁵ (as interpreted by Tom Shippey).

Unsurprisingly, and on the other side of the coin Drout and Wynne identify, Tolkien's apologists (Shippey foremost amongst them) react to such attacks on his works' literary merit through a defensive posture. This second critical school responds to "intense critical hostility... the refusal to allow [Tolkien] to be even a part of 'English literature'"¹⁶ through a rear-guard action: seeking to re-establish Tolkien as "a significant figure of the twentieth century, someone of comparable stature to, say, Poe or Peacock among nineteenth-century writers", rather than merely "a best-seller".¹⁷ This defensive line has become a foundational one for Tolkien Studies. As Drout and Wynne put it, "nearly every Tolkien critic has worked to some degree or another on the problem of defending Tolkien against his detractors".¹⁸ The defence takes various forms – including especially through abstracted political/sociological claims-making regarding the "class hostility" of literary criticism's "*haute bourgeoisie*";¹⁹ the intrinsic value of morality tales;²⁰ or an innate yearning for pre-modern ecologies.²¹

¹⁰ Drout and Wynne, pp. 113–17.

¹¹ Robin Anne Reid, 'Mythology and History: A Stylistic Analysis of The Lord of the Rings', *Style*, 43.4 (2009), 517–38 (p. 517).

¹² Burton Raffel, 'The Lord of the Rings as Literature', in *Tolkien and the Critics*, ed. by Neil Isaacs and Rose Zimbardo (London: University of Notre Dame Press, 1968), pp. 218–46 (p. 218).

¹³ Raffel, p. 220.

¹⁴ Raffel, pp. 229–331.

¹⁵ Tom Shippey, *J.R.R. Tolkien: Author of the Century* (London: HarperCollins, 2000), p. 4.

¹⁶ Shippey, p. 128.

¹⁷ Rosebury, p. 1.

¹⁸ Drout and Wynne, p. 114.

¹⁹ Shippey, pp. 129–30.

²⁰ Hal Colebatch, *Return of the Heroes: The Lord of the Rings, Star Wars, Harry Potter and Social Conflict* (Perth: Australian Institute, 1990).

²¹ Patrick Curry, *Defending Middle-Earth: Tolkien, Myth, and Modernity* (New York: Mariner Books, 2004).

For all that Tolkien's defence is a laudable endeavour, and for all the truth in accusations of establishment snobbery vis-à-vis Tolkien's "‘anorak-clad' followers",²² the energy expended in this cycle of attack and defence is counter-productive. Put simply, the debate between critics and apologists generates more heat than light when it comes to our understanding of, and appreciation for, Tolkien's literature. For this debate tends to occur at a level of remove from the texts themselves. As Shippey discovered of "one of [Tolkien's] most vehement" critics during a private conversation following a radio debate, for example: "he had never actually read *The Lord of the Rings* which he had just been attacking".²³ Similar inattention to textuality applies to defensive scholarship, moreover. Again, Drout and Wynne's review concluded Tolkien studies' "biggest failing" was the field's "lack of discussion of Tolkien's style, his sentence-level writing, his word choice and syntax".²⁴ Four years later, Drout found similarly that, though "J.R.R. Tolkien's prose style... has been both attacked and defended, its details have seldom been analysed in terms of specific aesthetic effect",²⁵ while Robin Anne Reid proposed "stylistic or applied linguistic scholarship" on Tolkien's legendarium remained "limited",²⁶ by the end of the decade.

Operating a primary concern with Tolkien's status as an author, rather than on his use of language, defensive debates constrain deeper understandings of Tolkien's *craft* as a story-teller. This includes understandings concerning narrative techniques, aesthetic styles, or lexical choices Tolkien made, in forging his legendarium. Such is the logic behind more recent scholarship, proposing a descent in analysis – away from abstracted debates around status/meaning, and towards the assessment of language use. Scholars like Brian Rosebury argue for "understand[ing] and evaluat[ing] Tolkien's works as *compositions*, that is, as products of literary art which are for readers aesthetic experiences"²⁷ – rather than engaging in contests over their connection to/placement alongside literary canon. This means developing micro-level tools and mechanisms that tell us *how* the composition took shape, at word- or sentence-level – as much as *why*, or *to what end*.

It's worth remembering in this vein that, for Tolkien himself, it was "the words [which] create[d] the story".²⁸ Tolkien considered himself a "philologist before he was a mythologist":²⁹ *words* and "linguistic aesthetic"³⁰ were at the

²² Shippey, pp. 129–30.

²³ Shippey, p. 14.

²⁴ Drout and Wynne, p. 123.

²⁵ Michael D. C. Drout, 'Tolkien's Prose Style and Its Literary and Rhetorical Effects', *Tolkien Studies*, 1 (2004), 137–63 (p. 137).

²⁶ Reid, p. 517.

²⁷ Rosebury, p. 5.

²⁸ Drout and Wynne, p. 118.

²⁹ Shippey, p. 7.

³⁰ Elizabeth Kirk, "I Would Rather Have Written in Elvish": Language, Fiction and "The Lord of the Rings", *Novel*, 5.1 (1971), 5–18 (p. 7).

forefront of his thinking, in producing works that were (in Tolkien’s own reflections) “fundamentally linguistic in inspiration”.³¹ In contrast to all the *heat* generated by debates around their literary status, following Tolkien’s self-professed interest in the specific craft of word use advances scholarship by shedding *light* on ways the legendarium took shape... Namely: word by word. Per Drout, “critics who have focused solely on source or theme should note that the analysis of style may unearth new sources and shed light on traditional themes as well”...³² As, for instance, in parallels Drout draws between *Return of the King* and *King Lear* in the former’s “grammatical, syntactic, lexical, and even aural effects”,³³ or, in “the impression of textual depth” which Drout, Namiko Hitotsubashi, and Rachel Scavera note of consistent “references to other, absent texts”³⁴ across Third Age writings. By addressing “the issue of style, of sentence-level writing”³⁵ in Tolkien, these works alter the tenor of scholarship. Not only, developing our knowledge of the detail of his creation – but, further (and in so doing), contributing to that creation’s very defence: demonstrating artful ways it took shape through linguistic practice. Such accounts of technical, lexical, stylistic craft present a useful response to “mainstream”³⁶ critiques that the texts themselves were not of sufficient aesthetic standard to merit consideration as literature: by demonstrating how “elegant and powerful”³⁷ Tolkien’s specific word choices really were – concluding, forcefully, “that *LotR* would be a lesser work if it were written any other way”.³⁸

What can the present article contribute to this shift from cyclical debates on status, to evolving awareness of language? This article makes a case for the inclusion of digital humanities methods within this descent to word: as one path towards delivering its objectives of illuminating Tolkien’s linguistic craft. For, though studies paying attention to word use have indeed advanced existing scholarship, many of them draw upon similar methods of qualitative analysis in generating their findings – and few have drawn upon innovations in computational analysis that open up new ways of thinking about word use. To dwell on one example: Nils Ivar Agøy’s 2013 assessment of the use of adjectives in *LotR* came to valuable conclusions concerning Tolkien’s “invitational style”.³⁹ This was a style that adopted thin description – not for lack of literary

³¹ Tolkien in Shippey, p. 6.

³² Drout, p. 155.

³³ Drout, p. 137.

³⁴ Michael D. C. Drout, Namiko Hitotsubashi, and Rachel Scavera, ‘Tolkien’s Creation of the Impression of Depth’, *Tolkien Studies*, 11 (2014), 167–211 (p. 179).

³⁵ Drout and Wynne, p. 124.

³⁶ Sharon Bolding, ‘Review: Tolkien as a Literary Artist by Thomas Kullmann and Dirk Siepmann’, *Mythlore*, 41.1 (2022), 277–84 (p. 277).

³⁷ Drout and Wynne, pp. 123–24.

³⁸ Drout and Wynne, pp. 123–24.

³⁹ Nils Ivar Agøy, ‘Vague or Vivid? Descriptions in The Lord of the Rings’, *Tolkien Studies*, 10 (2013), 49–67 (p. 63).

ability (as Tolkien's sceptics claim), but with the "deliberate" goal of leaving the depiction of characters/landscapes so "open that they are mentally filled in by their readers".⁴⁰ Ivar Agøy's findings advance the field: providing a lens for thinking about Tolkien's specific literary style (one running contrary to his historical critical dismissal). Yet, Ivar Agøy arrived at these findings according to a self-confessedly unsophisticated method. Being "methodically hampered by the fact that I am a historian, not a literary scholar", Ivar Agøy's "approach [was] extremely simple":⁴¹ hand-counting the number of descriptions in each *LotR* chapter, to understand (in raw, absolute terms) the sheer volume of depth Tolkien engaged when envisaging Middle-earth's people/places.⁴² More sophisticated methods for calculating language use can add complexity to this picture – deepening Agøy's significant argument, by enhancing tools by which it was attained. In critiquing Tolkien, Raffel felt the former's language must be "both more deeply felt and more deeply worked"⁴³ if it was to be considered alongside the Fitzgeralds and Lawrences of twentieth-century literature. Ironically, it is exactly this deep working which a digital humanities approach to Tolkien permits: illuminating patterns of style and lexis through the deployment of tools beyond the capacities of conventional human readings.

Corpus linguistics: reading rhizomatically

As a method of digital humanities scholarship, corpus linguistics can advance Tolkien studies' descent to the level of word: affording procedures and measures that raise our sensitivity to Tolkien's authorial craft, by identifying patterns of style/lexis across large-n corpora. But what is corpus linguistics? Corpus linguistics is a field of quantitative text analysis: in which computer softwares are employed to read a text sample (the corpus), and identify patterns of word use within it. This field emerged from advances in language programming at Brown University during the 1960s;⁴⁴ and has since gained a footprint in disciplines from medicine⁴⁵ to mathematics.⁴⁶

When it comes to analysing texts like those considered in this article, there are two major arguments in favour of corpus linguistic methods. The first is as regards the scope and substance of claims made about linguistic samples.

⁴⁰ Ivar Agøy, p. 63.

⁴¹ Ivar Agøy, p. 50.

⁴² Ivar Agøy, p. 59.

⁴³ Raffel, p. 221.

⁴⁴ Henry Kučera and W. Nelson Francis, *Computational Analysis of Present-Day American English* (Providence: Brown University Press, 1967).

⁴⁵ Jane Demmen and others, 'Language Matters: Representations of "Heart Failure" in English Discourse - a Large-Scale Linguistic Study', *Open Heart*, 9.1 (2022), e001988 <<https://doi.org/10.1136/openhrt-2022-001988>>.

⁴⁶ Juan Mejia-Ramos and others, 'Using Corpus Linguistics to Investigate Mathematical Explanation', in *Methodological Advances in Experimental Philosophy*, ed. by Eugen Fischer and Mark Curtis (London: Bloomsbury, 2019), pp. 239–64.

Corpus linguistic tools can enhance these claims' validity: by setting them against a systematic assessment of word use within the entirety of the relevant population. As Gerlinde Mautner has put it, with the support of statistical findings from corpus linguistic techniques, analysts can advance "less speculative"⁴⁷ claims about the quantity and quality of language use. Being drawn from replicable counts of *all* lexical items within a body of text, these claims are not inhibited by "researcher bias",⁴⁸ including "cherry-picking"⁴⁹ of unrepresentative data. It's hard to take issue, for example, with the claim a theme is losing relevance across a corpus, if the volume of use for words proxying that theme can be shown to be in systematic (and statistically significant) decline.⁵⁰

This is the most basic argument in favour of quantitative language analyses: that they advance a dispassionate, "scientific" characterisation of all materials within a large text population. Interestingly, other proponents of digital humanities theorise these strengths of systematic computational readings vis-à-vis the "universal, but often unspoken, bounding of *mortality*" amongst human readers – with the major reason for reading with computers being that, for human subjects, "death cuts short every totalising attempt to read everything".⁵¹ Computers can help critics overcome this "finitude of humanity",⁵² in relation to the scale of data pertaining to our analysis: by simply reading that data much faster than we ever could. Such circumvention of mortality seems curiously appropriate to the analysis of texts like Tolkien's. After all, Tolkien's literature pivots, similarly, on questions of morality – including, a device conferring immortality! (Not a computer, but a ring.) As Rosebury notes, "Tolkien himself spoke of the wish to escape from death as 'the oldest and deepest desire'".⁵³ Computational methods parallel this desire in curious ways – overcoming human constraints, by making accessible/assessable volumes of text beyond our temporal bounds.

