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From newspaper supplement to data company:

Tracking rhetorical change in the *Times Higher Education*'s rankings coverage

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ABSTRACT

Despite their importance, little is known about the companies behind global university rankings and how they have legitimized the use of league tables as structuring devices in the higher education sector. Taking a computational approach to Burke's dramatisic pentad, we analyse a corpus of 3,296 articles printed between 1994 and 2020 in the *Times Higher Education* magazine, publisher of the *World University Rankings*. We show how coverage of the rankings is subject to shifts in rhetorical strategy as Times Higher Education has developed into a ranking powerhouse. Over time, the magazine has spectacularized higher education by making changes in the rankings newsworthy, and has thereby cemented the company's position as an arbiter, reporter, and consultant in the sector.

Keywords: computational hermeneutics, rhetoric, ratio, university rankings, *Times Higher Education*.

INTRODUCTION

In February 2019, private equity company Inflexion bought Times Higher Education (THE), owner and producer of the influential *World University Rankings*. As with previous buyers, this new leadership is drawing the *Times Higher Education* magazine¹ further away from its 1971 genesis as a supplement to *The Times* newspaper, and towards its position as a global rankings house concerned with the production, analysis, and promulgation of university data. THE's expertise in journalistic coverage of the higher education sector underpins its capabilities as a data company with clear stakes in how university rankings—as well as related products and services—are perceived. Recent literature

¹ Times Higher Education (THE) is the name of both the company and their publication. In this paper, we italicise the acronym when referring to the publication (*THE*).

has focused on how rankers ensure the continued pervasiveness of league tables, typically by emphasizing their structuring role in the broader higher education landscape. Less, however, is known about how rankings were established as critical indicators in the sector in the first place.

By examining press coverage of the rankings in *THE*, this paper reveals the rhetorical strategies associated with establishing rankings as a legitimate way of navigating an increasingly competitive higher education sector. Compared to the producers of the other ‘Big Three’ rankings, *THE* provides a unique case study in that its rankings were likely originally developed and promoted to boost the magazine’s circulation. The coverage accompanying the university rankings would, therefore, have had to establish *THE*’s legitimacy as a producer of rankings, as well as its role as a reporter. Continuity in the production of rankings coverage provides a methodological opportunity for scholars interested in the evolution of the “potential meanings” offered to readers in this coverage (Mohr et al. 2020, 61) against the backdrop of shifting commercial dynamics. The subtle qualitative and quantitative changes in textual practices can thus be investigated longitudinally, whilst keeping an eye on larger market dynamics.

We contend that studying the rhetorical changes between such texts over time, and the rhetorical structures that various texts generate, can help us understand how meaning potentials were built around the rankings, as well as highlighting how those potentials—while assisted and made palatable by more general changes in the sector—also emerged and drew on the rankers’ own institutional history and practices. For example, many of the tropes and styles that characterize *THE*’s rankings coverage are derived from newspaper practices that have been redeployed for less journalistic and more commercial purposes. *THE*’s specialist rankings team remains composed of ‘reporters’ and ‘editors’ who report on the publication of new league tables as ‘news’, thus blurring the lines between journalistic coverage and self-promotion.

We focus on articles printed in *THE* from 1994 to 2020, including articles written for the supplements that accompanied the publication of new rankings. We explore the corpus through a computational hermeneutic application of Kenneth Burke’s dramatisic pentad (1969 [1945]), and we propose two techniques that extend the methodological work in this field (Mohr et al. 2013; Mohr, Wagner-Pacifici and Breiger 2015). First, we map the scenes prevalent in the corpus by using LDA

topic modelling. Second, we draw out scene-agent ratios by examining the cast of frequent agents by scene. Finally, we articulate subject-verb-object triplets as dendrograms and show how these can help us approximate scene-agent-act ratios. We show how *THE* engaged in specific legitimizing and spectacularizing dramatizations that order universities in an increasingly global hierarchical landscape. As Brankovic argues, ranking activities and implied epistemologies are “recursively related” (2021, 3) and we show how this relation is mediated through the dramatic potential achieved in their press coverage.

THE *TIMES HIGHER EDUCATION* AND THE *WORLD UNIVERSITY RANKINGS*

The ‘Big Three’—the *THE World University Rankings*, the *QS World University Rankings*, and the *Academic Ranking of World Universities*, also known as the *Shanghai Rankings*—are considered to be the most important international university league tables (Stack 2016, 6). Even though their function is largely similar in that they categorize and classify universities worldwide, their origins are distinct. The *Shanghai Rankings* was launched by Shanghai Jiao Tong University in 2003, and taken over by the Shanghai Ranking Consultancy in 2009. The consultancy describes itself as “a fully independent organization on higher education intelligence and not legally subordinated to any universities or government agencies” (Shanghai Rankings 2020). The British *THES-QS World University Rankings*, by contrast, started life in 2004 as a collaborative effort between the newspaper supplement and the higher education consultancy Quacquarelli Symonds (Baty 2014). In 2009 the companies parted ways and their flagship ranking split into what is now known as the *QS World University Rankings* and the *THE World University Rankings*.

THE distinguishes itself from its competitors because of its pre-existing and continued expertise in higher education journalism: it is considered to be the most influential professional higher education magazine in the UK (Tight 2000). As such, it provides: “a powerful tool for understanding the changing character of UK HE and [the magazine] can usefully be seen as representative, and in some ways constitutive, of that changing character” (Gewirtz and Cribb 2013, 60). Articles published in *THE*, therefore, constitute a useful repository with which to examine how rankings have been presented, discussed, justified, commented on, and even critiqued by writers who had a stake, as journalists, in the

UK higher education landscape and a stake, as employees, in the promulgation of an increasingly influential ranking.

THE's embeddedness in the sector was forged over decades, and needs to be contextualized in the history of its parent publications, its changing owners, and its eventual pivot towards providing university data. The *Times Education Supplement* was founded in 1910 as a free monthly supplement to *The Times*, an influential British newspaper founded in the 18th century (Temple 2017). As the supplement's popularity grew, the publication saw multiple transformations that banked on an increasing demand for news on a developing education sector. Eventually, the *Times Higher Education Supplement* was created in 1971 as a sister publication to focus on higher education and accompanied *The Times* as a weekly supplement. *The Times*, however, struggled financially under the ownership of the Thomson Corporation from 1967 to 1981 and was sold cheaply to Rupert Murdoch. Murdoch folded his new acquisition into the *Newsworld* universe and drastically cut the papers' outgoings (Stewart 2005). The education supplements were restructured into their own business (later named TSL Education Ltd), which included education-oriented supplements such as *Nursery World* and the *Times Higher Education Supplement*. Murdoch sold TSL Education Ltd to Exponent, a private equity group in 2005. In 2007 TSL Education was resold to another private equity group, Charterhouse Capital Partners (European Buyouts Report 2007) and the *Times Higher Education Supplement* took its current glossy magazine form in 2008.

Now known as *THE*, the magazine began investing more heavily in the flagship rankings that it had launched in 2004 with Quacquarelli Symonds. In 2009, when *THE* switched to partnering with Thompson Reuters, they also devised the *THE World Reputation Rankings* (2011-current), which effectively reports on the results of an academic reputation survey embedded in *THE*'s main rankings (Baty 2014; THE 2021). In 2013 the parent company, TSL Education, was then sold to the American private equity firm TPG Capital (Financial Times 2013), whose leadership intensified the focus on rankings by announcing a new partnership with Elsevier, and further increasing the institutions considered (Elsevier 2014, 2018). During these years, *THE* began covering new regions, economies, and institutions, which resulted in new league tables such as the *Asia THE World University Ranking* (2013-current), the *Emerging Economies THE World University Rankings* (2013-current), the *Young*

Universities THE World University Rankings (2013-current), and the *Latin America THE World University Rankings* (2016-current).² Most rankings are published annually and celebrated through a special supplement that is delivered together with the standard issue.

TPG Capital went on to carve THE out as a stand-alone business, separating it from the other education supplements owned by TSL Education. Whilst continuing to develop even more rankings, THE was then purchased by London-based private equity firm Inflexion in 2019. This was a calculated move. Inflexion had, in its own words, bought a data company that is used and trusted by universities, governments, and students:

THE is the world leader in university data, rankings and content, with institutions, academics, students, industry and governments utilising the information to gain insight, inform strategic priorities, benchmark, assess and select higher education institutions. THE has led on higher education analysis for nearly half a century, and has more than 700 clients globally across its data, consultancy and hiring services, including Oxford and Cambridge Universities in the UK and Harvard and MIT (Massachusetts Institute of Technology) in the US. [...] THE's in-house data team analysed over nine million data points on 3,500 institutions worldwide, more than half of which featured in its rankings (Inflexion 2019).

'Data,' 'rankings,' 'analysis,' 'benchmarking,' 'services,' 'consultancy,' 'clients,' 'university,' 'industry,' 'government,' and 'world leader' are keywords that signpost THE's commercial transition from a newspaper supplement to a 21st century data company (cf. Ghaziani and Ventresca 2005). Notably, the company now also has a branch called THE Consultancy, from which universities can purchase services enabling them to simulate upcoming performance in their rankings, augment branding efforts, and support global engagement efforts (THE Consultancy 2019d, 2019a, 2019c). The data collected through the early rankings and the network that the company has built up through its magazine and events business is used by the consultancy as a capability:

² Some of these rankings were renamed over time. For example, the *Emerging Economies THE World University Rankings* was initially called the *THE BRICS & Emerging Economies Rankings*. Also, this is not a complete list of rankings published by *THE*. Other rankings include the *THE Impact Rankings* and the *THE World Reputation Rankings*.

