

What do academic metrics do to political scientists? Theorizing their roots, locating their effects

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Abstract

This article argues that it is pertinent to situate academic metrics (journal, institutions and individual scholars' rankings and ratings) within the broader logic of neoliberal government, in order to better identify and understand the impact of these metrics on political scientists' perceptions, behaviours and identities. The results of a pilot survey conducted among political scientists in the United Kingdom and Belgium are used in order to further expose this impact. More precisely, we claim that although metrics are widely seen as a core element of a broader and undesirable political agenda, their repeated use leads to their endorsement, shapes and standardizes individual strategies, and shifts the codes of academic identity to the point of eroding academics' sense of purpose and permeating their judgements about colleagues.

Keywords

academic rankings, behaviours, identity, metrics, perceptions, political science

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Numbers are today's preeminent public language – and those who speak it rule.

Blastland and Dilnot (2009: x)

The measures seemed, at first rather harmless, but, like cuckoos in a nest, they have grown into monsters that threaten science itself.

Lawrence (2007: 583)

This article discusses the impact of academic metrics on scholars' perceptions, behaviours, and identities. It does so by using the literature on social quantification to reflect on the results of a pilot survey on academic metrics conducted on political scientists working

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in two very different managerial environments – the French-speaking community in Belgium where quantification is almost nonexistent, and the United Kingdom where it is ubiquitous.¹ By locating academic metrics within neoliberal logic, we are able to expose and critically assess their most important working dynamics and impacts: first, they *standardize academic perceptions and behaviours* (paradoxically producing specific forms of deviance), and, second, they *erode traditional academic identities*.

Three recent developments prompted this study. The first development is the ongoing discussion about the establishment of a metrics-based evaluation of teaching quality in UK higher education – the ‘Teaching Excellence Framework’ or TEF. As this project is gaining impetus despite heavy criticisms, it is important to have a clear idea of what metrics would do to teaching – arguably the last aspect of academic work that lacks strong metrics in the United Kingdom. The second development is more ethical in character. Two years ago, Imperial College professor Stefan Grimm committed suicide shortly after having received an email containing these words (our emphasis): ‘I am of the opinion that *you are struggling to fulfil the metrics* of a Professorial post at Imperial College [...] and must now start to give serious consideration as to whether you are performing at the expected level’. Much of the heated debate that ensued has focused on the issue of metrics, either as a direct factor in producing an unbearable and indeed deadly environment² or more indirectly as a dangerous tool able to create such an environment when misused by university management. However, these discussions fail to fundamentally alter the way metrics are routinely designed and used today in academia. A better understanding of how they work and why they can in some cases lead to tragic situations is important to discern. The third and final development is the emergence of a timid, yet increasing significant, reaction against simplistic academic metrics. Several initiatives have appeared, from the San Francisco Declaration on Research Assessment (DORA) calling for more accurate measurement tools instead of generic metrics like the impact factor or H-index,³ to the establishment of a Bad Metric Prize ‘to the most egregious example of an inappropriate use of quantitative indicators in research management’,⁴ and more importantly the decision of the Australian Research Council (ARC) to abandon journals ranking in its Excellence in Research for Australia (ERA).⁵ It is worth evaluating whether this trend is a positive move or whether it misses its target.

Academic metrics are no longer an epiphenomenon. They deserve a theoretically and empirically informed analysis. Studies on specific aspects of academic metrics do exist and have already provided a solid basis for discussion, but they tend to only explore very particular aspects and tend to lack theoretical depth. The present article provides a first attempt at correcting these shortcomings by examining the dynamics that underpin academic metrics. The central contention is that these need to be understood as a core component of the expansion of neoliberal logics to the academic sphere (e.g. Molesworth et al., 2010; Slaughter and Rhoades, 2004; Teixeira and Dill, 2011). It is thus to the literature on the neoliberalizing of higher education that we aim to contribute. More particularly, our paper documents and provides a grounded reading of the ‘marketization’ of the higher education system (e.g. Foskett, 2010) – a trend exemplified in the United Kingdom by documents and policies like the 2011 *White Paper on Higher Education, Students at the Heart of the System* (which among other things advocated for a stronger role for the private sector in UK academia and called for a strengthening and expansion of regulatory frameworks). It is the ‘consumer-based’ managerial narrative found in these documents whose effects informed the TEF project noted above.

We proceed in two steps. First, we briefly explore the rise of the numbers-led governance that drove the expansion of neoliberal ‘governmentality’ – a term from philosopher Michel Foucault that encapsulates the specific ways through which today’s government works. We also situate metrics at the core of the capitalist logic, drawing on Gilles Deleuze’s work on control. This framework allows us to highlight two key effects – or working dynamics – of metrics: they *standardize perceptions and behaviours*, and they *re-shape identities*. The presence of these two effects in academia, and more particularly political science, is then systematically analysed and discussed in the second part of the paper, which builds on the results of a pilot survey of political scientists working in French-speaking Belgium and the United Kingdom (more specifically a Russell Group University),⁶ by incorporating literature on academic rankings and on the ‘marketization’ of higher education more generally

Liberalism and the politics of numbers

Our central contention is that one needs to situate academic metrics within the wider trend of numbers-led neoliberal governance. Academic metrics are only one instance of much broader dynamics that are inherent to the rise of the liberal style of governance as exposed by Foucault and the expansion of the capitalist logic as theorized by Deleuze.