The second argument in favour of corpus linguistic tools for text analysis is the often-unexpected findings such totalising readings draw from their text sample – findings which can challenge, deepen, or reorient intuitive human cognition. When using corpus linguistic techniques in my work, I've often found they open doors to new lines of research – lines I hadn't anticipated, or which I'd overlooked, when undertaking qualitative readings. By nature, computers read textual materials differently to humans. This reading is not

⁴⁷ Gerlinde Mautner, 'Checks and Balances: How Corpus Linguistics Can Contribute to CDA', in *Methods of Critical Discourse Studies*, ed. by Ruth Wodak and Michael Meyer, 3rd edn (London: SAGE, 2016), pp. 154–79 (p. 42).

⁴⁸ Mautner, 'Checks and Balances: How Corpus Linguistics Can Contribute to CDA', p. 156.

⁴⁹ Markus Rheindorf, *Revisiting the Toolbox of Discourse Studies: New Trajectories in Methodology, Open Data, and Visualisation* (London: Palgrave Macmillan, 2019), p. 2.

⁵⁰ Baker, 'Times May Change, But We Will Always Have Money: Diachronic Variation in Recent British English'.

⁵¹ Eve, p. 3.

⁵² Eve, p. 12.

⁵³ Rosebury, p. 57.

sequential (word by word), but global (swallowing an entire corpus in one gulp). Moreover, computational readings are not intuitive/interpretive (allowing a text's meaning to take shape without needing to enumerate that meaning's exact parameters), but literal/direct (drawing an understanding of textual substance from a precise counting of contents).

This alternative form of reading produces different results to human-led approaches. Often, such results can appear meaningless, abstruse, or overly exact. If one was to ask a computer what Shakespeare's sonnets say about love, for example, one would be given the literal list of words Shakespeare uses to say *love* (perhaps ordered by frequency), rather than any insight into how these words connect to each other, what texts/meanings they reference from outside the corpus, or how they build particular visions of relationship. However, results of computerised reading can also be thought-provoking. By dint of having received the text differently, computer programmes can open our eyes to patterns undetected by human cognition. Just as individuals with different life experiences, and different knowledges of intertextuality, bring different interpretations to a single sample of text; so computers that read corpora non-intuitively can shed "different perspectives on the data".⁵⁴ Computational readings can map textual data in ways that deviate from conventional readings – "pinpointing [new] areas of interest for a subsequent close analysis".⁵⁵ Such *multiplicitous* mapping is useful from an analytical perspective, insofar as it changes angles from which we view our corpus. This is what the father of critical discourse analytic method, Norman Fairclough, found in learning to combine corpus linguistic methods with qualitative approaches: suggesting the former

can be useful in checking out impressionistic conclusions about which words and co-occurrences of words are most significant, in alerting analysts to words and co-occurrences which they had not noticed, and in providing statistical information about certain features of discourse. Above all it can stimulate new ideas which might lead to new directions of investigation and analysis...⁵⁶

Corpus linguistics can bring systematicity and multiplicity to the analysis of language. Both these arguments have been advanced in applying computational tools to literary studies. A small but growing number of scholars have chosen to employ corpus linguistics to aid their readings of works, ranging from Lewis

⁵⁴ Mautner, 'Checks and Balances: How Corpus Linguistics Can Contribute to CDA', p. 156.

⁵⁵ Paul Baker and others, 'A Useful Methodological Synergy? Combining Critical Discourse Analysis and Corpus Linguistics to Examine Discourses of Refugees and Asylum Seekers in the UK Press', *Discourse & Society*, 19.3 (2008), 273–306 (p. 284)
<<https://doi.org/10.1177/0957926508088962>>.

⁵⁶ Norman Fairclough, *Language and Power*, 3rd edn (Abingdon: Routledge, 2015), p. 21.

Carroll's *Alice*⁵⁷ to Virginia Woolf's *The Waves*.⁵⁸ These scholars have noted corpus methods' primary facility in "aid[ing] systematicity and objectivity in the analysis of literary texts".⁵⁹ But they have also noted the "alternative interpretative engagement",⁶⁰ which digital readings sustain. Kieran O'Halloran, in particular, makes a helpful comparison between computational methods of text analysis and Gilles Deleuze/Felix Guattari's notion of "rhizomatic" investigation. Citing Deleuze and Guattari's botanical metaphor of "the rhizome"⁶¹ as a productive image of creative thought", O'Halloran suggests corpus linguistic searches "often" return results "which would have been difficult to predict. When a corpus search leads to unpredictable results, this discovery could be construed as rhizomatic"⁶² – by which O'Halloran means that, like the rhizome, the corpus linguistic researcher is able to draw unforeseen connections and discover unanticipated sources of interpretive inspiration.

In my use of corpus linguistic methods to assess literary texts, I came to a different metaphor: that of corpus linguistics as a means to "pop the bonnet" on language use within a text. When we watch a vehicle pass by, we perceive its movement, power, and aesthetic, without sight of the cogs and pistons that drive these elements. Likewise, when we read a text intuitively, we receive its meaning, profundity, and style, without recording precise mechanics by which such principles function. In listing the units that make a text in their naked volumes and operation, however, corpus linguistics can bring that text's mechanics into sharp focus: lifting the lid on "patterns of usage of which [we might have] had only a vague notion or even no knowledge at all",⁶³ based on human readings.

This popping the bonnet is what the present article sets out to achieve: using corpus linguistic techniques to expose hidden mechanics of language in Tolkien's Third Age writings. Doing so situates this study amongst the (even smaller, but likewise growing) group of works applying corpus linguistics to Tolkien's legendarium. Part of the wider turn to digital humanities in Tolkien

⁵⁷ Paul Rayson, 'Computational Tools and Methods for Corpus Compilation and Analysis', in *The Cambridge Handbook of English Corpus Linguistics*, ed. by Douglas Biber and Randi Reppen (Cambridge: Cambridge University Press, 2015), pp. 32–49 (p. 45) <<https://doi.org/10.1017/CBO9781139764377.003>>.

⁵⁸ Giuseppina Balossi, *Corpus Linguistic Approach to Literary Language and Characterization: Virginia Woolf's The Waves* (Amsterdam: John Benjamins, 2014).

⁵⁹ Mahlberg, p. 5.

⁶⁰ Kieran O'Halloran, 'Performance Stylistics: Deleuze and Guattari, Poetry and (Corpus) Linguistics', *International Journal of English Studies*, 12.2 (2012), 171–99 (p. 172).

⁶¹ (A creeping underground plant stem which sends roots out at random from multiple nodes – thus delivering new opportunities for growth, and producing new fruit in different locations.)

⁶² O'Halloran, pp. 174–78.

⁶³ Ángela Almela and Irina Keshabyan, 'A New Approach to Literature: Corpus Linguistics', *International Journal of English Studies*, 12.2 (2012), i–iv (p. i).

studies,⁶⁴ a handful of scholars have employed corpus linguistics to gain insight into Tolkien's story-telling styles. The most significant work in this group is Thomas Kullmann and Dirk Siepmann's 2021 *Tolkien as a Literary Artist*.⁶⁵ By quantising language from *LotR*, Kullmann and Siepmann shed light on the highly-precise, deliberate, and artistic ways in which Tolkien crafted his universe. Of "the impression of archaicity which any reader will experience on reading *Lord of the Rings*",⁶⁶ for example, Kullmann and Siepmann find this stylistic quality was no accident. Rather, they suggest readers' intuitive sense of archaicity emerges from deliberate forms of linguistic curation: involving the unusual combination of *new* and *old* registers which, when brought together, engender a jarring lexical rhythm forcing the reader to take account of non-modern lexicons. Kullmann and Siepmann draw this finding from collocation analysis – with the systematic consistency of modern-medieval collocations elaborating the authors' core contention, that "far from being 'amateurish', Tolkien's prose effectively employs several centuries' worth of linguistic developments, putting old words to new uses".⁶⁷

In the only other peer-reviewed work I'm aware of that uses corpus linguistics to analyse Tolkien's writings, Vanessa Milom comes to a similar conclusion. Milom draws on statistical techniques to assess Tolkien's *orthographic* choices: the different spellings he employed when constructing dialogue for the Gollum character, versus dialogue for Sméagol. Drawing on statistics for word keyness, Milom finds high levels of "sibilant reduplication" whenever Gollum speaks (as compared with Sméagol): the repetition of s's (*fishh*, *pocketses*), which "illustrate the cave-dwelling Gollum as a snake-like and surreptitious character".⁶⁸ She concludes "the linguistic mannerisms of the Gollum-Sméagol [character] are distinct and change depending on which of the two are speaking". Milom's use of statistical techniques bring this feature of the text unambiguously to light: illuminating just how "thoughtfully curated"⁶⁹ Tolkien's language choices were.

Earlier, I proposed corpus linguistics as a pathway to enhancing Tolkien studies' descent to the level of words – including, by illuminating specific stylistic/lexical choices Tolkien made in crafting his legendarium. These two studies demonstrate possibilities of this corpus linguistic pathway. Together, they advance an argument regarding Tolkien's place amongst other literary

⁶⁴ See especially James Tauber and others, 'Digital Tolkien Project' <<https://digitaltolkien.com/>> [accessed 15 December 2023].

⁶⁵ Thomas Kullmann and Dirk Siepmann, *Tolkien as a Literary Artist: Exploring Rhetoric, Language and Style in The Lord of the Rings* (London: Palgrave Macmillan, 2021).

⁶⁶ Dirk Siepmann, 'Tolkien as a Stylist: A Corpus-Based Investigation into "The Lord of the Rings"', in *9th International Corpus Linguistic Conference* (University of Birmingham, 2017), p. 2.

⁶⁷ Siepmann, p. 3.

⁶⁸ Vanessa Milom, 'Corpus Linguistic Analysis of the Idiolects of Gollum and Sméagol', *Journal of Linguistics and Literature*, 5.1 (2022), 1–5 (p. 5).

⁶⁹ Milom, p. 5.

greats – not just a powerful *story-teller* (as is well-known), but also an artful *writer*. Importantly, they don't advance this argument in abstraction from the writing itself. Rather, they employ the advantages of rhizomatic, computer-led readings to clarify Tolkien's precise and deliberate linguistic strategies – a precision and deliberateness whose oversight elsewhere has kept Tolkien “out of the mainstream literary tradition and sidelined his writing... from receiving its due consideration”.⁷⁰ Using corpus linguistics to re-read literary texts can unravel such tendencies in past criticism: illuminating unnoticed patterns of language/style, and taking our interpretations in new directions. The present article builds on this argument, as it pertains to literary studies broadly or Tolkien studies specifically: elucidating Tolkien's lexicalisation of the One Ring across *The Hobbit* and *The Lord of the Rings*. Before I divulge my findings vis-à-vis mechanics of this lexicalisation, however, let me first outline my study's research design. Having set out the uses and value of corpus linguistic methods for analysing literary texts, I now proceed to précis specific processes by which I applied them to my Third Age corpus.

Methodology: keyness, collocation, weaknesses

As flagged in my introduction, my analysis of Third Age texts drew on two research questions:⁷¹

1. How does the One Ring's centrality to the Middle-earth story evolve, over its lifetime?
2. Do the Ring's imagined qualities change, as Tolkien's Third Age writings unfold?

These questions map sympathetically onto corpus linguistics' two core techniques: keyness and collocation analysis.

Keyness analysis: focus corpus, reference corpus, Simple Maths Parameter

In corpus linguistics, keyness analysis represents the assessment of a text sample's “aboutness... its topic and the central elements of its content”.⁷² Corpus linguistic softwares ascertain this aboutness by comparing a focus corpus (the corpus of interest, about which an analysis is being constructed) against a reference corpus (a comparable sample of language, excluding the language of the focus corpus itself). This comparison draws out elements which are unique to the focus corpus: words which appear in statistically significant high or low volumes, vis-à-vis the reference. Other scholars have used this

⁷⁰ Bolding, p. 277.

⁷¹ I used LancsBox 6.0 software for my corpus linguistic analysis. Vaclav Brezina, Pierre Weill-Tessier, and Tony McEnery, '#LancsBox v.6.0.0' (Lancaster: Lancaster University, 2021).

⁷² Baker and others, p. 278.

process to clarify language use's diachronic evolution: by comparing a corpus of language from one period against that of another, to see whether words/topics rise or fall in centrality over time.⁷³

I propose a similar approach here: exploring the One Ring's diachronic evolution, by comparing each of Tolkien's four Third Age texts⁷⁴ against a wider Third Age reference corpus: to identify whether/how the Ring's keyness changed as the Third Age unfolded. If different Third Age texts return different keyness scores for the word *ring*, that would suggest the extent of the Ring's centrality to the Third Age's narrative arc varied over time. Moreover, if variance in *ring* keyness is in a particular direction (up or down), that would suggest the Ring is undergoing a sustained increase or decrease in relevance to Middle-earth story-telling.