THE uses proprietary and primary data to provide bespoke solutions. Our Consultancy practice harnesses THE's strong network in the sector, taking into account all aspects of stakeholder engagement in our analyses (THE Consultancy 2020, 3).

As a result, THE's changing ownership and business models have had an impact on its everyday operations. Some employees who produced the supplement's journalistic content found their work re-oriented towards data service provision, as the rankings were managed and reported on by 'rankings editors'. The rankings have become a cornerstone in THE's business model, definitively recasting some of its journalistic expertise in the service of sustaining and promoting these forms of organizing the higher education sector. Yet this shift was neither happenstance nor inevitable: THE's commercial voyage follows the trend in which established companies shift focus towards collecting and analysing data at scale in order to transform this data into services, products, and infrastructure that can be valorized (Fourcade and Healy 2017b; Sadowski 2019; Srnicek 2016), in turn driving emerging commercial logics, opportunities, and pathologies (Khan 2017; Pasquale 2015; UNCTAD 2018; Zuboff 2019). In *THE*'s case, this was a response to the structural decline of print news media, which necessitated innovation in the sector (e.g., Bodó 2019; King 2010; Usher 2015), while higher education institutions were gaining a more acute awareness of their dependence on the global knowledge economy. *THE* positioned itself in that nexus at an opportune moment, and as Gerwartz and Cribb note, contributed to it (2013).

HOW GLOBAL UNIVERSITY RANKINGS SHAPE THE SECTOR

Increasingly accepted by university leaders as the 'new normal' (Hazelkorn 2008a, 2018), scholars have argued that rankings act as sorting devices that order an otherwise heterogeneous landscape into ordinal hierarchies (Fourcade and Healy 2017a, 2017b). In doing so, they establish new orders of worth between higher education institutions that shape their reputation and commercial opportunities (Robertson 2019a; Robertson and Olds 2016). While rankings have been said to produce competition between universities (Brankovic, Ringel and Werron 2018), they can also formalize existing power dynamics that further entrench established inequities (Shahjahan, Blanco Ramirez and Andreotti 2017). Overall, rankings have been discussed as responses to or results of more general processes of neo-liberalization, globalization, mediatization, commodification, and accountability and

transparency movements (Espeland and Sauder 2007; Kauppi 2018; Marginson and van der Wende 2007; Stack 2016). However, scholars have called for more research that unpacks how influential rankings houses increase their pull in the sector, and reinforce the legitimacy and pervasiveness of their league tables (Ringel, Brankovic and Werron 2020).

So far, rankers have been documented to carefully manage relationships with higher education institutions, who are the subjects, readers, and users of the rankings: Lim shows how THE, for example, buttresses its legitimacy and expertise claims through continued and close engagement with key stakeholders, while leveraging those same relationships to gauge how to develop the rankings in ways that are palatable to the sector (2018). Rankers “balance between the relevance, reliability, and robustness of [their] data and their relationships with key readers and audiences” (Lim 2018, 415). Likewise, Ringel and colleagues highlight how some rankers have sought to sustain this readership by actively pitching to multiple audiences, including non-specialist readers, and by continually republishing their results (e.g., the yearly update) (2020). Drawing on interviews with 52 professionals, Ringel also found that significant ‘backstage’ activity goes into the successful orchestration of rankings as public performances across various ‘frontstages’ (2021). These orchestrations are continuous, multitudinous, and aimed at capturing audience attention and affect, for example through social media activity (Shahjahan, Grimm and Allen 2021). As a result, global university rankers juggle a multitude of identities: they are neutral judges, helpful partners, inspirational thought leaders, anxiety-inducing auditors, commercial service providers, and trustworthy experts (Brankovic et al. 2018; Espeland and Sauder 2016; Fourcade 2016; Lim 2018; Robertson and Komljenovic 2016).

Looking more closely at how this balance is managed, Shahjahan and colleagues suggest that global rankers forge ‘emoscapes’ through their various touchpoints, from advertisements to conferences. Emoscapes are “affective landscapes where various affects (i.e. collective emotions, desires, moods, attitudes, and/or states) flow and move between people, space, and across various spatial scales” (Shahjahan et al. 2020, 2). These emoscapes are two-faced. On the one hand, they evoke a collective sense of precarity intended to make universities feel like they operate in a harsh and competitive zero-sum environment characterized by retrenchment in public funding. It is the type of environment that can make university leaders feel like they are losing their bearings, making them open

to new ‘suggestions,’ ‘solutions,’ ‘products,’ and ‘expertise.’ This finding resonates with Espeland and Sauder’s influential book *Engines of Anxiety* (2016), in which the authors discuss the anxieties generated by fear of poor performance. On the other hand, emoscapes also encourage a collective sense of trust in the global ranker’s ability to develop policy solutions that can meet the demands of the day. For one respondent from an Australian university, “THE is a trusted authority on higher education... THE is a great business partner and can be trusted to bounce off ideas in a respected and considered way” (THE Consultancy 2019b cited in Shahjan et al., 2020). Rankers have a double identity: they are judge and jury in a competitive environment, but they are also seen as ‘great business partners,’ and therefore part of the solution.

This complexity promotes strategic communication in which rankers and universities use each other, revealing the extent of their interdependence. For example, the methodological overhauls that characterized *THE* rankings in the early-2010s “yield[ed] results that corresponded to commonsensical outcomes that were worthy of the higher education community’s trust,”—adjustments ensured that Ivy League Universities would rank highly, thus confirming expectations and ensuring buy-in from prestigious institutions (Lim 2018, 422). Conversely, Ashwin notes how universities “know that [the rankings] are nonsense but they still ‘celebrate’ their success in them as if they say something meaningful” (2020, 47). In spite of often-vocalized scepticism, rankings are leveraged when useful to those who emerge triumphant, or those who must motivate internal change, such as an increase in teaching hours or international admissions. Yet Ashwin’s assessment reveals a key tension in the study of rankings and their impact on higher education: rankings continue to thrive in spite of a generalized scepticism (Hazelkorn 2008b; Marginson and van der Wende 2007) that is often glossed over as a commonsensical response to what is acknowledged to be an imperfect construct at best, and cynical fabrication at worst.

In other words, researchers have shown what rankings houses do in order to bolster the legitimacy of their products. Following Brankovic’s call to denaturalize the notion of rankings (2021), we contend that more work is needed to understand how rankers historically made their rankings meaningful in the first place, both by breaking with and drawing on previous sets of expertise and points

of reference. We aim to contribute to this effort by conducting a rhetorical mapping of rankings-related journalism as featured in *THE*. Specifically, we ask:

How did *THE*'s rhetorical use of rankings change after the launch of the *World University Rankings* in 2004, and the expansion of their rankings portfolio in 2013?

- a. What topics characterize articles that mention rankings from 1994 to 2020? Does the focus change over time?
- b. Who is being drawn into rankings-related journalism, and in what contexts are the various actors placed?
- c. What can the rhetorical composition of the rankings journalism tell us about the strategies that *THE* has used to legitimize its rankings?

DATA AND METHODS

Our corpus was put together by first collecting a full run of *THE* Magazines from 1994 to 2020, including any special issues or supplements that accompanied the publication of a new ranking. *THE* magazine articles (n ~ 89,000) were collected from online repositories LexisNexis and ProQuest. We first verified the completeness of the corpus by manually cross-checking database results with digital and paper copies of the magazine. This revealed gaps³ in the ProQuest and Nexis databases that could neither be explained by the providers nor by *THE*, although ProQuest maintains its holdings are complete (personal correspondence, 2021). The incompleteness of the corpus is a recurrent limitation of computational text analysis because archives can be poorly documented and unreliably indexed. However, we believe that the run that we do have provides a sufficient view of the type of writing that characterizes *THE*.

Articles that appeared in the ranking supplements have not been fully indexed in these repositories, and they were, therefore, collected manually from archives at the British Library, Cambridge University Library, and digitized copies available on the *THE* and Tes Global websites. We cleaned the corpus by checking for duplicate texts (a process in which various combinations of the

³ In particular, the whole of 1999 is missing, as well as part of 2000.

article’s title, text, and dates are checked for duplication). To avoid skewing the topic model, we also removed articles that do not strictly cover higher education ‘news,’ such as obituaries, book reviews, and bulletins announcing research opportunities, job openings, appointments, grant winners, awards, and prizes. We also removed strings that slipped in during the digitization process, such as placeholders and hypertext (e.g., “Place headline here”, “Click for more information,” and “Browse the full rankings results here”). After cleaning, a total of 72,768 articles remained in the corpus. By searching each text for the keywords ‘ranking(s)’ and ‘league table(s)’ we extracted 3,296 rankings-related texts. Table 1 provides an overview of the resulting corpus.

Table 1. Descriptive statistics for the corpus

	<i>Corpus</i>	<i>Pre-WUR (1994 - 2003)</i>	<i>WUR years (2004 - 2012)</i>	<i>Expansion (2013 - 2020)</i>
<i>Total number of articles</i>	72,768	34,426	28,917	9,425
<i>Total word-count</i>	68,223,112	26,782,768	25,993,466	15,446,878
<i>Number of ranking supplement articles</i>	555	0	121	434
<i>Ranking league table subset</i>				
<i>Number of articles</i>	3,296	629	1,355	1,312
<i>Proportion of total articles</i>	4.53%	1.83%	4.69%	13.92%
<i>Total word-count</i>	5,833,678	785,838	2,116,122	2,931,718
<i>Median word-count</i>	1,326	958	1,164	1,588
<i>Mean word-count</i>	1,770	1,249	1,562	2,235
<i>Standard deviation</i>	1,624	1,027	1,520	1,828

In the following analysis, we deployed computational methods to capture the broad topology and trend-lines of the journalism that accompanied the rankings, and to guide our attention to texts that might require closer inspection. As we are interested in rhetorical strategies, we extend Mohr et al.’s use of the dramatisitic pentad (2013). The pentad, which postulates that rhetorical texts are composed of an act, scene, agent, agency, and purpose, was formulated by literary critic Kenneth Burke to theorize the motives animating the text’s composition: “any complete statement about motives will offer *some kind of* answers to these five questions: what was done (act), when or where it was done (scene), who did it (agent), how [they] did it (agency), and why (purpose)” (1969, xv). For example, the pentad maps as follows in this excerpt from Inflexion’s acquisition announcement (2019):

The existing management team (AGENT) will work alongside (AGENCY) Inflexion (CO-AGENT) to address (ACT) the growing demand from universities for data and branding products (SCENE) to improve the performance and academic achievement, as well as to attract students, academics and funding (PURPOSE).

Because the five elements can be ambiguous, inconsistent, and overlapping, readers might interpret them differently; we use our historical knowledge to point to the “strategic spots at which ambiguities will necessarily arise” (Burke 1969, xviii). The scene that *Inflexion* implies is a sub-optimally coordinated economic system that has left universities in dire need of data and branding products. The following sentence then launches into how these problems will be solved by THE with the help of *Inflexion*, thus implicitly foregrounding each party’s expertise and the synergy introduced by the acquisition. These solutions are framed in relation to the profit that they will bring to the owner (the implicit PURPOSE):

In addition to cross-selling to existing clients (ACT), there will be a focus on acquiring new customers (ACT) and launching add-on products (ACT) through further enhancing the company’s digital offering (AGENCY) and continuing the expansion into new international markets (AGENCY).

Examining the ratios between the elements (the Burkean term for their relationship), enables us to map how elements interact and influence each other, and therefore create a specific symbolic order. Elements within ratios are typically consistent with each other, in that the scene is unlikely to be inhabited by incongruous agents, though when this occurs, the tension is worth examining for its rhetorical qualities (e.g., to grotesque effect; Burke 1969). For example, analysing the scene-act-agent ratio above articulates how the perceived demand from universities leads to a list of acts in response, thus defining the contours of who the agent is in this context. Ratios ultimately reveal something about the author. The language used by the rhetor-agent “reflects and reveals, in its reality, the attitudes, values, and even the worldview of the person (or people) who use it” (Gabor 2017, 88).

Efforts to unite “techniques of measurement and techniques of interpretation” across large bodies of text (Mohr et al. 2020, 150) illustrate how computational techniques are useful but as yet incomplete analogues to a rhetorical-dramatic analysis (also see Salama 2021). Scenes, for example, have been hypothesized to be articulable through topic modelling if the nature of the corpus is such that various topics “are discussed in an ongoing way [... and that these] represent a particular kind of a scene for thinking about acts, actors, purposes and agency” (Mohr et al. 2013, 686). We find that this approach fits well with journalistic texts because they tend to front-end the event in which the act takes place

(Aitchison 2006), which corresponds to Burke’s understanding of the scene as a type of situation. Likewise, natural language processing combined with grammar parsing can extract the agents if these are conceived of as typically occupying the subject position (Goldenstein and Poschmann 2019; Mohr et al. 2013), and the acts if these are conceived of as typically occupying the verb position. In what follows, we explore how applying topic modelling and syntactic dependency parsing can begin to approximate more elements of the pentad and be used to discuss ratios.

We used `spacyr` (Benoit and Matsuo 2020), an R wrapper for the natural language processing software `spacy` (Honnibal and Montani 2017), to extract lemmas and perform part-of-speech (POS) tagging (Weischedel 2013) as well as syntactical dependency parsing.⁴ Given the high number of place and organization names in the corpus, we subsequently consolidated entities into single lemmas using `spacy`’s built-in feature (e.g., Hong Kong becomes `Hong_Kong`). This formed the lemmatized basis for the subsequent topic modelling, and the grammar parsing results were used to extract lemmas with a specific syntactic function to identify and visualize agents and their acts.

Latent Dirichlet Allocation (LDA) is a generative, probabilistic topic modelling implementation commonly used in both computational social sciences and computational humanities (Blei 2012; Jockers 2013). Whilst other implementations predate LDA (e.g., NMF, LSA), LDA been effective in both mapping historical discourse (Du 2019) and modelling genre (Schöch 2017). As we seek to build on Mohr et al.’s computational approximation of the pentad (2013), it was our implementation of choice. We used the `seededlda` package in R⁵ (Watanabe and Xuan-Hieu 2021) and ran the model on the consolidated lemmas with $k=16$ (k being the target number of topics) after removing stop words, punctuation, and numbers from the corpus. To check for robustness, we iterated

⁴ We also tested `UDPipe` and `OpenNLP` but found that `spacyr` produced more accurate results on our corpus, and was substantially faster to run.

⁵ We did not make use of seeding (semi-supervision) in this case, but found that, given the size of our corpus, the package was both speedy and accessible compared to other implementations such as the well-known ‘`topicmodels`’ package (Grün and Hornik 2011).

over $k = 10$ to $k = 25$ and examined the results for topic coherence based on word intrusion checks (Chang et al. 2009; Gaby and Caren 2016; Kinney, Davis and Zhang 2018), as well as the distribution of topics over time (e.g., did certain topic prevalence surges make sense, given our discipline knowledge?). We found that this back-and-forth method gave us a sense of how the topics oscillate between certain features. Articles about Covid-19, an event unique to 2020, are a good example. Whilst they clustered in their own topic in models with a large enough k to distinguish them, they more often travelled between Sustainability, Emerging Economies, Communications/digital — all of which makes sense given frequently made connections between the pandemic, the climate emergency, and sustainability, its worrying impact on the global South, and of course the sudden turn to remote teaching. In making our final choice, we privileged the greatest coherence over the fewest number of topics, although we acknowledge that making different choices could reveal other insights; human interpretation is fundamental to topic modelling (Benoit 2020). Likewise, we allowed for some ‘semantic opacity’, meaning that some topics might not look coherent on the surface (see Existence and Opinion & Humour below), but reveal pockets of writing that make more use of figurative language, which is difficult to categorize without human intervention (Rhody 2012). Their surprising stability across various k is indicative of a thematic strand that may be more stylistic than semantic, and therefore worthy of exploration.

FINDINGS

Scenes: A professional UK focus turns more global and managerial

The LDA model of rankings-related texts shows 16 distinct topics that are covered in the corpus from 1994 to 2020 (Table 2). As depicted in the heatmap in Figure 1, the prevalence of topics indicates which aspects of the rankings were drawn on, focused on, or contextualized over time. Following Gaby and Caren (2016), we concluded that these 16 topics can be manually clustered into four broader themes: a) the rankings landscape (e.g., United Kingdom, Emerging Economies); b) activities internal to the university (e.g., leadership, student admissions, equality and diversity in employment); c) the extraneous forces that have a direct or indirect impact on rankings (e.g., politics, funding, and governmental oversight); and d) reflections on the rankings (i.e., what are they in/to the world?). The

heatmap was normalized over the total of weights per year (Andrew 2021; Wieringa 2017), meaning that we can compare the proportion of different topics at one point in time. The vertical grey lines indicate when *THE* launched the *World Universities Rankings* in 2004, and when *THE* grew its portfolio of rankings in 2013. Following Mohr et al., we will consider these topics to be the scenes in which our agents and acts take place (2013).

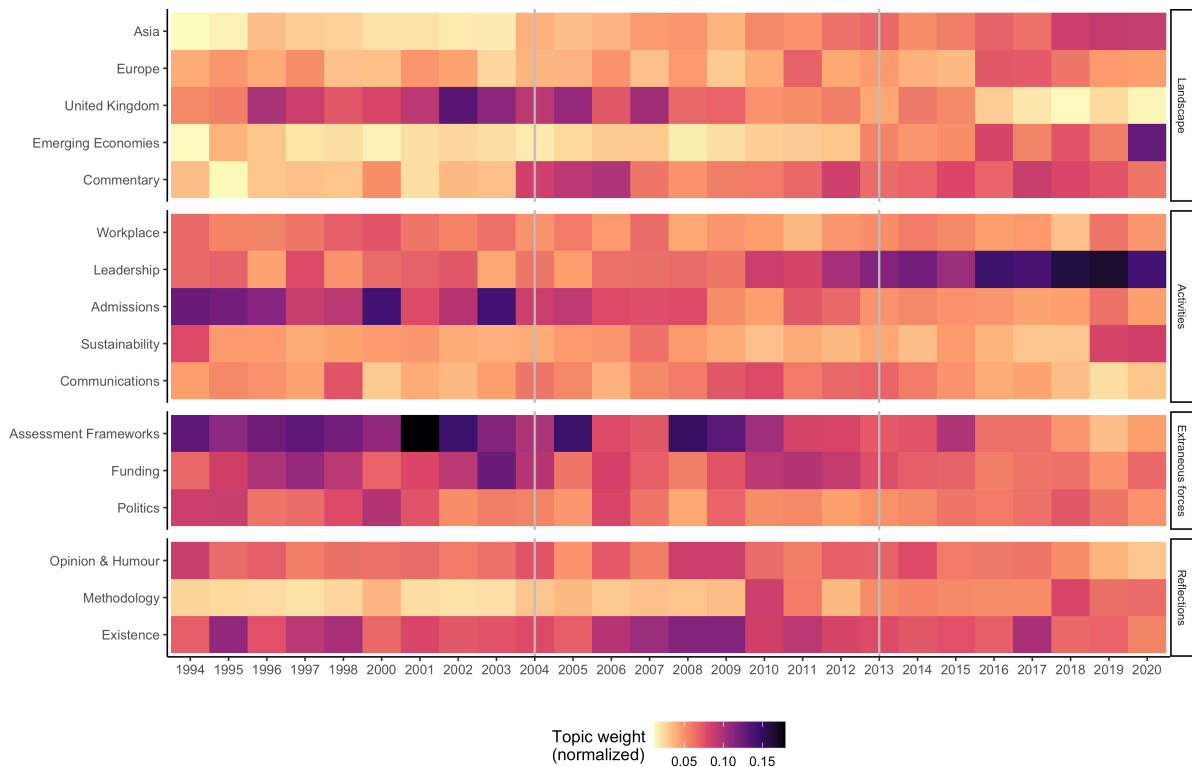


Figure 1. Heatmap of topic frequency over year, with topic weights normalized over total of weights per year, i.e., they total 1 in each period (Andrew 2021; Wieringa 2017). The lines in 2004 and 2013 correspond to the launch of the *World University Rankings* and the beginning of the spin-off rankings, respectively. 1999 is omitted since there is no data for that year.