I created my focus and reference corpora by using Optical Character Recognition (OCR) software to scan⁷⁵ my copies of HarperCollins' 2020 editions of *The Hobbit*⁷⁶ and *LotR*.⁷⁷ This created a fully digitised database of Tolkien's Third Age texts – which I read through in detail to correct errors and remove extraneous data like page numbers. I then divided my database by Third Age volume – giving me individual .txt files for each volume. These .txt files were my four *focus corpora* for keyness analysis. I created my *reference corpus* by combining these four .txt files into a single Third Age file. This procedure left me with four Third Age focus corpora (*The Hobbit*, *The Fellowship of the Ring*, *The Two Towers*, *The Return of the King*), and one Third Age reference corpus (against which I could compare my focus corpora, to identify relative levels of word keyness in each volume).

Whenever using my Third Age reference corpus in keyness analysis, however, I removed the specific focus corpus under investigation from the wider reference file. Each keyness analysis thus proceeded by comparing the focus corpus to a reference corpus of all Third Age texts *minus the focus corpus itself* (i.e., comparing *The Hobbit* to all Third Age texts minus *The Hobbit*; comparing

⁷³ Helen Baker, Tony McEnery, and Andrew Hardie, 'A Corpus-Based Investigation into English Representations of Turks and Ottomans in the Early Modern Period', in *Lexical Priming: Applications and Advances*, ed. by Michael Pace-Sigge and Katie Patterson (Amsterdam: John Benjamins, 2017), pp. 42–66 <<https://doi.org/10.1075/scl.79.02bak>>; Baker, 'Times May Change, But We Will Always Have Money: Diachronic Variation in Recent British English'; Michael Livesey, 'Introducing the "Conceptual Archive": A Genealogy of Counterterrorism in 1970s Britain', *European Journal of International Security*, 8.4 (2023), 471–92 <<https://doi.org/10.1017/eis.2023.10>>.

⁷⁴ (*The Hobbit*, *The Fellowship of the Ring*, *The Two Towers*, *The Return of the King*.)

⁷⁵ The use of OCR to digitise copyrighted texts for non-commercial research is legal in the UK, under the Copyright, Designs and Patents Act 1998 sections 29/29A (provided sufficient source acknowledgement is made).

⁷⁶ J.R.R. Tolkien, *The Hobbit*, 2nd edn (London: HarperCollins, 2020).

⁷⁷ J.R.R. Tolkien, *The Lord of the Rings: The Fellowship of the Ring*, 2nd edn (London: HarperCollins, 2020); J.R.R. Tolkien, *The Lord of the Rings: The Two Towers*, 2nd edn (London: HarperCollins, 2020); J.R.R. Tolkien, *The Lord of the Rings: The Return of the King*, 2nd edn (London: HarperCollins, 2020).

The Fellowship to all Third Age texts minus *The Fellowship*). This was an appropriate step in ensuring my analysis highlighted details which were unique to each Third Age volume. It's important to note the important work that other Tolkien scholars have undertaken, in compiling digitised corpora for use in research like mine. James Tauber, in particular, has created a remarkable source of marked-up, XML versions of Tolkien texts under the aegis of the Digital Tolkien Project.⁷⁸ I did not use these XML files in my analysis. However, I am willing to share .txt files I generated for this article with any colleagues seeking to conduct similar (non-commercial) research in future.

So much for the focus/reference corpora I used to generate keyness metrics. But what of the metrics themselves? There are various ways to measure keyness. The version of keyness I use in this analysis is Simple Maths Parameter (SMP), as proposed by Adam Kilgariff.⁷⁹ SMP keyness works by dividing the relativised count⁸⁰ of each word within the focus corpus, by the relativised count of the same word in a reference corpus. The result of this formula is a number quantifying how much more, or less, that word features in the focus corpus vis-à-vis its reference. The beauty of SMP is in the simplicity of its interpretation (hence *simple* maths parameter). If a word returns SMP keyness of 2.00, for example, it can be read as being *twice as key* in the focus corpus vis-à-vis the reference corpus. Conversely, if that word returns an SMP of 0.50, it can be read as *half* as key in the focus vis-à-vis the reference.

Collocation analysis: MI2

Keyness metrics illuminate the *quantity* of word use in a corpus. By contrast, collocation metrics shed light on word *qualities*: the meanings by which words are used within the language sample. I use collocation to answer my second research question: supplementing analysis of *how much* the Ring featured in each of Tolkien's Third Age texts, with further analysis of *how* it featured. The definition of collocation is "the above-chance frequent co-occurrence of two words within a pre-determined span".⁸¹ Corpus linguistics approaches this co-occurrence as the essence of meaning-making – on the Firthian principle that "you shall know a word by the company it keeps".⁸² (I.e., that word meanings emerge from contexts of use, such that when words connoting *time* consistently appear in the presence of words connoting *money*, for instance, this points to these semantic fields' co-constitution: the mutual notion of *value* and *resource*

⁷⁸ Tauber and others.

⁷⁹ Adam Kilgariff, 'Simple Maths for Keywords', in *Proceedings of Corpus Linguistics Conference CL2009* (Liverpool: University of Liverpool, 2009), pp. 1–6.

⁸⁰ Relativisation is important here – ensuring comparability of keyness counts across corpora of different sizes.

⁸¹ Baker and others, p. 278.

⁸² John Rupert Firth, *Papers in Linguistics, 1934-1951* (Oxford: Oxford University Press, 1957), p. 179.

by which English language conceptualises time and money.⁸³) Collocation analysis uncovers the network of meanings pertaining to a word within a text by listing terms which appear alongside that word with every appearance, and calculating these co-occurrences' probabilities to indicate the strength of each co-relation. This procedure is more complex than keyness analysis, and involves a reading beyond the capacity of intuitive, human cognition.⁸⁴

As with keyness analysis, there are various ways to operationalise collocation. In my study, I employ the Mutual Information (MI2) metric to clarify the quality of the Ring's usage in Tolkien's writings. Unlike other collocation measures quantifying mere *frequency* of words' collocations, MI2 captures the "exclusivity" or "tightness"⁸⁵ of collocational relationships. MI2 draws on a formula comparing observed collocations between a word/its collocates, with chance collocations – if the corpus under analysis was reordered at random. This procedure filters out common words like *the* or *and*, which naturally appear in high frequencies alongside any keyword (a by-product of their ubiquity in general language, rather than an indication of meaningful co-constitution). Instead of highlighting common terms, MI2 identifies the co-appearance of meaningful terms like *royal* and *family* – terms which might appear in lower absolute frequencies than common terms, but whose consistent co-occurrence signifies a non-chance meaning relation.

MI2 scores are harder to interpret than those for SMP keyness. They are best read comparatively, to ascertain high or low values. As a point of reference, when applied to the BE06 corpus of modern British English,⁸⁶ the search parameters used in this study⁸⁷ returned an MI2 of 8.66 for the collocation *royal-family*. As above, this is a very strong (and common) collocation in British English. MI2s of 8.66+ can therefore be read as evidence of *very strong* relationships between words within a corpus of interest. In searching for *ring* collocates within Third Age texts, I set a threshold MI2 of 9.00. This means that all collocates considered in my study exist in a stronger relation to *ring* in Tolkien's writings, than do *royal* and *family* in BE06. In short, I limit my analysis to co-configurations which meaningfully affect the quality of the Ring's lexicalisation. (For clarity, I didn't use BE06 as a reference corpus in my

⁸³ Vaclav Brezina, *Statistics in Corpus Linguistics: A Practical Guide* (Cambridge: Cambridge University Press, 2018), p. 78 <<https://doi.org/10.1017/9781316410899>>; Vaclav Brezina, Tony McEnery, and Stephen Wattam, 'Collocations in Context: A New Perspective on Collocation Networks', *International Journal of Corpus Linguistics*, 20.2 (2015), 139–73 (pp. 153–153) <<https://doi.org/10.1075/ijcl.20.2.01bre>>.

⁸⁴ The results produced by collocation analysis enable a similar analysis to Ivar Agøy's analysis on Tolkien's descriptive style, but at a much higher level of sophistication.

⁸⁵ Gablasova, Brezina, and McEnery, pp. 163–64.

⁸⁶ Paul Baker, 'The BE06 Corpus of British English and Recent Language Change', *International Journal of Corpus Linguistics*, 14.3 (2009), 312–37 <<https://doi.org/ijcl.14.3.02bak>>.

⁸⁷ (Returning collocates within a span of 5 words either side of my keyword, and with a minimum frequency of 3 collocations across the focus corpus – search parameters replicating Kullmann and Siepmann's usage.)

research. I merely used it to acquire a baseline for defining statistical significance in MI2 scores.)

Weaknesses: decontextualisation, chronology, pagination

Finally, a caveat on weaknesses of my study (which also illuminate generic weaknesses of “scientific” method in analysing language). For, despite my claims regarding corpus linguistics’ analytical strengths, “a word of warning [remains] in order”.⁸⁸ The apparent neutrality of statistical results, and the apparent validity of large-n quantitative sampling, can lull scholars/their readers into a false sense of security vis-à-vis their findings’ significance and surgical provenance. In fact, it is important for readers not to “overinterpret”⁸⁹ the significance of corpus linguistic findings – including findings from the present article. The primary problem with quantitative analysis of text is the “necessarily decontextualised”⁹⁰ character of statistical outputs. Computers read corpora at distance – swallowing the entirety of a text in one gulp, and returning insights abstracted from the mess of in-text word use. Corpus linguists need to be cautious in reading statistical returns, therefore, which might appear significant at first sight – but which may actually be overblown, or misleading.

One of the most significant collocations in *The Hobbit*, for example, is that between *bell* and *ring* (a configuration with a very high MI2 of 12.13). Reading this score alone, one could misinterpret the Ring’s meaning within *The Hobbit* – finding Tolkien used *ring* in the context of other metal artefacts, for instance. A closer reading of instances where these words co-occur, however, clears up the confusion. When *ring* and *bell* appear in *The Hobbit* it is not in the sense of the One Ring, but in the sense of the verb “to ring” – as in the following concordance lines:

Just before tea-time there came a tremendous ring on the front-door bell, and then he remembered!⁹¹

They had not been at table long... when there came another even louder ring at the bell. “Excuse me!” said the hobbit, and off he went to the door...⁹²

Avoiding statistics’ misinterpretation, as in these examples, requires the researcher to shuttle continuously between quantitative returns and a close reading of relevant texts. These quantitative returns should never be considered in isolation from the lines from which they are drawn. On the contrary,

⁸⁸ Mautner, ‘Checks and Balances: How Corpus Linguistics Can Contribute to CDA’, p. 174.

⁸⁹ Mahlberg, p. 22.

⁹⁰ Mahlberg, p. 7.

⁹¹ From Chapter 1: An Unexpected Party.

⁹² Same chapter.

quantitative and qualitative readings should be considered complementary – with findings from each being used to “triangulate”⁹³ insights from the other. Hence my earlier emphasis on combining computational readings *with*, rather than treating them as a substitute *for*, qualitative readings. This is what Martin Paul Eve meant in describing computational methods as an “environment in which we can ‘think along’ with machines”⁹⁴ – using digital methods “where they are helpful and appropriate”, but “abandon[ing them] when they become overly forced”.⁹⁵ I operationalise this restraint throughout my write-up, to guard against misleading claims. Like Eve, “I aim to avoid [treating] everything like a technological nail, just because I have a digital hammer”.⁹⁶

A second weakness concerns my study’s chronological ordering. In reporting my analysis below, I work through each volume⁹⁷ of Tolkien’s Third Age writings sequentially. This design may appear incongruous to Tolkienists. For Tolkien approached *LotR* not as “a ‘trilogy’ but [as] a unified work of some 600,000 words”,⁹⁸ whose presentation in three separate volumes had less to do with narrative flow than printing constraints. Nonetheless, I chose to structure my analysis volume-by-volume for three reasons.

The first two reasons for this design are methodological. Descending from volume-level analysis (as in my study) to book- or chapter-level analysis (in common with Tolkien’s intentions) would have raised issues of corpus granularity. Large-*n* quantitative methods work best when applied to large-*n* data samples. And, though some insight can be gained from smaller/bespoke corpora,⁹⁹ there remains consensus amongst corpus linguists that corpora need to be of a minimum size to return meaningful statistical calculations.¹⁰⁰ *The Hobbit* already tests this minimum size, with a total wordcount of 95,559 tokens. Some *LotR* books fall even further below this count – with books four and six, for instance, including only 66,374 and 64,738 tokens each. Guarding against misleading claims for collocation in particular (MI2’s calculation is based on the number of possible collocations, which in turn correlates with total tokens), required grouping Third Age books into trilogy volumes (with each volume capturing well over 100,000 words – a good baseline for robust findings). A further methodological rationale for grouping my analysis trilogically concerns the Ring’s non-balanced appearance across *LotR* books. For, as a physical

⁹³ Baker and others, p. 295.

⁹⁴ Eve, p. 2.

⁹⁵ Eve, p. 12.

⁹⁶ Eve, p. 12.

⁹⁷ (*The Hobbit, The Fellowship of the Ring, The Two Towers, The Return of the King.*)

⁹⁸ Rosebury, p. 11.

⁹⁹ Gerlinde Mautner, ‘Corpora and Critical Discourse Analysis’, in *Contemporary Corpus Linguistics*, ed. by Paul Baker (London: Bloomsbury, 2012), pp. 32–46 (p. 37).

¹⁰⁰ Hai Zhao, Yan Song, and Chunyu Kit, ‘How Large a Corpus Do We Need: Statistical Method Versus Rule-Based Method’, in *Proceedings of the Seventh International Conference on Language Resources and Evaluation* (Valletta: European Language Resources Association, 2010), pp. 1672–77.

character-object, the One Ring is absent from *LotR* books three and five – which follow the trajectories of characters other than Frodo and Sam, post-breaking of the Fellowship. This absence has implications for keyness returns (logically, *ring* would appear less frequently in books where it is physically absent – which is not an especially insightful finding). More importantly, it also has implications for collocation analysis. MI2 returns risk distortion when applied to keywords returning low wordcounts, because of the smaller pool of observed collocations (an incidental outcome of corpus size, rather than a meaningful reflection of meaning). I chose to avoid such distortion, by structuring my analysis trilogically.

The third reason for organising my analysis this way had to do with my argument's flow and complexity. In writing this article, per its beginnings in an attempt to persuade my colleague of corpus linguistics' ease-of-use, I set out to tell an accessible and fluent story regarding the Ring's progress through Tolkien's Third Age lexis. Structuring this story according to seven books, or 81 chapters (as opposed to four volumes), would have added unnecessary illegibility to this story. This illegibility would apply for Tolkien specialists: who might understand a book-level focus, but who would find the additional complexities of a seven-fold keyness/collocation analysis hard to follow. It would also apply for corpus linguists: who might have an interest in the application of established techniques to a new source base, but for whom *LotR* is indeed most familiar as a trilogy (whose six-fold division would render the reading of my findings fragmentary or inaccessible). Besides necessary considerations of methodological robustness noted above, therefore, I chose to stick with a volume-based assessment to ensure my account (whether on computational readings, or on Tolkien) remained legible to multiple audiences.

My last caveat concerns ways I present my findings. As noted earlier, in entering Tolkien's texts into my corpus linguistic software,¹⁰¹ I removed all matter extraneous to the Third Age narrative itself (page numbers, foreword, prologue, appendices, etc.). This was to avoid confusing software, which cannot distinguish between analytically-relevant and irrelevant contents. The downside of taking this step was that I lost page numbers for materials considered in my study. In my write-up, therefore, I am limited to referencing book and chapter numbers for all excerpts cited. This limitation is a common and accepted feature of corpus linguistic studies¹⁰² (and, indeed, of Tolkien studies itself¹⁰³).

Keyness analysis: the disenchantment of Tolkien's world?

Having established my study's argument, its relationship to scholarly literatures, and its methodological design, I now turn to its substantive findings. In

¹⁰¹ Brezina, Weill-Tessier, and McEnery.

¹⁰² As, for instance, in Baker, 'Times May Change, But We Will Always Have Money: Diachronic Variation in Recent British English'; or in Baker, Brezina, and McEnery.

¹⁰³ Drout and Wynne, p. 105.

reflecting on *LotR*, Adam Roberts concludes that “when one starts to look at [the text] ‘through the Ring’, as it were, it starts to assume a certain ubiquity”.¹⁰⁴ According to Roberts, the Ring enjoys a pre-eminent position in Tolkien’s Third Age, as the centrepiece to the latter’s narrative structure. Certainly, on a narrative level, Tolkien’s Third Age pivots on the Ring: whether in Bilbo’s finding of it, Frodo’s quest to destroy it, or Sauron’s attempts to recover it. But does this narrative centrality manifest in Tolkien’s use of language? Is the Ring really ubiquitous to Third Age style/lexis?

According to my keyness analysis, the answer is no. This analysis actually found the Ring’s prevalence to be a passing, and indeed declining, feature of Third Age language. The word *ring* appears in varying frequencies in each Third Age text: 68 times in *The Hobbit* (0.71 mentions per thousand words); 306 times in *The Fellowship* (1.72/thousand words); 70 times in *The Two Towers* (0.45/thousand words); and 73 times in *The Return of the King* (0.54/thousand words). Per these figures, the Ring enjoys relatively high frequency of mentions in *The Hobbit*, followed by a peak of frequency in *The Fellowship*. But the frequency of its mentions subsequently declined to low levels in *The Two Towers* and *The Return of the King*. The same pattern applies to the associated word *rings* (as in “rings of power”): which appears 0.08 times per thousand words in *The Hobbit*; rising to 0.28 per thousand in *The Fellowship*; but then falling back to 0.05 and 0.04 mentions per thousand words in *The Two Towers/Return of the King*.

To convert these naked frequencies into readable SMP ratios: *ring* enjoys SMP keyness of 0.83 in *The Hobbit*; 2.85 in *The Fellowship*; 0.43 in *The Two Towers*; and 0.56 in *Return of the King* (for *rings*, the scores are 0.81; 2.64; 0.55; 0.50). As a reminder, these scores quantify the prevalence of each word in each text, by comparison to a wider Third Age corpus (all texts, minus the one being assessed). The scores indicate that the Ring was 83% as key in *The Hobbit* as in the wider Third Age (i.e., a ratio of nearly 1:1); 285% as key in *The Fellowship* (nearly three times as prevalent as in other texts); and 43%/56% as key in *The Two Towers/Return of the King*. In short, the Ring’s keyness journey began with a moderate plateau, followed by a substantial peak, and then a precipitous decline (to roughly half its original prevalence).

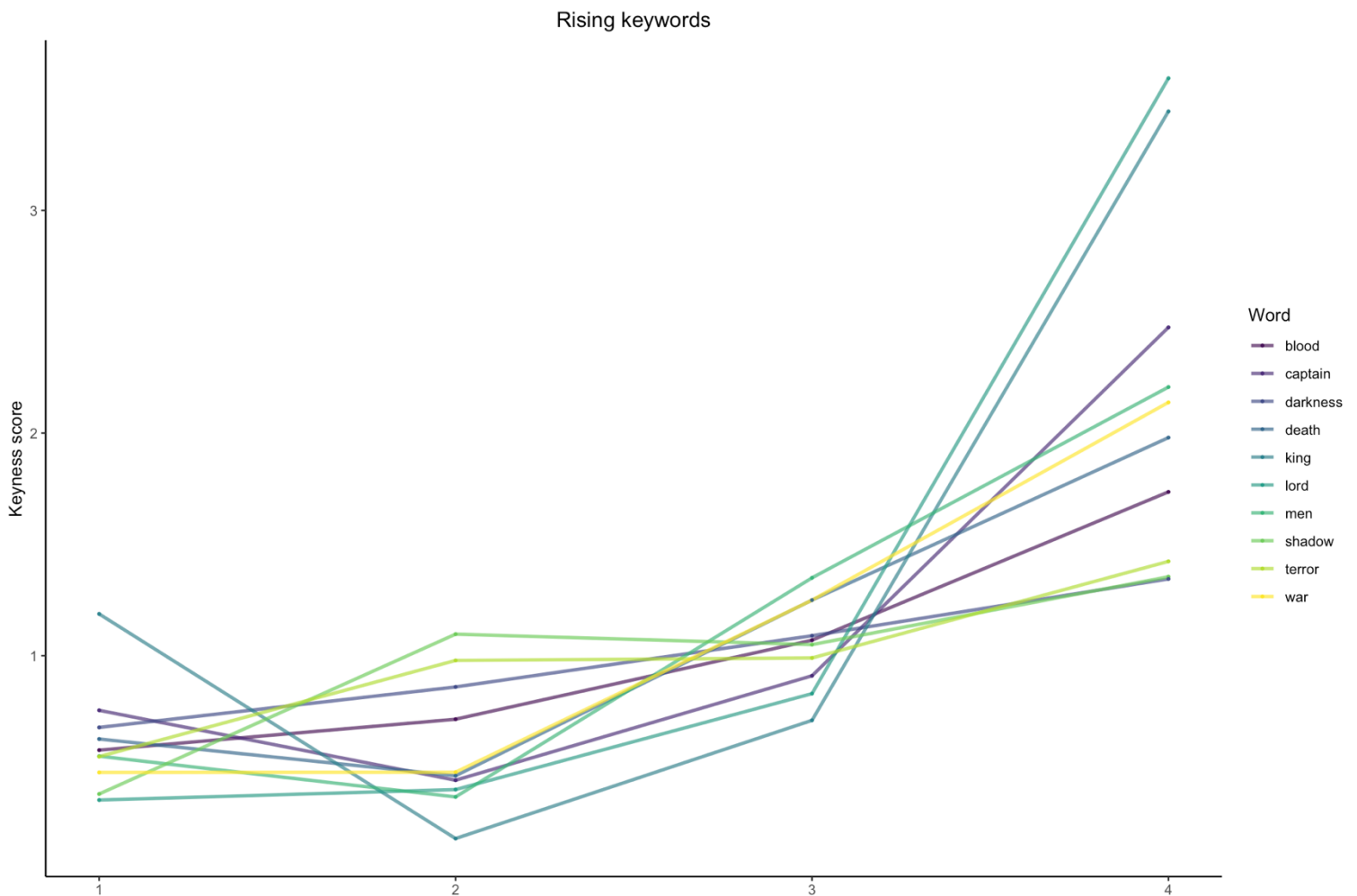
To put it in even simpler terms, the Ring is *not ubiquitous* to Third Age writings. On the contrary, its centrality to the narrative arc is broadly in decline as these writings evolve. This finding precipitates a follow-up question: which motifs might have displaced the One Ring’s centrality, as the Ring itself went into decline? My keyness analysis revealed a series of significant terms enjoying steady growth in keyness across *The Hobbit/The Lord of the Rings*. I list ten of these terms in the table below: giving SMP scores for each term, in each text.

¹⁰⁴ Roberts, p. 60.

Table one: keyness scores for ten rising keywords in Third Age texts

	<i>The Hobbit</i>	<i>The Fellowship of the Ring</i>	<i>The Two Towers</i>	<i>The Return of the King</i>
king	1.19	0.18	0.71	3.45
captain	0.76	0.44	0.91	2.48
lord	0.35	0.40	0.83	3.59
men	0.55	0.37	1.35	2.21
war	0.48	0.48	1.25	2.14
blood	0.58	0.72	1.07	1.74
death	0.63	0.46	1.25	1.98
shadow	0.38	1.10	1.05	1.36
terror	0.55	0.98	0.99	1.42
darkness	0.68	0.86	1.09	1.35

For ease of interpretation, I've also visualised these scores in the following graph.