Scenes included in the first theme, Landscape, show how the rankings order universities into a global landscape with distinct geographic regions. They indicate how *THE*'s early emphasis on the UK dissipates as the rankings are introduced, first with a focus on North American coverage (subsumed in Commentary), and later with an expansion to (emerging) players in Asia, Africa, South America, and the Middle East as concomitant rankings are introduced. Europe, which generally remains constant overtime, gains slightly in 2011 and in 2016-2017 owing to the launch of the European Commission's U-Multirank and the Brexit vote respectively. *THE* has gradually painted a more global picture under the auspices of their rankings, which tracks with the gradual increase of universities considered. These

universities not only vie against a geographic backdrop, but as captured in the Commentary scene, they also ‘slip’, ‘climb’, and ‘dominate’ on a vertical landscape. Note that the Commentary scene contains frequent reference to North American universities, and its intensification coincides with the introduction of the *World University Rankings*.⁶

The second theme, Activities, groups the scenes that foreground activities that are internal to universities and have an impact on their places in the rankings. This includes managing student admissions and participation, promotional activities, and strategic leadership (e.g., “At the nexus of East and West,” published on 6 October 2011, was written by the President of the National University of Singapore about their commitment to diversity in teaching and research), but also workplace conditions such as equality and diversity. The Leadership scene in particular becomes more prevalent overtime, likely due to the tandem increase of supplements and content written by and about university management and their strategic vision. As reflected in the launch of the Green League Table in 2007 and the more recent *Impact* rankings, some coverage is also dedicated to the university’s value to society, including commitment to the Sustainable Development Goals and tackling climate change.

Scenes under Extraneous Forces contain events and conditions imposed on the higher education sector by external actors, such as government oversight and assessment frameworks (e.g., the defunct Research Assessment Exercise and the current Research Excellence Framework in the UK context), politics, and the funding climate (e.g., retrenchment and student fee limits). The prevalence of Research and Teaching Assessment frameworks declines as other rankings coverage increases, showing a shift from national concerns to global comparisons. Likewise, Funding becomes less prominent, except for an uptake in the wake of the 2010 Browne Review and rise in student fee limits. Politics covers not only

⁶ When we ran the LDA model with a higher target number of topics, the Commentary topic tended to split into two, and North America emerged as a distinct topic. Top terms included references to their elite institutions but also American funding practices, such as ‘endowment,’ ‘alumni,’ and ‘donor.’

how national politics can shape the sector, but also how universities respond to political pressures or scandals with a political bent.

The scenes categorized under Reflections are the least straightforward but provide the most dramatic potential. While in the Methodology scene, rankings are embedded in elaborate descriptions of how the underpinning data is collected and parsed, Opinion & Humour catches various mentions of the rankings in vivid opinion pieces or spoofs. It captures how the notion of being ‘ranked’ is used in everyday parlance, including references and comparisons to other kinds of ranking such as sports events or the ‘Nobel league table.’ These articles equally use university rankings as literary devices, for example to allude to the mundanity of the academic who “survived [his undergraduate studies] to get a degree, a marriage, two children, a cat and a lecturing job at one of our middle-ranking seats of learning” (“Parallel Lives”, 13 October 2006). Another example, a reflection on the proceedings of a typical graduation ceremony, questions the value of a degree and the difficulties of capturing this in a league table:

What was it all about, those university years? Perhaps they learned a thing or two in seminars and lectures. Maybe they discovered something about themselves. Mostly, it has little to do with anything mentioned in university rankings, student satisfaction being pursued, and sometimes achieved, in places and with people best not enquired into (Bigsby, “Now raise a plastic glass...,” 25 June 2015)

These instances draw on the rankings as forces that, in one way or another, structure the academic experience, often inadequately. A spoof combines rankings and Vice-Chancellors’ pay controversies into one unflattering picture:

Yes, it's hippy-hop-hurrah for this year's Easter bunny - our very own vice-chancellor, seen here celebrating his record-breaking third place in the newly published league table of vice-chancellors' pay. In a special Easter message, our vice-chancellor expressed the wish that all members of academic staff join him in celebrating the news that even at a time when the university was, in the words of the Finance Director, "up the creek without a paddle", its chief executive could still go on enjoying such extraordinarily large emoluments. He also used the message to denounce critics of his package as "peddling the politics of envy" and pointed out that his salary of £325,000 per annum was perfectly commensurate with the sums being paid in the private sector to other well-known comedians. (“He’s in the money!,” 1 April 2010)

‘Existence,’ by contrast, tackles ontological malaise more directly, capturing debates over the commercialization of degrees, the purpose of teaching and learning, and the threat that rankings pose:

Even five years ago, we might have responded to league tables' instrumentalising by just teaching first-year students what they did not know. But that's beginning to go. As the competition culture hits the universities, so tomorrow's customers - yesterday's students - will make their choices according to the student satisfaction league (Brecher, “Go To Aisle 4 To Pick Up Your 2:1,” 24 February 2006).

As suggested by the topic’s most frequent terms, these reflections often involve subjects in the humanities, which contrasts with the heavy focus on the hard sciences that are included in the ‘Sustainability’ scene.

The scenes, organized into four broader themes, show how there has been continuous coverage within *THE* on the subject of rankings (or league tables) generally, which shifts in focus as *THE*’s own expanding rankings are produced. *THE* has, therefore, long been in the business of generating texts that consider ranking operations, but whereas its early coverage would have been driven primarily by newsworthy concerns in the general sector, its transition to producing them generates more coverage that is driven by their commercial decision-making. We posit that, over time, these scenes show a transition in depicting a British higher education sector beset with national concerns, to commenting on a global ordinal hierarchy with a particular focus on a) factors internal to universities that contribute to league positioning, and b) making the rankings a viable product for THE by both expanding their remit and explaining their methodology. To examine this further, we turn our attention to scene-agent and scene-agent-act ratios.

Table 2. Topics with top 10 terms (and their weights), and some sample headlines from documents strongly associated with each topic.