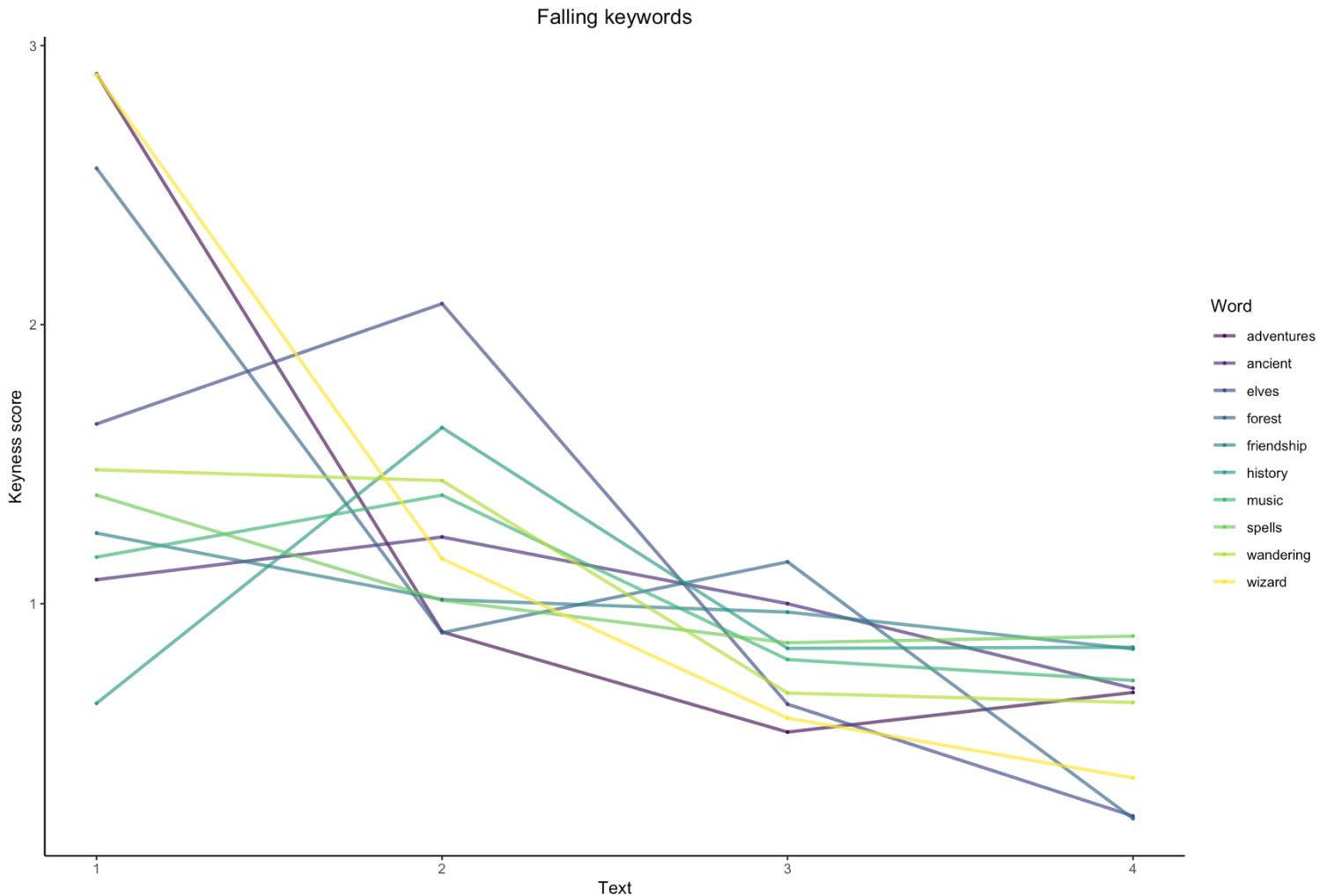
What the table and graph show is continuous growth in keyness for certain significant words, across Tolkien's Third Age. These include words like *king*, *captain*, *lord*, and *men* – capturing motifs associated with order, hierarchy, and masculinity. The keyword *lord*, for example, enjoys continuously rising keyness across the Third Age: from 0.35 in *The Hobbit*; to 0.40 in *The Fellowship*, 0.83 in *The Two Towers*, and 2.48 in *Return of the King*. These scores identify *lordship* as only 42% as central as *ring* in *The Hobbit* and 14% as central as *ring* in *The Fellowship* – but fully 641% as central by *Return of the King*. Likewise, *men* grows from keyness of 0.55 in *The Hobbit*, to keyness of 2.21 in *Return of the King*; meaning masculinity became exactly four times as central to the Middle-earth story by the time of its fourth chapter as it had been in its first – and, indeed, 4.5 times as central as the *ring* motif. Other rising keywords connote with war – including *war* itself, *blood*, and *death*. *War*, for example, rises from keyness 0.48 in both *Hobbit* and *Fellowship*; to keyness 1.35 in *The Two Towers*; and 2.14 in *Return of the King*. Again, by the Third Age's final instalment, *war* had displaced *ring* at the story's heart – with higher centrality at a factor of 3.8. Finally, words like *shadow*, *terror*, and *darkness* also enjoy steadily-growing centrality across the Third Age – with the three words being, respectively, 2.43, 2.54, and 2.41 times more central to language than *ring* in *Return of the King* (having been only 0.46/0.66/0.82 times as central in *The Hobbit* and only 0.39/0.34/0.30 times as central in *The Fellowship*).

These statistics reveal that the Ring became less central to Tolkien's language as the Third Age progressed, whilst themes of hierarchy, masculinity, war, and darkness became more central. We can add a layer of meaning to these findings, if we consider what other words, besides *ring*, also lost centrality across the Third Age. The table below details ten further falling keywords: words whose usage, like *ring*, was in decline with each Third Age instalment.

Table two: keyness scores for ten falling keywords in Third Age texts

	<i>The Hobbit</i>	<i>The Fellowship of the Ring</i>	<i>The Two Towers</i>	<i>The Return of the King</i>
adventures	2.90	0.90	0.54	0.68
wizard	2.90	1.16	0.59	0.38
spells	1.39	1.01	0.86	0.88
elves	1.64	2.08	0.64	0.24
music	1.17	1.39	0.80	0.73
history	0.64	1.63	0.84	0.84
ancient	1.09	1.24	1.00	0.70
friendship	1.25	1.02	0.97	0.84
wandering	1.48	1.44	0.68	0.65
forest	2.56	0.90	1.15	0.23

Again, I've visualised these scores in graphical form, for ease of interpretation. Just as my first graph demonstrated the trend towards *rising* keyness for words like *men* or *darkness*, so my second graph demonstrates *falling* keyness amongst words like *elves* or *friendship*.



Scores from the table, and its graphic representation, balance my findings on rising keywords. They show that the Ring was not the only element to lose centrality as the Third Age narrative evolved. On the contrary, several words fell out of Tolkien's usage in the Third Age's latter instalments. *Adventures*, for example, was only 24% as key by *Return of the King* as it had been in *The Hobbit*. Likewise, the keyness of *wizard* fell by a factor of 7.63 across each text; *music* was half as relevant by the end of the Third Age as it was at its start; and the footprint of *forest* in *Return of the King* was only 10% what it had been in *The Hobbit*.

Like my rising keywords, we could group these falling keywords into a series of thematic categories: capturing motifs of magic (*wizard*, *spells*, *elves*), adventure (*adventures*, *wandering*, *friendship*), memory (*history*, *ancient*), and

mystery (*music, forest*). Of course, these categorisations are imperfect, and there are many overlaps between them. Nonetheless, that themes of magic, adventure, memory, and mystery became more *peripheral* as the Third Age wore on, whilst themes of hierarchy, masculinity, war, and darkness became more *central*, tells us something significant about Tolkien's evolving Middle-earth imaginings. Revisiting Tolkien's unfolding Third Age language use through corpus linguistic analysis, we see that as the Ring became less ubiquitous to the legendarium, so too that legendarium lost its enchanting, mysterious, and adventurous characteristics. At the same time, keyness returns indicate Middle-earth became increasingly dark, hierarchical, and amnesiac in parallel with the Ring's marginalisation (losing sight of its *ancient history*, even as it became embroiled in the *blood of men's wars*).

Such disenchantment of Middle-earth ties into significant narratives from the wider story. It reflects, for example, the otherworldly elves' departure from Middle-earth – and their displacement by fallen men. (As in Frodo's exchanges with Gildor/Galadriel in *The Fellowship*: “we are Exiles, and most of our kindred have long ago departed and we too are now only tarrying here a while”¹⁰⁵ / “our power is diminished, and Lothlórien will fade, and the tides of Time will sweep it away. We must depart into the West, or dwindle to a rustic folk of dell and cave, slowly to forget and to be forgotten”.¹⁰⁶ Or, in an exchange between Legolas and Gimli in *Return of the King*: “seldom do [men] fail of their seed... The deeds of Men will outlast us, Gimli”.¹⁰⁷) This theme of the elves' departure is repeated in the quantities of Tolkien's word choice – with *elves* falling in prevalence, and *men* rising.

This disenchantment also reflects the legend-isation of ents and hobbits amongst Middle-earth's peoples. (Per Aragorn's/Theoden's surprise at the former's appearance in *The Two Towers*: “The Ents!... Are there still Ents in the world? I thought they were only a memory of ancient days, if indeed they were ever more than a legend of Rohan”¹⁰⁸ / “Ents!... Songs we have that tell of these things, but we are forgetting them, teaching them only to children, as a careless custom”.¹⁰⁹ Or, comments on hobbits from a man of Rohan/Faramir, in *The Two Towers/Return of the King*: “Halflings! But they are only a little people in old songs and children's tales”¹¹⁰ / “now we come to strange matters... For this is not the first halfling that I have seen walking out of northern legends into the Southlands”¹¹¹ – not to mention Tolkien's own reflections on hobbits in the prologue to *The Fellowship*: “Hobbits are an unobtrusive but very ancient people, more numerous formerly than they are today”.) Like *elves*, *hobbits* also suffered declining keyness with each Third Age instalment: with the word

¹⁰⁵ Book 1, chapter 3: Three is Company.

¹⁰⁶ Book 2, chapter 7: The Mirror of Galadriel.

¹⁰⁷ Book 5, chapter 9: The Last Debate.

¹⁰⁸ Book 3, chapter 5: The White Rider.

¹⁰⁹ Book 3, chapter 8: The Road to Isengard.

¹¹⁰ Book 3, chapter 2: The Riders of Rohan.

¹¹¹ Book 5, chapter 4: The Siege of Gondor.

hobbit falling from SMP 3.68 in *The Hobbit*; to 0.62 in *The Fellowship*; 0.74 in *The Two Towers*; and as low as 0.53 in *Return of the King* (14% what it had been in the first text). Likewise, the word *hobbits*: which rose in keyness from 0.48 to 2.10 between *The Hobbit* and *Fellowship of the Ring*, but subsequently fell to 1.48 in *The Two Towers* and as low as 0.57 in *Return of the King* (again, only 27% as key as it had been mid-Third Age; and only 25% as key as *men* by the Third Age's end).

Combining my returns from keyness analysis with these excerpts points to a trend in Tolkien's writings: Middle-earth's transition from a *legendary* land of music/adventure, elves/ents, to a *modern* world of men, blood, and steel. This transition runs parallel to the One Ring's *peripheralization* in the Third Age's narrative arc. This is not to say that the Ring symbolises adventure or magic, rather than darkness or terror. After all, the Ring's semantic profile (as we will see) crosses both these thematic categories. Nonetheless, these findings give pause for thought. They reveal patterns regarding Middle-earth's *aboutness*: the specific linguistic choices Tolkien made in lexicalising his universe – vis-à-vis which motifs Tolkien allowed to acquire centrality, and which he confined increasingly to its margins. If other corpus linguistic Tolkien scholars are right in finding his language use to be highly deliberate, we would have to conclude that this shifting balance between centre and periphery is by design. Namely, that it sheds light on Tolkien's vision for Middle-earth's evolving history. And, further, that understanding this balance in depth might equally illuminate Tolkien's own journey – as regards his disenchantment with the real world (his dissatisfaction with his country's "shabby destruction"¹¹² under industrialisation/modernisation), and how this might have bled into his conceptions of Arda.

I now undertake this effort at greater understanding. I consider ways Tolkien disenchanted his One Ring, specifically: turning to different meanings by which Tolkien operationalised the Ring in each Third Age text (as illustrated by variation in collocation returns), and exploring what changing *qualities* of the Ring's operationalisation (alongside its declining *quantities*) might tell us about Tolkien's disenchanted Middle-earth visions.

Collocation analysis: the disenchantment of the Ring?

To recap this article's start-point... My study began with two research questions; the second of which was: do the Ring's imagined qualities change, as Tolkien's Third Age writings unfold? The most straightforward answer to this question is: yes. According to my findings from collocation analysis, the word *ring* appears with a shifting semantic profile across Third Age texts.

¹¹² Paraphrasing Tolkien's foreword to the second edition of *The Lord of the Rings*.

Within my search parameters,¹¹³ my collocation analysis returned a list of 197 words that appear alongside *ring* whenever Tolkien used the latter word. This is itself a relatively narrow lexical field. *Ring* appeared 517 times across my four texts, meaning the word *could* have returned a total of 1,723 collocates within my search parameters. In reality, *ring* returned only 11% of this potential maximum – suggesting Tolkien exercised a high degree of caution when it came to the breadth of the One Ring’s lexicalisation (a finding synergising nicely with Rosebury’s argument on Tolkien’s style as “distinguished by an unobtrusive economy and precision”,¹¹⁴ or Ivar Agøy’s on Tolkien’s deliberately thin descriptiveness¹¹⁵ – whilst also adding value to both claims, by substantiating them through the use of sophisticated computer-led readings).

And yet, even within this restricted network of meanings, only 23 of the Ring’s 197 total collocates appeared in all four Third Age texts. Again, this represents 11% of all returned collocates – suggesting that, despite his lexical restraint whenever using *ring*, Tolkien tended to target different parts of his Ring’s vocabulary to different periods of his Third Age story. Moreover, of the 23 words which reappeared alongside *ring* in every Third Age text, 22 are so-called stopwords. That is, words like *a*, *and*, *but*, *is*, *at*, *it*, etc. – highly common words in English language, which don’t meaningfully affect the Ring’s semantic profile. Only one meaningful word appeared alongside *ring* in every Third Age text: *great*. The notion of the Ring’s *greatness* was the only part of its meaning-in-use that remained continuous across the Third Age. Otherwise, each Third Age text operationalised *ring* according to different qualities.

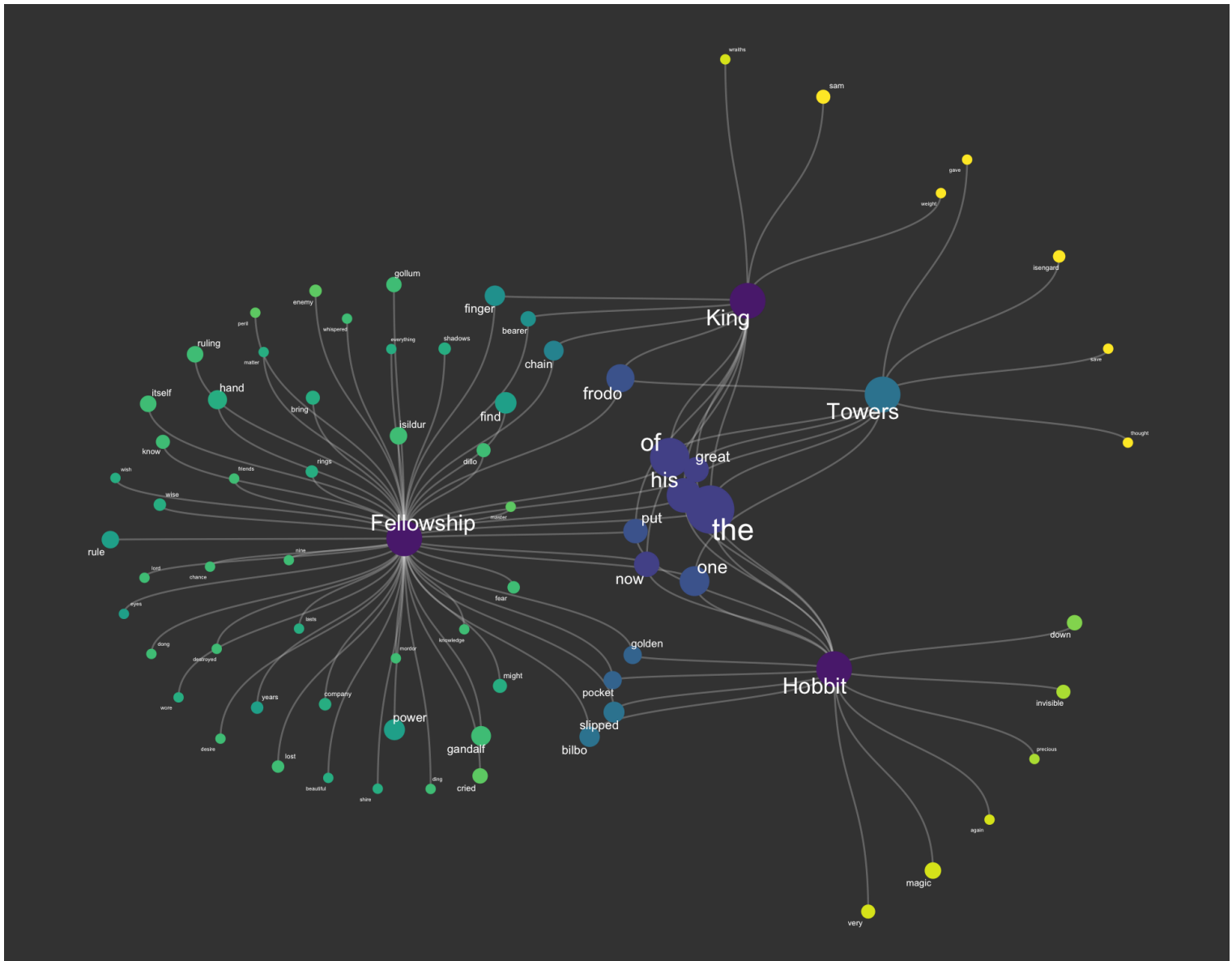
I visualise the variation in Tolkien’s vocabulary for *ring* in the network graph below.¹¹⁶

¹¹³ Returning collocates within a span of 5 words either side of the word *ring*, and with a minimum frequency of 3 collocates across each text.

¹¹⁴ Rosebury, p. 22.

¹¹⁵ Ivar Agøy.

¹¹⁶ Code for visualising MI2 adapted from Guillaume Desagulier, ‘Plotting Collocation Networks with R and Ggraph’, *Around the World*, 2020.



What the graph shows is all words appearing alongside *ring*, excluding most stopwords, in each Third Age text. The four texts are labelled as the central nodes from which the collocates emerge. And the collocates are arrayed in a network graph. Where collocates are connected to only one text node (i.e., by only one line), this reveals those collocates as *unique* to that single text. Where collocates are connected to more than one text node (by more than one line), this reveals the word as appearing alongside *ring* in multiple texts. This graph's significance is in visualising the extent of semantic variance in the Ring's every Third Age usage. Few of the collocates in the graph appeared in more than one text, as represented by multiple nodal lines. And a minimal number sit in the middle of the network, with relationships to every text node. Indeed, most

collocates are unique to each text – appearing alongside *ring* in only one of Tolkien’s Third Age texts. This initial finding serves as an entry-point to my collocation analysis. Whenever bringing the One Ring into his language, Tolkien did so according to different meanings. Thus, the One Ring did indeed undergo a journey across the Third Age – with its semantic qualities changing in each text.

Once more, this finding precipitates a follow-up: what was the character of this unfolding journey? According to what meanings did Tolkien operationalise *ring*, in each Third Age text? To answer these questions, I turn to analysis of collocation relationships in each text. Here, I limit my search to collocates returning a minimum MI2 of 9.00. This means focussing on strong collocational relationships – relationships which, like *royal* and *family* in British English, meaningfully affect the quality of each word within the configuration.

The Hobbit: a magic ring

I begin by assessing collocation returns for the word *ring* in *The Hobbit*. The table below provides a list of all *ring* collocates returning an MI2 of 9.00 or more in *The Hobbit* (excluding stopwords and *bell*, as noted earlier).

Table three: words collocating with *ring* in *The Hobbit* (MI2>9.00)

Collocate	MI2	Frequency of collocation
slipped	12.13	8
invisible	12.10	5
magic	11.12	7
pocket	9.72	3
his	9.68	23
golden	9.17	3

These collocation returns exemplify Tolkien’s operationalisation of *ring* in *The Hobbit* according to a playful, almost childish quality. The Ring’s most significant collocation relationship in *The Hobbit* is with an inoffensive verb: *slipped*. This collocation emerges in a playful sense, as in Bilbo’s light-hearted and innocent usage of his ring across the story:

Hobbits are clever at quietness, especially in woods, as I have already told you; also Bilbo had *slipped on his ring* before he started. That is why the spiders neither saw nor heard him coming...¹¹⁷

¹¹⁷ Chapter 8: Flies and Spiders.

Or

“Let’s have a light!” he said. “I am here, if you want me!” and *he slipped off his ring*, and popped from behind a rock.¹¹⁸

These usages situate the Ring as closer to a toy than a weapon or burden – something to be slipped on and off light-heartedly, rather than a device to be feared or a weight to be borne.

The same light-hearted quality applies to the Ring’s second, third, and sixth most-significant collocation relationships in *The Hobbit*: those with *invisible*, *magic*, and *golden*. These collocations identify the Ring as a device of wonder or child-like pleasure. Take *invisible*, for instance: Tolkien’s consistent use of this collocate alongside *ring* framed the latter as a source of exciting and wonderful possibilities (especially, in connection with Bilbo’s naughty-schoolboy “burglar” role, within Thorin’s company). Hence, Bilbo’s thoughts upon first discovering the Ring’s powers:

His head was in a whirl of hope and wonder. It seemed that the ring he had was *a magic ring: it made you invisible!* He had heard of such things, of course, in old old tales; but it was hard to believe that he really had found one, by accident...¹¹⁹

Of a similar character is the Ring’s collocation with *magic* (also manifested in this excerpt). This usage reflects the high keyness enjoyed by words like *wizard* or *elves* early in the Third Age, as noted above. Here, the Ring appears as an artefact to make children go ooh, rather than one to make grown-ups go arghhh – an artefact Bilbo is *lucky* (“I am Ringwinner and Luckwearer”¹²⁰) to have come across, per the following passage:

Knowing the truth about the vanishing did not lessen their opinion of Bilbo at all; for they saw that he had some wits, as well as luck and *a magic ring* – and all three are very useful possessions...¹²¹

The *magic* pertaining to the Ring in *The Hobbit* is a childish magic of quick escapes and casual usages – rather than the dark and shadowy sorcery we come to know later in the Third Age. As, for example, in Tolkien’s description of Bilbo’s carefree attitude vis-à-vis the Ring, upon his return to the Shire:

His gold and silver was largely spent in presents, both useful and extravagant – which to a certain extent accounts for the affection of his

¹¹⁸ Chapter 16: A Thief in the Night.

¹¹⁹ Chapter 5: Riddles in the Dark.

¹²⁰ Chapter 12: Inside Information.

¹²¹ Chapter 8: Flies and Spiders.

nephews and his nieces. *His magic ring* he kept a great secret, for he chiefly used it when unpleasant callers came...¹²²

In short, when lexicalising *ring* in *The Hobbit*, Tolkien did so according to an innocent, magical, and undaunting meaning profile. Bilbo's ring was not something to be feared, but something to be used in pursuit of Tookish shenanigans. That being said, there is one further collocation worth mentioning – which adds a layer of meaning, and which will reappear in subsequent texts. This is the collocation between *ring* and *his*. At various points, Bilbo thinks of “the secret of *his* ring”,¹²³ or “blesse[s] the luck of *his* ring”.¹²⁴ These usages are significant. They cast the Ring as a possessive item: a thing to be owned. This possessive quality foreshadows the darkness that will later envelop the Ring. The Ring's possessiveness, even in early Third Age writings, serves as a hook for later parts of its journey.

For the most part, however, the Ring in *The Hobbit* is a magical, wondrous, and innocent device – one exemplifying Bilbo's good luck within the narrative, and one enabling him to pursue his adventures without the burden of fear and care.

The Fellowship of the Ring: a powerful ring

In early drafts, Tolkien planned to title the second instalment of his Third Age writings “The Magic Ring”.¹²⁵ Such a title would have carried the Ring's initial meaning profile into its subsequent narrative development. However, Tolkien changed his mind early on in his plans, opting instead for the title “The Lord of the Rings”. This shift in word use, from *magic* to something more sinister, was also reflected in the meaning network by which Tolkien operationalised *ring* in post-*Hobbit* writings.

In *The Fellowship*, Tolkien operationalised the One Ring as a powerful device: one its wearer could wield to acquire dominance over others. The table below lists all collocations for *ring* returning an MI2 above 9.00 in *The Fellowship*.

¹²² Chapter 19: The Last Stage.

¹²³ Chapter 8: Flies and Spiders.

¹²⁴ Chapter 12: Inside Information.

¹²⁵ See <https://twitter.com/TolkienWonder/status/1586448691224752128>.