	Topic	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6	Term 7	Term 8	Term 9	Term 10	Headline examples
Landscape	Commentary	harvard (0.0198)	representative (0.0095)	berkeley (0.0075)	fourth (0.0073)	harvard_university (0.007)	dominate (0.0068)	found (0.0067)	california (0.0066)	pillar (0.0063)	mit, caltech (0.0059)	"Golden state surfs crest of high-tech wave" (2010) "Young guns from Oz pull ahead of pack" (2015) "China's stars shine brighter in rankings" (2015)
	Emerging Economies	brazil (0.0153)	russia (0.0145)	russian (0.0105)	africa (0.0097)	pandemic (0.0097)	turkey (0.0084)	internationalisation (0.0073)	latin_america (0.007)	covid-19 (0.007)	south_africa (0.0067)	"Black rule hits league tables; South Africa" (1995) "Universities prove their value in a difficult year" (2020) "In search of education's El Dorado" (2017)
	United Kingdom	sir (0.0131)	scotland (0.0113)	england (0.0098)	merger (0.0079)	scottish (0.0075)	ucl (0.0073)	the_russell_group (0.0068)	wales (0.0067)	manchester (0.0066)	lse (0.0061)	"Frugal Few Fly As Others Fall" (2001) "Imperial reclaims crown as research income king" (2014) "Cambridge pips Oxford to the post in fourth annual 'Table of tables'" (2011)
	Europe	germany (0.0186)	french (0.0175)	france (0.0166)	eu (0.0164)	german (0.0119)	netherlands (0.0094)	canada (0.009)	switzerland (0.0079)	spain (0.0068)	dutch (0.0067)	"In race to top, France bids adieu to egalite" (2011) "Why has research in the EU13 countries not caught up with the west?" (2018) "Continental drift: recovery or slump?" (2014)
	Asia	chinese (0.0328)	india (0.0265)	japan (0.0202)	foreign (0.0184)	asia (0.0165)	singapore (0.0146)	australian (0.0124)	japanese (0.0123)	hong_kong (0.0116)	indian (0.0104)	"A closed book to outsiders" (2008) "A superhighway to success" (2019) "Chinese progress yet to turn tide" (2017)
Activities	Communications	online (0.0226)	brand (0.0209)	website (0.0125)	marketing (0.0121)	publisher (0.0074)	site (0.0074)	alumnus (0.0073)	web (0.0066)	mba (0.0064)	communication (0.0064)	"All about me, dot com" (2010) "Frankensite' monsters loom as universities lose control of content" (2010) "Futurelearn picks league table stars for debut line-up" (2012)
	Sustainability	climate (0.0099)	physics (0.0097)	computer (0.0097)	environmental (0.0088)	energy (0.0085)	space (0.0085)	medical (0.0079)	chemistry (0.0078)	sustainability (0.0074)	sdg (0.006)	"UK and Canadian universities lead world on sustainability" (2019) "How green is my tally?" (2009) "Climate of consent" (2015)
	Admissions	qualification (0.0135)	admission (0.0129)	applicant (0.0118)	employment (0.0117)	exam (0.0104)	participation (0.0102)	test (0.0102)	background (0.0099)	entry (0.0098)	liberal (0.0084)	"Top State Students Miss Out On Elite Places" (2004) "A sensible selection tool" (2018) "Raw deal for BME students?" (2014)
	Leadership	engagement (0.0084)	diversity (0.0061)	strategic (0.0055)	leadership (0.005)	diverse (0.0046)	capacity (0.0043)	enable (0.0041)	innovative (0.004)	structure (0.004)	vision (0.0039)	"Navigating fast-flowing waters" (2013) "The graduate, re-engineered" (2018) "A global beacon" (2016)
	Workplace	woman (0.0326)	contract (0.0163)	female (0.0136)	gender (0.0125)	respondent (0.0097)	man (0.0091)	union (0.0082)	tenure (0.0079)	male (0.0075)	earn (0.0074)	"Fixed-term work is now the norm for early career academics, says UCU" (2016) "Pounds 130m Needed To Bridge Pay Divide" (2001) "Gender still on the agenda" (2013)
Extraneous Forces	Politics	freedom (0.0124)	party (0.0088)	politic (0.0059)	speech (0.0056)	protest (0.0052)	official (0.0051)	war (0.005)	election (0.005)	police (0.0049)	vote (0.0049)	"The lines on free speech are becoming blurred" (2015) "Dean sacked 'Soviet' style" (2006) "Karolinska Institute scandal: the system or the surgeon?" (2016)
	Funding	charge (0.0102)	loan (0.0089)	spending (0.0072)	price (0.0064)	debt (0.0063)	cash (0.0061)	finance (0.0059)	profit (0.0051)	cap (0.0048)	tax (0.0047)	"In the shake-up to come, no guarantees for anyone" (2010) "Cuts focus money-spinning minds" (1996) "Dark money matter: the cash is there but scientists can't see it" (2013)
	Assessment Frameworks	rae (0.015)	ref (0.0144)	metric (0.0123)	panel (0.012)	submit (0.0106)	submission (0.0081)	external (0.0079)	rating (0.007)	tef (0.0067)	hefce (0.0064)	"Research Intelligence - REF guidance sets up the starting blocks" (2011) "Rankled By Rankings" (2002) "Elite Attacks 'unreliable' TQA" (2001)
Reflections	Existence	argument (0.0041)	theory (0.0039)	modern (0.0037)	literature (0.0036)	wrong (0.0036)	philosophy (0.0035)	else (0.0032)	actually (0.0029)	understanding (0.0028)	writing (0.0028)	"Magic moments - We've lost those" (2008) "Go To Aisle 4 To Pick Up Your 2:1" (2006) "Failure is an option" (2016)
	Methodology	category (0.0255)	ratio (0.0176)	volume (0.0174)	index (0.0148)	data (0.0146)	normalise (0.013)	examine (0.0112)	database (0.0111)	thomson_reuters (0.0109)	transfer (0.0101)	"Bespoke figures" (2019) "Firm foundations New rankings, same method" (2013) "Adjusted figures" (2018)
	Opinion & Humour	child (0.0081)	sport (0.0069)	room (0.0052)	day (0.0052)	lecture (0.0044)	man (0.0043)	american (0.0039)	bit (0.0037)	football (0.0037)	friend (0.0034)	"He's in the money!" (2010) "Parallel lives" (2006) "Now raise a plastic glass..." (2015)

Scene-agent-act: The things universities do in a world of rankings

The analytical effectiveness of Burke’s pentadic elements comes to fruition when examining them in relation to each other, i.e., their ratios. To understand the effect that scenes have on the ways in which the rankings are covered in *THE*, we first seek to identify how scene-agent ratios vary across scenes, and therefore which agents might warrant further exploration. Whereas Burke looked at individual texts and sentences to tease out these relations, computational methods enable us to map and compare the typical cast of agents in each scene. Table 3 shows the 20 most prevalent agents per scene, identified as grammatical subjects (note that we removed all pronouns and determiners for greater clarity; the agents’ ranks should therefore be compared in relative terms). Each scene also has a ratio that shows how many agents are unique per 100 occurrences (normalized by word-count in each scene), so that the casts of characters can be compared: a lower ratio means that fewer unique agents account for the total frequency of agents in the scene.

The ‘university,’ closely shadowed by ‘institution,’⁷ is a key actor across the board, coming second only to ‘student’ in Admissions and Existence, and to ‘indicator’ in Methodology. Likewise, ‘student’ consistently features as a top 20 actor in all scenes, except for Methodology. The cast of prominent characters depends on the remit of the scene: students are not particularly active agents in Methodology, but feature prominently in Admissions with kindred agents such as ‘college,’ ‘school,’ ‘education,’ ‘graduate,’ ‘study,’ and ‘course.’ Methodology finds its actions primarily in agents that constitute or produce the rankings, such as ‘survey,’ ‘indicator,’ ‘category,’ ‘score,’ ‘citation,’ ‘datum,’ and ‘Reuters.’ By contrast, Commentary brings in prominent synecdochal external agents such as nations, cities, and institutions—a focus echoed, as we might expect, in the other Landscape scenes, but nowhere else. The unique-agent to total-agent ratio also suggests that Methodology has, by far, the smallest cast of unique agents (ratio of 14:100 compared to 32:100, which suggests the largest cast of agents is found in Opinion & Humour).

⁷ Note that ‘university’ often appears in the name of the institution, e.g., “University of Lancaster.”

Table 3 is useful to understand who the key players might be in each scene, but it does not give us insight into the qualities of the scene-act ratios, i.e., which scenes allow which agents to do what kind of thing. To uncover patterns in the ways that agents and acts relate in our various scenes, we pulled out subject-verb-object triplets (Goldenstein and Poschmann 2019). This extends Mohr et al.'s (2013) identification of actors and acts based on POS tagging because, instead of relying on the collocation of subjects and verbs, we can now confirm that the subject-verb pairs indeed point to each other.

Figures 2 to 5 depict the triplets in two-sided dendrograms, where a focal term—the agent—occupies the position of the object (left-hand branch) and the position of the subject (right-hand branch) based on its grammatical relations within a specific scene. As such, the dendrograms show the following relationship: subject – verb – [object/subject] – verb – object. By searching for a focal term (nouns in their lemmatised form) in the [object/subject] position, we can see how this agent acts and is acted upon. These dendrograms enable us to juxtaposition ratios across scenes, thereby potentially revealing differences between the ratios that characterize each topic. The number of ratios that could be examined are endless; with more space, we might explore each agent that is prominent in distinct scenes, such as ‘student’ in Admissions, ‘indicator’ in Methodology, and ‘government’ in Funding, or to compare the usage of ‘university’ versus ‘institution’ (Table 3). In the following, however, we focus primarily on ‘university’ and ‘ranking’ to understand how these agents change depending on the scene in which they are embedded.

Table 3. Top 20 agents by scene, in order of frequency. Agents were found by extracting terms that are grammatical subjects; we removed pronouns and determiners in this list for clarity. The numbers underneath the scene indicate the unique number of actors to the total frequency of actors ratio, both normalized by total word-count in the scene. The higher the number, the fewer unique actors in the scene. Agents of interest are coloured to facilitate comparison between scenes (nations are coloured as a group in blue).

<i>Landscape</i>			<i>Activities</i>				<i>Extraneous Forces</i>					<i>Reflections</i>			
Commentary (19:100)	Emerging Economies (24:100)	United Kingdom (24:100)	Europe (24:100)	Asia (20:100)	Communications (26:100)	Sustainability (29:100)	Admissions (20:100)	Leadership (18:100)	Workplace (22:100)	Politics (30:100)	Funding (19:100)	Assessment Frameworks (17:100)	Existence (22:100)	Methodology (14:100)	Opinion & Humour (32:100)
university	university	university	university	university	university	university	student	university	university	university	university	university	student	indicator	university
institution	institution	institution	student	student	student	institution	university	student	academic	student	student	institution	university	institution	student
US	student	student	institution	institution	institution	student	institution	institution	staff	institution	government	student	academic	university	people
UK	country	number	UK	china	people	people	college	ranking	institution	government	institution	academic	people	category	one
table	government	table	government	governme nt	academic	research	people	government	woman	academic	fee	result	institution	datum	academic
ranking	number	group	country	country	ranking	academic	per_cent	people	per_cent	people	education	council	one	income	institution
student	china	figure	system	number	journal	per_cent	government	education	salary	one	report	department	government	ranking	many
country	ranking	staff	academic	india	one	one	report	country	figure	report	system	report	many	score	thing
harvard	academic	oxford	people	education	school	researcher	number	research	student	many	people	system	research	citation	per_cent
institute	many	government	researcher	japan	brand	work	school	academic	people	number	UK	ranking	education	survey	school
china	per_cent	result	number	ranking	course	science	education	one	chancellor	college	number	research	number	reuters	study
one	system	people	one	academic	education	staff	system	many	survey	per_cent	cost	one	per_cent	point	education
datum	people	academic	funding	system	research	institute	graduate	number	pay	party	sector	number	system	weighting	chancellor
people	education	cambridge	per_cent	people	system	many	study	programme	one	education	academic	panel	work	measure	college
berkeley	russia	chancellor	reform	many	reputation	scientist	result	system	report	staff	many	government	thing	research	work
number	nation	college	education	report	publisher	project	course	model	lecturer	member	research	group	result	proportion	number
result	brazil	many	many	per_cent	branding	UK	one	challenge	professor	council	funding	staff	league table	academic	staff
london	one	scotland	ranking	one	number	ranking	figure	per_cent	leader	chancellor	one	study	ranking	per_cent	life
nation	researcher	merger	brexit	marginso n	result	study	many	strategy	member	union	figure	datum	study	table	parent
academic	report	research	report	altbach	website	government	research	change	many	system	chancellor	league table	problem	rankings	child