Table four: words collocating with *ring* in *The Fellowship* (MI2>9.00)

Collocate	MI2	Frequency of collocation
the	12.51	332
ruling	12.22	7
finger	11.21	9
rule	11.19	8
one	11.02	38
to	10.46	95
chain	10.45	6
isildur	10.24	8
pocket	10.11	6
itself	10.05	7
power	9.93	13
of	9.64	80
his	9.62	45
find	9.59	14
bearer	9.55	3
bring	9.03	5

Given the Ring appeared more in *The Fellowship* than in other texts, it also returns more collocates. For brevity, I will focus on a few of these.

The most important collocations for *ring* in *The Fellowship* are those connoting *power* or *rule*. *Ruling*, *rule*, *power*, and *bring* (as in “One Ring to bring them all”) all appear with high MI2s in this text. These words shift the Ring’s meaning profile in significant ways: from a lucky device of careless magic to a more ominous tool for control/conquest. Hence, the co-occurrence of *ring* and *ruling* in *Fellowship* book 2, chapter 4 (A Journey in the Dark):

The Ringwraiths are deadly enemies, but they are only shadows yet of the power and terror they would possess if *the Ruling Ring* was on their master's hand again...

Or, that between *ring* and *rule* in book 1, chapter 2 (The Shadow of the Past):

This is the Master-ring, the *One Ring to rule* them all. This is the One Ring that he lost many ages ago, to the great weakening of his power...

And, finally, that between *ring* and *power* in the same chapter:

Clearly *the ring had an unwholesome power* that set to work on its keeper at once. That was the first real warning I had that all was not well...

A master-ring to rule them all, forged by deadly enemies and wielding an unwholesome power... We are a long way from the *magic ring* of Bilbo's youth, here. Tolkien has developed the Ring's significance: from childish to adult themology, from an opportunity with Bilbo to a dangerous responsibility for Frodo.

The collocations noted in my table also point to a complementary shift in the level of agency Tolkien gave his Ring during *The Fellowship*. In this second of Tolkien's four Third Age texts, the Ring came to collocate with the definite article, *the*, with very high MI2 of 12.51. This coinage brought the Ring into being as a proper noun – not *a* magic ring, one among many; but *the* Ring, the centre-point of all unseen power in Middle-earth. Thus, also, the equally-high score for the collocation *ring-one*. In *The Fellowship*, the Ring became “The One Ring” – as in Frodo's offer to Galadriel (“I will give you *the One Ring*, if you ask for it”¹²⁶); or his question to her upon her refusal (“I am permitted to wear *the One Ring*: why cannot I see all the others...?”¹²⁷). The Ring became a singularity in *The Fellowship*: with its meaning profile being clarified through addition of the word *one* (MI2 11.02). It also developed an *agency* which it hadn't enjoyed in *The Hobbit*, per *ring*'s novel collocation with *itself*. Gandalf tells Frodo in Bag End that

It was not Gollum... but *the Ring itself* that decided things. The Ring left him...¹²⁸

Equally, he tells others in Rivendell that

in my despair I thought again of a test that might make the finding of Gollum unneeded. *The ring itself* might tell if it were the One...¹²⁹

Finally, in Bree, Frodo

wondered if the Ring itself had not played him a trick; perhaps it had *tried to reveal itself* in response to some wish or command that was felt in the room...¹³⁰

This novel collocation between *ring* and *itself* (a strong one, returning MI2 of 10.05) endowed the Ring with new qualities: the ability to act on its own terms, rather than merely being used by others. This contrasts with the possessive use of *ring* in *The Hobbit* (collocating with *his*). Whilst *ring* continues to collocate

¹²⁶ Book 2, chapter 7: The Mirror of Galadriel.

¹²⁷ Same chapter.

¹²⁸ Book 2, chapter 2: The Shadow of the Past.

¹²⁹ Book 2, chapter 2: The Council of Elrond.

¹³⁰ Book 1, chapter 9: At the Sign of the Prancing Pony.

with *his* in *The Fellowship*, it is not with any increase in MI2. And, in fact, in later texts, we'll see that this possessive character of the Ring falls out of usage entirely. The Ring came into its own across the Third Age. It developed agency and singularity (*the/one*). It also developed a relationship with vocabularies communicating dominance through exercise of its power. This relationship displaced child-like connotations of Bilbo's lucky magic ring, which had prevailed in earlier language use.

The Two Towers/The Return of the King: a burdensome ring

The word *ring* returns only two collocates above MI2 9.00 in *The Two Towers*: *the* (MI2 10.99) and *of* (9.17). These minimal collocations point to the Ring's declining relevance within the Third Age narrative, as similarly noted in my section on keyness. Put simply, the Ring is mentioned less in *The Two Towers* than in previous texts – and, as a result, appears alongside fewer words. There is one significant thing to note about these two collocations, though. And that is the reduced MI2 score for the collocation *the-ring* they reveal (meaning the strength of the configuration “the Ring” fell by 12% between *LotR*'s first and second texts). In fact, exploring collocates for the word *the* in *The Two Towers*, we find that the definite article came to collocate more closely with a range of other words, including *tower* (MI2 11.29, up from 8.80 in *Fellowship*); *riders* (11.26, up from 10.27); *ents* (11.24, up from 0); or *darkness* (10.96, up from 10.87), than it did with *ring* (10.91). This trend, the weakening of the Ring's proper-noun-isation continued in *Return of the King*, where *the* came to collocate more closely with *city* (12.71, up from 8.71 in *Fellowship*/9.70 in *Towers*); *king* (12.44, up from 7.64/10.87); *west* (11.82, up from 11.40/11.34); *lord* (11.64, up from 10.35/10.58); or *captains* (10.73, up from 0/6.45), than with *ring* (10.67).

These growing collocations for words denoting hierarchy and masculinity affirm earlier comments vis-à-vis the displacement of *elves* by *men* in keyness centrality. This time, however, *men* displace *ring* in the exclusivity of their relationship with the definite article. Men became more proper-nouned than the One Ring, as Tolkien's writing evolved. Where the Ring enjoyed the status of singularity in *The Fellowship*, it came to compete with other proper nouns in *The Two Towers*. This is all to deepen my findings from keyness analysis: confirming that not only did the Ring become more peripheral as the Third Age wore on, it also lost its gravitas (slipping down the hierarchy of Middle-earth's proper-noun beings).

In Tolkien's final Third Age text, *Return of the King*, *ring* enjoys highly-exclusive relationships¹³¹ with seven other words. These are listed in the table below:

¹³¹ I.e., MI2 scores 9.00+.

Table five: words collocating with *ring* in *Return of the King* (MI2>9.00)

Collocate	MI2	Frequency of collocation
chain	12.06	5
wraiths	12.05	3
bearer	11.72	3
the	10.76	89
finger	10.46	3
put	10.32	7
weight	10.14	3

As these collocation returns indicate, the Ring underwent a further significant shift in Tolkien's language use as his Third Age narrative drew to a close. Once more, it came to be associated with a new lexical field: the most significant unifying feature of which was the Ring's appearance alongside words connoting *burden*. For example, the strength of the collocation between *ring* and *chain* grew from 10.45 in *The Fellowship* to 12.06 in *Return of the King*. This configuration appears in the struggle between Gollum and Frodo in the Sammath Naur: "Gollum was tearing at his master, trying to get at the chain and the Ring"¹³² – a usage which combines *chain* and *ring* as two features of the same phenomenon... Or, similarly, in Sam's reassurances in Cirith Ungol:

"I've kept it safe. It's round my neck now, and a terrible burden it is, too." Sam *fumbled for the Ring and its chain*. "But I suppose you must take it back." Now it had come to it, Sam felt reluctant to give up the Ring and burden his master with it again...¹³³

Note, here, that not only are "the-Ring-and-its-chain" becoming one phenomenon; but, also, that this combined artefact is described consistently as a *burden*. Hence, the significant collocation between *ring* and *weight* in *Return of the King* – a collocation returning high MI2 of 10.14, and appearing in passages like those below:

The Ring is enough. This extra weight is killing me. It must go...¹³⁴

Sam guessed that among all their pains he bore the worst, *the growing weight of the Ring*, a burden on the body and a torment to his mind...¹³⁵

¹³² Book 6, chapter 3: Mount Doom.

¹³³ Book 6, chapter 1: The Tower of Cirith Ungol.

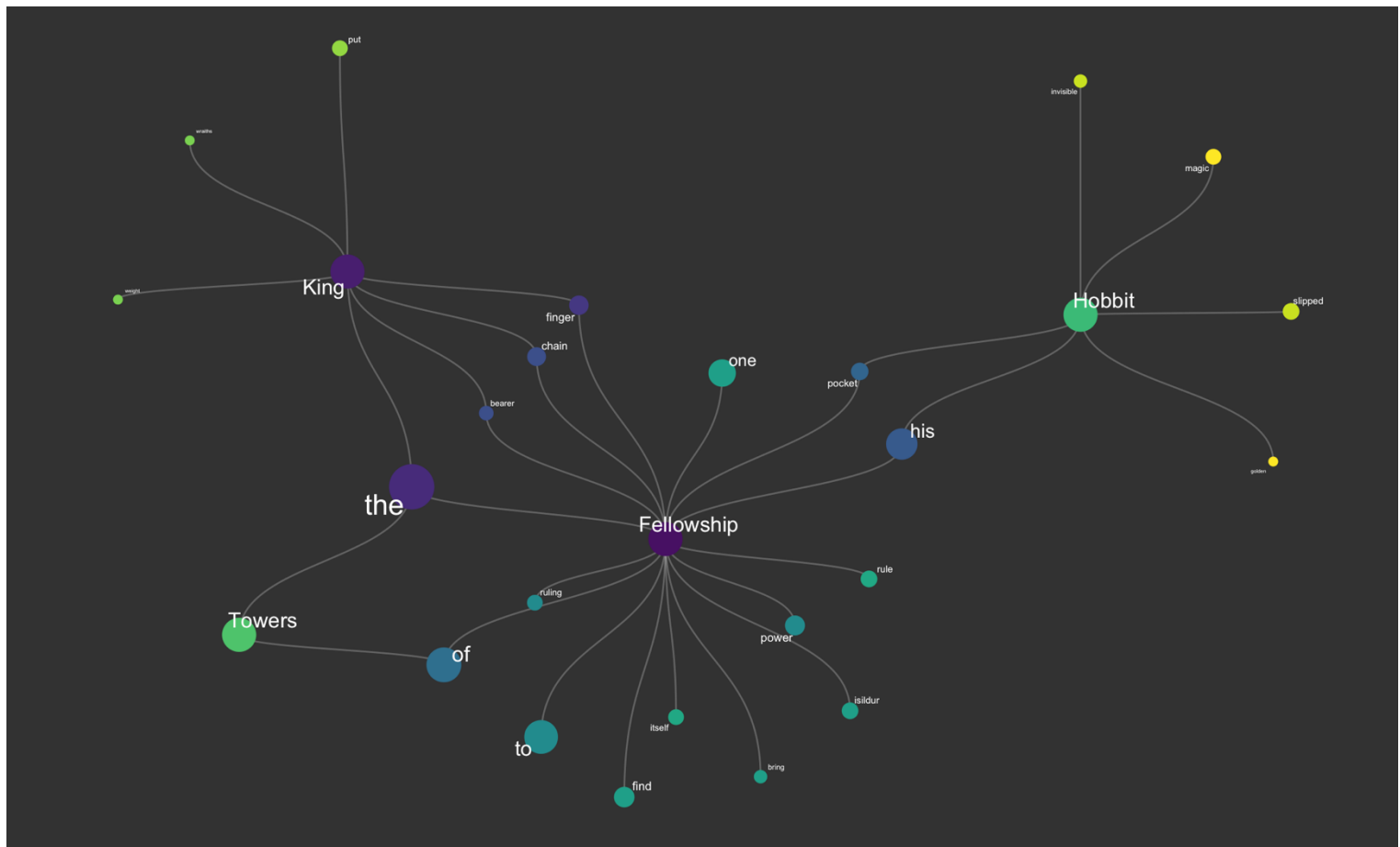
¹³⁴ Book 6, chapter 2: The Land of Shadow.

¹³⁵ Book 6, chapter 3: Mount Doom.

He had feared that he would have barely strength to lift his master alone, and beyond that he had expected to share in *the dreadful dragging weight of the accursed Ring*...¹³⁶

Evidently, and uniquely to the final Third Age text, Tolkien came to think of the Ring as a weighty burden – one that must be endured by its *bearer* (*ring* and *bearer* also collocate in *Return of the King* with a very high MI2 of 11.72, up from 9.55 in *The Fellowship*). Again, this new quality of burdensome weight adjusts the Ring’s nature in significant ways. Across the Third Age, the Ring travelled from the status of a wonderful, childish plaything to that of a painful and heavy load (via a profile of dominant singularity in *The Fellowship*). This final lexical shift adds physicality to the Ring’s evolving meaning profile – no longer an artefact which might be slipped nonchalantly onto one’s finger, but a cross for its bearer to carry.

In my keyness analysis, we saw the gradual disenchantment of Tolkien’s legendarium – the fall in usage of words like *elves*, *music*, and *friendship*; versus a rise for *men*, *shadow*, and *war*. My collocation findings develop this picture: bringing *the Ring itself* into Middle-earth’s disenchanting journey. Like Middle-earth generally, Tolkien’s One Ring underwent a decline from the status of child-like mystery, adventure, and faerie, to one of darkness, dominance, and strain – across his Third Age writings. We can see this decline in visual form via a filtered network graph, shown below.



This final visualisation filters collocates from my earlier network graph – focussing only on those returning meaningful MI2 of 9.00 or higher. Looking closely at the words in the graph reveals the unique meanings pertaining to the Ring in each of its textual instantiations. *Invisible, magic, slipped, golden* are all unique to *The Hobbit* – words capturing the Ring’s child-like, innocent qualities at the outset of the Third Age. Many words collocate uniquely with *ring* in *The Fellowship* (a product of its peaking centrality within this text). Amongst these are *power, rule, ruling, itself, and one* – words signifying the Ring’s unsettling power properties, its agency, and its singularity. Few words appear alongside *ring* in *The Two Towers* (a product of its peripheralization in Tolkien’s language use). But a handful of Ring collocates are unique to the *Return of the King* – including *weight*, exemplifying the Ring’s growing, burdensome physicality.

The network graph simplifies the story I’ve told regarding the Ring’s Third Age journey within this article. This is a story of declining relevance (the Ring’s peripheralization in language, including falling keyness and a slip down the pecking order of proper-noun beings); as well as changing meanings (from innocent magic to burdensome physicality, via shadowy power). These findings bring the Ring’s Third Age development (its evolving meaning profile as Tolkien’s writing style unfolded) into line with Middle-earth’s wider disenchantment, per my keyness analysis (its transformation from a land of mystery, adventure, and faerie; to one of darkness, hierarchy, and amnesia).

Conclusion

I began this article by describing Middle-earth as a world of journeys. In my use of corpus linguistic techniques to pop the bonnet on Tolkien’s evolving linguistic/stylistic choices across Third Age writings, I’ve found it was not only Tolkien’s characters who undertook these journeys. But, also, the Ring itself. The Ring was not a stable artefact in Tolkien’s unfolding imaginings. On the contrary, it underwent a turbulent character arc of its own: suffering increasing marginalisation from the wider narrative (reflected in declining keyness scores); and undergoing significant transformations of quality with each Third Age instalment (per shifting collocation relationships).

In both my keyness and collocation analyses, I’ve suggested these ruptures in the Ring’s centrality and qualities tie into a disenchantment of Middle-earth itself across the Third Age, as brought (artfully) into being by Tolkien’s language use. My keyness analysis found the Ring was not the only motif to suffer marginalisation from Tolkien’s narrative arc. Important motifs of magic, adventure, memory, and mystery were also in decline as the Third Age wore on – displaced by motifs of order, hierarchy, blood, and masculinity. This displacement reflects Middle-earth’s generic Third Age disenchantment, which is a master theme in Tolkien’s literature – encompassing the departure of elves, the forgetting of past greatness/beauty, and the disappearance of ents/hobbits. Whilst the Ring cannot be considered a positive phenomenon for Tolkien – the

way *music* and *friendship* unambiguously were – its declining relevance is also part of this disenchantment. As I’ve shown in collocation analysis, not only did the Ring slip down the pecking order of Middle-earth’s proper-noun beings (replaced by highly-masculine items like *the City* or *the King*); it also underwent a transformation in quality that carried it away from a profile of child-like mystery, adventure, faerie – and towards one of darkness, power, and physical burden.

The *co-disenchantment* between Middle-earth and its ubiquitous Ring is telling. It reveals much regarding Tolkien’s changing attitude to Middle-earth, as its stories unfolded. Based on my findings, it isn’t a stretch to conclude Tolkien’s vision for Middle-earth fell from one of beauty, music, and magic to one of shadow, blood, and hierarchy. For all that the forces of good won the War of the Ring, we may ask: at what cost? Middle-earth after the Ring’s destruction was a significantly more depressing place, per the mechanics of Tolkien’s word choice, than it had been when Bilbo first stumbled across his *golden* ring. There’s no better demonstration of this shift than the dissonance of Bilbo’s wildly inappropriate request for the Ring, right at the end of the Third Age, in Book 6, Chapter 6:

“Which reminds me: what’s become of my ring, Frodo, that you took away?”

“I have lost it, Bilbo dear,” said Frodo. “I got rid of it, you know.”

“What a pity!” said Bilbo. “I should have liked to see it again...”

What makes this request so jarring is its abstraction from the Third Age journey the Ring has been on – in its passage between Bilbo’s and Frodo’s hands, and as traced in this article. In his senile state, Bilbo cannot recognise this journey. He can only think of the Ring as the magical device he found in his youth – a lucky and wondrous gift: rather than a dark and sinister burden, as in Frodo’s experience. Bilbo’s senility (the absurdity of thinking it a pity that the Ring was lost) throws the Ring’s journey into sharp relief. The exchange speaks to the deliberate choices Tolkien made in evolving the Ring’s stylistic/lexical profile: an evolvment he curated through evolving word choice as much as through narrative techniques (keyness and collocates); and which he highlights to us, in the end, through a comment on the follies of (Bilbo’s) old age.

The Bilbo story points to the artful way Tolkien curated his Third Age narrative: taking his characters and universe on a journey through language – and crystallising this journey’s parameters and breadth through a final, wry exchange at its close. Such intentionality, deliberation, thoughtfulness in Tolkien’s *techniques* of authorial craft (at the level of word choice) returns us to debates around his work’s status as “literature”, with which I opened this article. Burton Raffel concluded his dismissal by arguing Tolkien’s works didn’t deserve recognition as literature because *language played second fiddle to narrative structure* within them – a submission of style to plot which, for Raffel, epitomised Tolkien’s non-literary status. Per Raffel, language in *LotR* served

merely “a cog in some narrative machine... None of this [Tolkien’s written word] has anything to do with *what words as words can communicate*; the question of style is simply not an issue”.¹³⁷ Yet, my analysis has shown that Tolkien was indeed attentive to word and style. The words he used to lexicalise the Ring operated not only as functions of wider plots’ unfolding. On the contrary, *Tolkien’s words were the unfolding*. Whether in terms of volumes of their use, or semantic configurations by which they appeared, the words by which Tolkien told his story themselves played a calculated and impactful role: shaping Middle-earth’s texture and experience, in ways that paralleled, amplified, and advanced his mythopoesis.

In descending to the level of word, my analysis has come to significant findings on Tolkien’s stylistic craft – findings which speak back, in turn, to historical debates concerning his literary status. I want to make one final point in this regard. Paying attention to the mechanics of word use, as I’ve done, can illuminate similarly long-standing contests concerning Tolkien’s treatment of modernity. In his foreword to *LotR*’s second edition, Tolkien famously claimed a “cordial dislike” for “allegory in all its manifestations” – arguing the Third Age had no “inner meaning or ‘message’... It is neither allegorical nor topical”.¹³⁸ This claim has long confounded critics seeking to make connections between Tolkien’s real-world experience, and that of his legendarium.

On the other hand, in the same foreword, Tolkien also admitted no author could “remain wholly unaffected by his experience”. And he went on to suggest that, even though allegorical connections between the War of the Ring and the wars Tolkien lived through were false, connections between Middle-earth’s fall and that of his country’s “shabby” industrialisation/modernisation were more warranted:

It has indeed some basis in experience, though... much further back [than Tolkien’s immediate writing period]. The country in which I lived in childhood was being shabbily destroyed before I was ten...

My corpus linguistic findings bring this dilemma between rejecting allegory and making real world connections into alternative relief. They provide further evidence of this tentative link between the Middle-earth experience and Tolkien’s dissatisfaction with industry/modernity – noting meaningful patterns in word use across Third Age texts, which also tend towards a vision of worldly disenchantment in the face of historical (highly-masculine) development. Regardless of assertions to the contrary, Tolkien’s own experiences in the world he *really* inhabited did indeed bleed into his conception of Middle-earth – per language choices he made, in crafting his legendarium’s diachronic evolution.

Noting these resonances between real and imagined world’s does not lessen Middle-earth’s imaginative power, nor its timelessness (its non-limitation

¹³⁷ Raffel, p. 227.

¹³⁸ Tolkien, *The Lord of the Rings: The Fellowship of the Ring*.

to any one period or place). Equally, understanding *Middle-earth's* connection to *Earth* does not diminish Tolkien's creativity and linguistic brilliance. Rather, the relationship between worlds and experiences, which my corpus linguistic findings illuminate, *enhances* these features. They help us read significant parts of Tolkien's legendarium. These include Middle-earth's darker parts – per excerpts from *The Two Towers* and *The Return of the King*:

For a while they sat without speaking under the shadow of a mound of slag; but foul fumes leaked out of it, catching their throats and choking them. Gollum was the first to get up. Spluttering and cursing he rose, and without a word or a glance at the hobbits he crawled away on all fours. Frodo and Sam crawled after him until they came to a wide almost circular pit, high-banked upon the west. It was cold and dead, and a foul sump of oily many-coloured ooze lay at its bottom. In this evil hole they cowered, hoping in its shadow to escape the attention of the Eye...¹³⁹

North amid their noisome pits lay the first of the great heaps and hills of slag and broken rock and blasted earth, the vomit of the maggot-folk of Mordor...¹⁴⁰

We can understand these depictions of lands surrounding Mordor more fully by situating them in connection to the country in which Tolkien grew up (many elements of which remain active in our lives). But this resonance between real and imagined worlds also helps us appreciate Middle-earth's (and by implication, our Earth's) enchanting elements. These are elements we can see, hear, sense in our own lives as much as on Tolkien's page – and, therefore, which we might learn to treat with more respect, as Tolkien sought his characters to do. As Tolkien put it of his love for hobbits in *The Lord of the Rings'* prologue:

they love peace and quiet and good tilled earth: a well-ordered and well-farmed countryside was their favourite haunt. They do not and did not understand or like machines more complicated than a forge-bellows, a water-mill, or a hand-loom, though they were skilful with tools...

Peace, quiet, good tilled earth... These are things we know and can understand – and, therefore, that we can learn to value more keenly thanks to the value to which Tolkien ascribed them in his legendarium (and the darkness he associated with their loss).

My use of corpus linguistics to assess Tolkien's Third Age writings clarifies these connections. Employing computational readings to shed alternative, rhizomatic light on patterns of word use, I've uncovered significant trends towards Tolkien's world's linguistic disenchantment: in the specific

¹³⁹ Book 4, chapter 2: The Passage of the Marshes.

¹⁴⁰ Book 5, chapter 10: The Black Gate Opens.

journey taken by the One Ring; and in Middle-earth's global lexicalisation. My study reveals artful mechanics of Tolkien's language use – counting words to elucidate how Tolkien brought his imagined world into alignment with personal dissatisfactions on industry/modernity, through subtle authorial choices engendering Middle-earth's equivalent creeping disenchantment. This finding represents a significant contribution to both Tolkien studies and wider literary studies. It demonstrates the power of digital humanities approaches: helping analysts read texts anew, by illuminating their mechanics from alternative, non-human angles. In my application of this non-human reading, I've found patterns clarifying long-held debates regarding Middle-earth's allegorical relationship to real-world experience. This outcome substantiates my claims in favour of corpus linguistics for literary studies: revealing these techniques' capacity to reframe existing interpretive stalemates, and open new lines for knowing familiar materials.

Appendix: formulae for calculating SMP and MI2

Formula for calculating Simple Maths Parameter keyness scores:¹⁴¹

$$\frac{\text{relative frequency of word in focus corpus} + \text{constant}}{\text{relative frequency of word in reference corpus} + \text{constant}} = \text{SMP score}$$

Formula for calculating MI2 collocation scores:

$$\log_2 \frac{\text{observed frequency of collocation}^2}{\text{expected (chance) frequency of collocation}} = \text{MI2 score}$$

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¹⁴¹ Default constant of 100 in LancsBox 6.0 (the software used in this analysis).

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