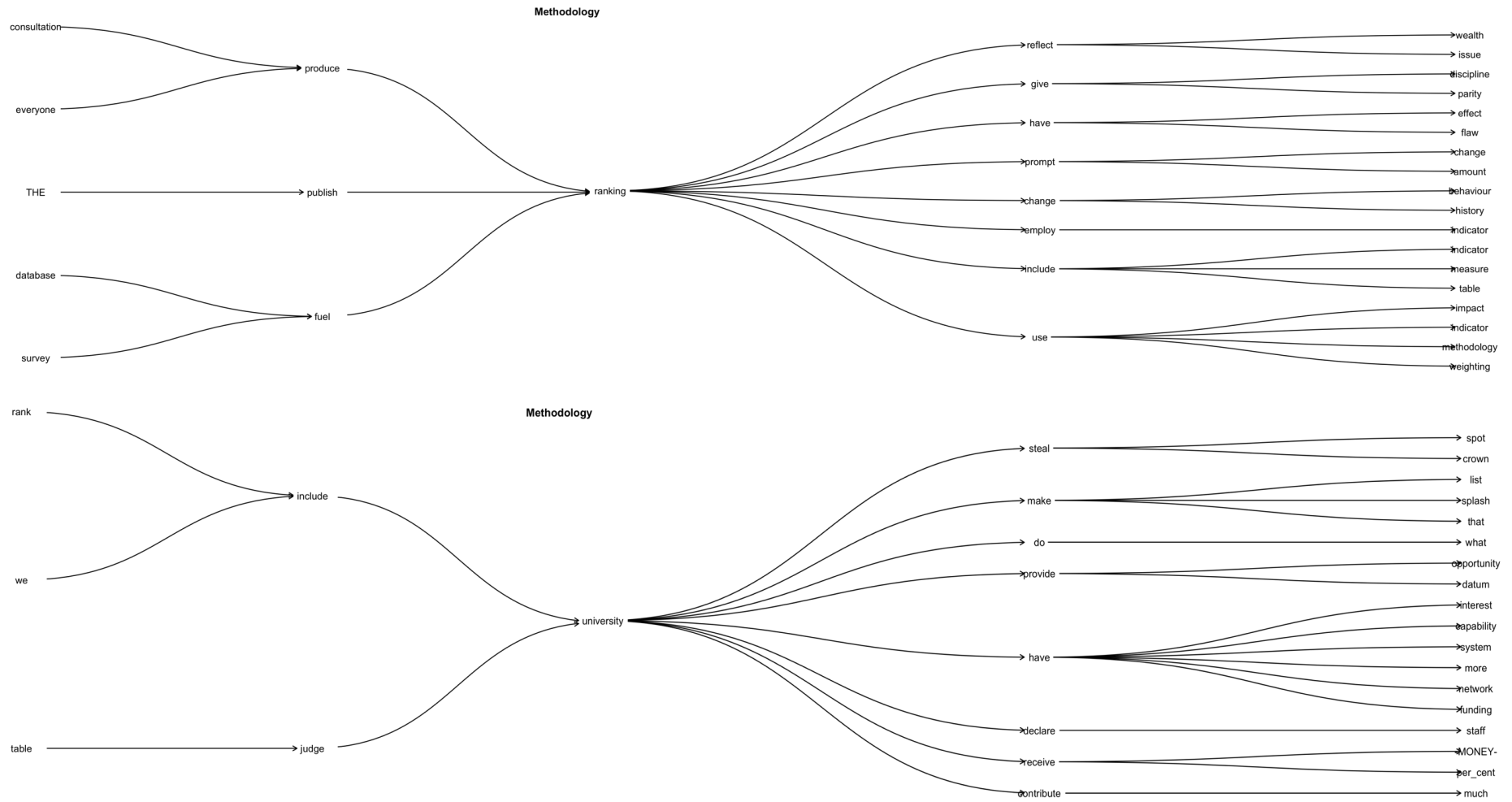


Figure 2. Dendrograms showing subject-verb-object triplets for the focal agent 'ranking (top) and 'university' (bottom) within the Methodology scene. To reduce the number of terms included in the graphs, all verbs have a frequency of $n \geq 2$.

The Methodology scene, for example, provides insight into how *THE* constructed rhetorical relationships between universities and its rankings and, by extension, between universities and *THE* itself. Using ‘ranking’ as the focal lemma, the top dendrogram in shows what rankings do in the Methodology scene, as well as the acts that agents perform to or with rankings. Unsurprisingly, the rankings are active agents that ‘reflect... wealth / issue,’ ‘give... discipline / parity,’ ‘have... effect / flaw,’ ‘prompt... change / amount,’ ‘change... behaviour / history,’ ‘employ... indicator,’ ‘include... indicator / measure / table,’ and ‘use... impact / indicator / methodology / weighting.’ These are the acts of an objective agent that preoccupies itself with issues of measurement. Noticeably, the objects being measured are absent: universities and institutions feature only indirectly, as part of a whole (e.g., ‘history’), or as one of its parts (e.g., ‘discipline,’ ‘wealth,’ ‘behaviour’).

Rankings are, therefore, first constructed as measurement devices, rather than as a socio-political technology with real impact on universities. We know from the academic literature that rankings indeed ‘act’ on universities, but this is backgrounded here because the scene privileges the formation of the ranking itself. Using ‘university’ as the focal term (bottom dendrogram in) shows that only three types of agent (‘rank,’ ‘we,’ and ‘table’) act on universities by ‘including’ or ‘judging’ them. By contrast, universities are themselves busy, engaging in a variety of distinct agent-acts. Some of these construct universities as active participants in the production of the rankings (universities ‘provide... datum,’ ‘declare... staff,’ ‘have... funding / capability / system / standing / staff / network’), whilst others refer to their performance therein (universities ‘steal... spot / crown’ and ‘make... list / splash’).⁸

⁸ Note that these verb-object combinations need to be interpreted with care. For example, ‘contribute ... much’ comes from the sentence, “[t]he citations help to show us how much each university is contributing to the sum of human knowledge...” While in this example, the university is an agent doing something in the service of the rankings; the interpretation is not that they ‘contribute much.’ Likewise, the dendrograms filter out any negations, which means that the subject/object verb combinations need to be regarded only for their semantic content.

This backgrounding and foregrounding is also visible when looking at the agents that act upon the rankings: ‘consultation / everyone... produce’ rankings, ‘database / survey... fuel’ rankings, whilst ‘*THE*... publish’ the rankings. Two distinct activities are articulated here: the production and the publication of the rankings. Publishing is a congruous act for newspapers because they disseminate newsworthy events, but by emphasizing its role as a publisher, *THE* distances itself from production of the rankings, which is left to instruments (‘database,’ ‘survey’) or outside actors (e.g., ‘consultation,’ ‘everyone’). This rhetorical logic is well-illustrated in an online article⁹ that celebrates an audit commissioned by *THE* and conducted by PricewaterhouseCoopers (PwC):

In a move unprecedented in the global university rankings field, *THE* subjected its methodological description, its data capture and handling process and its rankings calculations to a PwC audit. This week, PwC confirmed that the audit for the forthcoming World University Rankings 2016-2017 had been completed successfully (Baty, “THE World University Rankings 2016-2017 passes independent audit”, 5 September 2016).

The PwC audit allows *THE* to claim objectivity and robustness in their rankings and disperses responsibility for their creation. This opens the way for *THE* journalists to construct other scenes where rankings can be discussed as if they were surprising events that *THE* has little control over, because the ranking has been detached from its circumstances of production.

As a result, *THE* can position itself as the ‘great business partner’ (Shahjahan et al. 2020) that helps institutions navigate a vertiginous landscape. In the Commentary scene, rankings are ‘offering... snapshots,’ ‘confirming... standing / status,’ and ‘fostering... growth / benefits’ (Figure 3)—they offer use value to the sector by cataloguing its merits. The universities themselves spring to life (Figure 5): they ‘overtake / beat’ each other, and ‘rise,’ ‘drop,’ ‘reach,’ ‘leap,’ ‘exit,’ ‘jump,’ ‘climb,’ or ‘top,’ in rank. The scene reads as a type of spectacle, putting forward a limited set of potentials that are made

⁹ This article is not part of the corpus. *THE* derives content from its print publications for dissemination on their digital platforms only. The audit is announced in the concomitant print article that describes that year’s methodology, and is given its own piece, from which we quote, in the online magazine.

manifest in the agents and their acts (Burke 1969): some universities ‘lead’ and others ‘slip’ in a metaphoric race. This is a scene where challenges must be overcome (‘universities... face... cuts / challenges / decline / problem / stress / criticism’), and improvements are rewarded with a rise in the hierarchy. Though with less frequency, universities are also acted upon or with, which positions them as co-agents: ‘evaluators... rank’ them, ‘rankings... showcase’ them, ‘casualties... include’ them, and ‘Harvard... beats’ them.

Leadership, an increasingly prominent scene, equally benefits from the dispersive legwork done through the Methodology scene. Leadership is primarily concerned with revealing what ‘successful’ universities do in order to rise or keep their position in the rankings, and *THE* puts its extensive networks in the upper echelons of university management (Lim 2018; Shahjahan et al. 2020) to work here. Rhetorically, this scene (Figure 4) does two things: First, it shows how agents such as ‘I’ (i.e., a university leader who was invited to write a piece about their institution) celebrate *THE* by ‘applauding,’ and ‘congratulating’ it. Second, *THE* positions itself as an assertive voice in the scene that ‘demonstrates... commitment,’ ‘gains... respect,’ ‘refines... mission,’ ‘asks... question / leader,’ ‘has... say / pedigree,’ ‘holds... conference / summit.’ Universities in this scene no longer move up and down vertical space, but are characterized instead by the sorts of activity that they and *THE* believe contribute to their success: they ‘give... education / lecture / money / comfort / employer / parents,’ they ‘receive... funding / freedom / support / application,’ they ‘offer... approach / program / inducement,’ they provide... ‘service / leadership,’ and they ‘make ... impact / progress / change / contribution / effort’ (). Because it only includes universities that are deemed worthy, this scene has room for a richer description of the higher ranks in the ordinal landscape, as “tools for scoring and ranking [...] are repeatedly used to produce nominal classifications associated with judgements of essential worth” (Fourcade and Healy 2017a, 286). The scene cements what ‘top’ institutions supposedly are, do, and how they feel about *THE*.

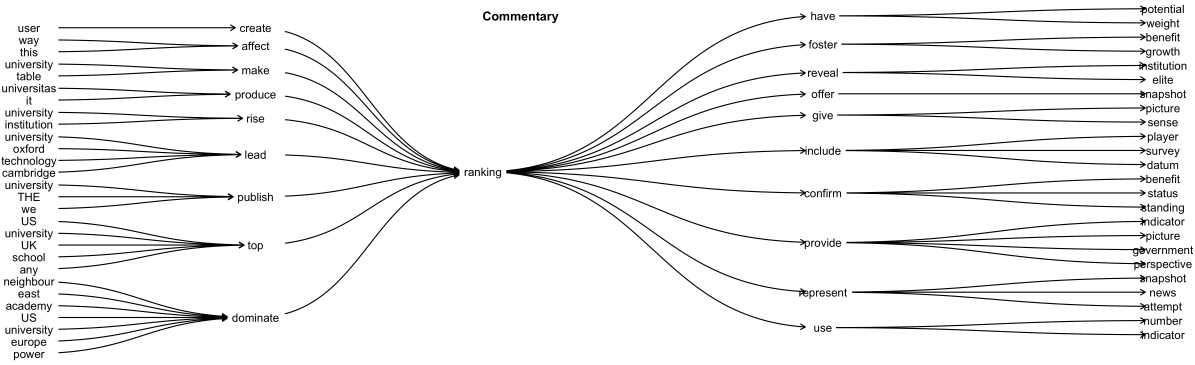


Figure 3. Dendrogram for Commentary with 'ranking' as focal agent (both lhs $n \geq 2$, rhs $n \geq 2$).

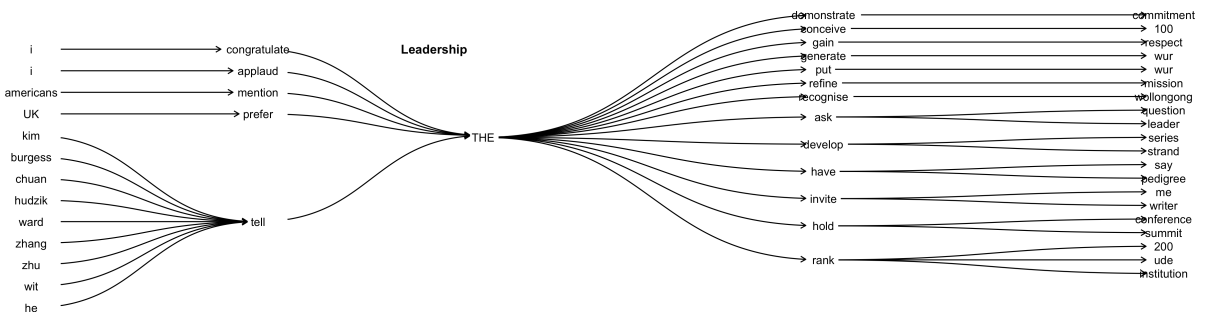


Figure 4. Dendrogram for Leadership with 'THE' as focal agent (both lhs $n \geq 1$, rhs $n \geq 1$).

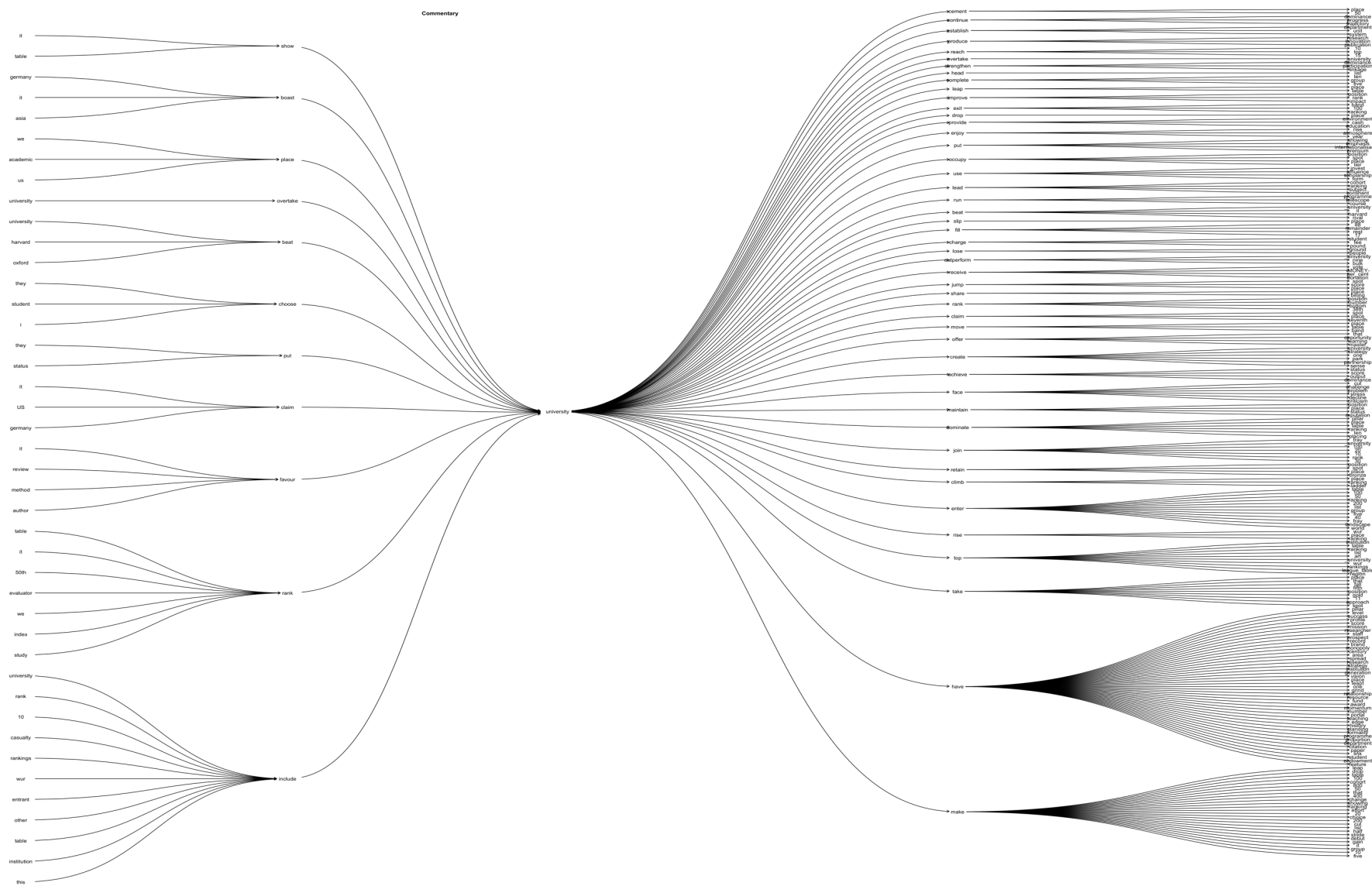


Figure 5. Dendrogram for Commentary with 'university' as focal agent (lhs $n \geq 3$, rhs $n \geq 3$).

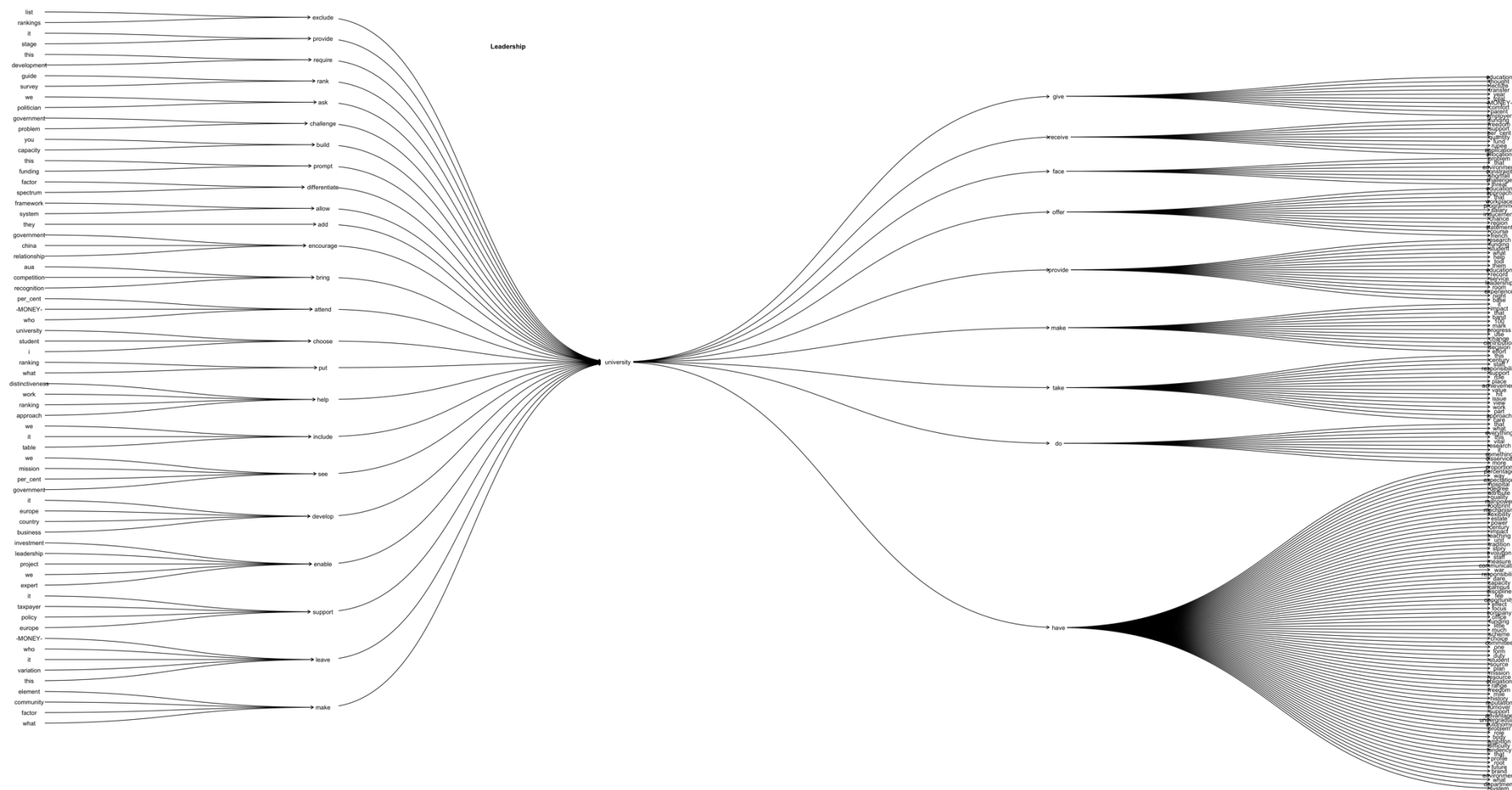


Figure 6. Dendrogram for Leadership with 'university' as focal agent (lhs n >= 2, rhs n >= 10).

DISCUSSION

As previously indicated in the literature, rankers such as THE keep a hierarchical higher education order alive and relevant by continuously circulating ‘updated’ rankings results (Brankovic et al. 2018; Ringel et al. 2020), developing new rankings (Times Higher Education 2020c, 2020a, 2020d, 2020b), organizing events that bring together the ‘top’ universities (Lim 2018), and profusely reporting on these activities in specialized outlets. Yet THE’s evolution from newspaper supplement to data company, a shift that has not been fully examined to date, resulted from a commercially astute re-interpretation of the higher education sector that has generated a new and ambiguous relationship between the newsmaker and its readers. By viewing rankings coverage as a repository of rhetoric, we explore how *THE* engaged with this ambiguity strategically:

Although the ambiguity of meaning and substance creates potentialities for division, it also provides for identifications among multiple meanings and realities. In this sense, rhetoric is the advocacy of realities; it is partisan, as it seeks to decide among the paradoxes of substance and definition (McClure and Cabral 2009, 76).

Our goal is to show how the computational hermeneutic application of Burke’s dramatic pentad can discern the rhetorical patterns and ruptures that characterize such shifts. We allow insights from computational analyses to guide us between scales of description (Underwood 2019): rhetorical features crystallize both at the level of the text, and at the level of discourse that is constructed over time. The back-and-forth between these scales thus aims to reinstate the richness of “deep hermeneutic reading” in a method that risks casting meaningful linguistic features as “noise” (Mohr et al. 2020, 152). From the outset, we also contend that this analysis is only possible with a deep knowledge of the historical, extratextual context outlined above. We postulate that the transcendent purpose of *THE*’s rankings journalism is to develop, sustain, and nurture THE’s survival in a competitive landscape—the question we pose is how.

LDA topic modelling suggests that *THE*’s coverage of the rankings can be captured in 16 scenes, which fall into four themes: the creation of a Landscape; the Activities that universities perform to compete in this landscape; Extraneous Forces that act on them; and Reflections on their existence. From 1994 to 2004, scenes such as Admissions, Assessment Frameworks, Politics, and United

Kingdom figured strongly. Collectively, these scenes draw a picture that focuses on the British higher education system and its internal dynamics. This changes with the launch of the *World University Rankings* in 2004, when the Commentary scene emerges alongside a gradual increase in Landscape scenes. Following its split from data partner Quacquarelli Symonds in 2009, the Methodology scene becomes more prominent, coinciding with *THE* revising and strengthening its rankings' methodological underpinnings to counter intensifying criticism (Baty 2013). As the then-rankings editor put it in December 2014: "...if the Vice Chancellor or President rings *Times Higher Education* telling you that your ranking's silly, we have a credibility problem because we need them to trust us and see what we do is responsible" (Baty quoted in Lim 2018, 421). The Methodology scene, with its narrow and specialist cast of agents that produce the rankings, is key to making the Commentary scene possible: the rankings are positioned as the product of continually reconsidered and therefore trustworthy metrics, thus dispersing responsibility for their creation, and legitimizing THE's role as an impartial reporter.

The Commentary scene casts universities in a metaphoric race, in which the scene-act ratio is "strictly observed" (i.e., the scene contains its agents and acts): a 'world-class' ranking contains 'world-class' institutions "as its dialectic counterpart" (Burke 1969, 8). While such commentary makes for entertaining reading, it can also cause a loss of direction and proportion in the sector. Robertson, for example, notes how the blending of sector facts and rankings imaginaries recalibrate optical sense-making concepts (vision, visibility, volume, verticality), thereby causing vertigo among universities. It effectively 'V-Charges' "the remaking of higher education as a global enterprise" (2019b, 2). We confirm this notion of verticality empirically by showing how it slips into the language used to discuss universities. Further research might consider exploring the other Vs by deploying purpose-trained named entity recognition to disambiguate university agents and map their activities according to geographic locality.

Orchestrating a spectacle is a well-trodden strategy for specialist publications looking to sell more issues, as was the case, for example, when the French sports paper *L'Auto* inaugurated the famous Tour de France cycling race in 1903 (Wille 2003). Much like a cycling race, 'competitive' universities rise, fall, stagnate, and stabilize in a global landscape. The drama that unfolds is one in which the entire higher education landscape is conditioned against the backdrop of the rankings, mixing fact with the

fictional scaffolding that bring the rankings to life. The proclamation that “we are proud to bring you our most comprehensive, inclusive and insightful *World University Rankings* to date” (Baty, “Our most inclusive World University Rankings yet”, 30 September 2015), thus rhymes with *L’Auto*’s self-congratulatory claim that the Tour de France was “the most grandiose competition there has ever been” (*L’Auto*, 1903 cited in Thompson 2006, 22), because both rhetors legitimated their respective spectacles and transformed their sectors. Knowing that the Tour de France has outlived *L’Auto* and witnessing the increasing influence of rankings, we might conceptualize turning points when the spectacle ceases to service the publication, and the publication begins to work in the service of the spectacle.

The re-evaluation of *THE*’s methodology allowed for a proliferation of rankings from 2013 onwards, and the proportion of *THE* coverage dedicated to rankings more than doubled between each period. Landscape scenes such as Emerging Economies (tracking the launch of the *Emerging Economies* and *Young* rankings¹⁰), and Activities scenes such as Sustainability (tracking the launch of the *Impact* rankings) become more prevalent. Leadership, which emerged together with the *World University Rankings*, noticeably intensifies, indicating an increase in content that focuses on explaining the managerial and strategic visions of ‘successful’ institutions. Our analysis also shows how *THE* positions itself as a decisive actor in this space, and ‘top’ universities praise their leadership. This type of rhetoric reinforces the market for *THE*’s consultancy services. These scenes should, therefore, be contextualized in *THE*’s shift from relying on subscription and advertising revenues, to developing rankings and derivative services as products in their own right.

In conclusion, while ample research has focused on the effects that rankings have on the higher education sector, the business impetus that fuels their production remains under-researched. We begin to show how *THE*’s existing expertise was leveraged to scope out new revenue streams for the company. Unlike its competitors, *THE* provides an ideal historical case study because it was already a purveyor

¹⁰ Recall that these rankings have been renamed over time. The *Emerging Economies University Rankings* started life as the *BRICS and Emerging Economies Rankings*, and *Young Universities* was once called the *150 under 50* rankings.

of higher education information via its news coverage. As it moved towards developing rankings and subsequently reporting on them, their coverage articulated ways in which rankings are constructed as legitimate agents. The rhetorical strategies that we discern thus provide further insight into why these “nonsense” (Ashwin 2020, 47), potentially “silly” (Baty quoted in Lim 2018, 421), and mundane (Brankovic 2021) devices are so successful. A good drama does not need to be a true drama, but only to be sufficiently believable (e.g., discharging some epistemic doubt to the Methodology scene) for its effects to take hold. The dramatic appeal of newsworthiness, which is achieved through spectacularization, might be as key to the mundanity of the rankings (Brankovic 2021), as their purported truthfulness.

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