Scholars like Hacking (1982), Rose (1991), and Desrosières (1998) have documented the development throughout the 20th century of an ever-expanding web of state-run statistics on both the general population and specific sub-groups (e.g. criminals). The ambition of this literature was to further document and theorize Michel Foucault’s claim that statistics play a central role in the way power works in advanced liberal societies (e.g. Foucault, 2004: 104, 280). He argued that public policies today heavily depend on the quantification of reality in order to establish standards of normalcy and deviance that allow minimal intervention (an ‘economy of power’ as defined in Foucault, 2001a) instead of a costly general surveillance of the population (as in authoritarian regimes). Liberal societies establish a statistical norm defining the range of authorized behaviours in each area (e.g. drinking, eating, sex, and health) so state power can concentrate on outside-the-norm ‘deviant’ behaviours. When advertised by the government or associated organizations, these social norms become more powerful than coercive laws as they end up being internalized as morally desirable by citizens (Berns, 2009: 81). In this regard, the art of today’s government has been called by Foucault (2001b) ‘governmentality’, to highlight that liberal societies are governed through an extensive set of norms, most of them dependent on a large body of quantitative knowledge about the population, to infuse mentalities, shape behaviour and establish the limits of tolerable deviance (Dean, 1999; Laborier and Lascoumes, 2005: 43). Numbers are thus today’s most prominent ‘technique of power’, ‘integral to the problematizations that shape what is to be governed, and to the unrelenting evaluation of the performance of government that characterizes modern political culture’ (Rose, 1991: 675). Government is done ‘at a distance’, ‘as if governing agencies only cared about collecting data that is already there [...] but in fact implement a multiplicity of control systems resting on classifications and quantitative evaluations’ (Berns, 2009: 7–9). Consequently, norm-based policies have as major consequence the standardization of perceptions and behaviours. Subjects conform not only to elude coercive action but also to avoid being seen and blamed by others as deviants. They embrace standards in an attempt to live up to the exigencies of ‘normalcy’ that are supposed to characterize an ethical and responsible subject (Burchell, 1996). Even standards

that were once seen as constraints develop into ‘practice standards’ (Timmermans and Epstein, 2010). Thus, top-down social regulations become invisible, undisputed, and unchallenged, creating routines and unreflective habits.

In an intense dialogue with Foucault,⁷ Gilles Deleuze further theorized the use of numbers in contemporary dynamics of power. He claimed that more than tools to establish social norms, numbers perform a much deeper value-giving function that lies at the heart of capitalism, which ought to be understood not only a form of economy but more fundamentally as a system of perceptions and power. One of the many theses put forward in his book *Capitalism and Schizophrenia 2: A Thousand Plateaus* (Deleuze and Guattari, 1980), but also in his later volume *Pourparlers* (Deleuze, 2003) is that capitalist societies destroy old-fashioned moral classifications, replacing them by a universal quantitative ‘axiomatic’ – that of value.⁸ As Baele (2014: 212–214) sums up, capitalist societies

are characterised by a disappearance of traditional classifications, called ‘codes’. Respectable clear-cut categories that used to structure pre-capitalist traditional societies by rigorously implementing constraining rules (on marriage, social behaviours, in-group hierarchies, and the like) and by distributing fixed roles have lost their importance with the emergence and expansion of capitalism. [...] In sum, capitalist societies re-code ancient problems, dissolve traditional categories together with their normative charge. [...] New categorisations are made according to a single, simple quantitative principle and not according to qualitative codes inherited from complex and deeply entrenched social traditions. [...] Quality is replaced by quantity. (Baele, 2014: 212–214)

Therefore, capitalist societies impose ‘a law of general equivalence in the form of monetary value’ (Roffe, 2005: 35–36) which works ‘by purely quantitative calculation, dispensing with meaning systems of coding or overcoding’ (Bonta and Protevi, 2006: 66). In all sectors, traditional values and organizations are contested on the basis of their ‘subjective’ or ‘irrational’ character and replaced by ‘objective’ or ‘rational’, ‘evidence-based’ quantitative criteria that ‘are supposed to be generated by a processing of numbers independent from passions and opinions, that is, based on scientific procedures that are seen as warranting objectivity and dissolving idiosyncrasies’ (Molle and Mollinga 2003: 538). Complementing Foucault’s study of liberal governmentality, Deleuze’s analysis highlights a much deeper trend – the expansion of the capitalist logic of quantitative evaluation to non-strictly economic social fields. Yet even if the new categories and evaluations produced by the capitalist axiomatic look objective, value-neutral, and unquestionable, they are of course never effectively so for they consistently favour the winners of the global market and make it impossible to the losers to play the game.⁹ In this context, ‘critics, if they want to be heard, are forced to play the game of quantification’ (Baele, 2014: 216) or else are accused of holding irrational or ideologically biased beliefs and goals. Opponents of a given quantitative standard have seemingly no other choice than to suggest a new one and become standardizers themselves,¹⁰ and numbers become the best ‘rhetorical weapons’ (Bréant, 2012: 156; also Boswell, 2009: 89 on immigration debates).¹¹ As a consequence, community-based identities are progressively eroded; the progressive erasure of old codes of conducts based on particular groups’ values and history in favour of the expansion of the axiomatic of numbers leaves no basis for common in-group identity, thereby diminishing individuals’ sense of purpose at the same time that the new rules of competition increases their stress. This kind of social environment, Deleuze (2003: 235–246) theorizes, is a ‘society of control’, where the traditional, field-specific mechanisms of discipline shaped by the old codes are replaced by a unitary

principle of regulation: continuous quantitative monitoring and benchmarking. As Toscano (2005: 18) summarizes, the capitalist ‘axiomatic moves us from a society of discipline to a society of control’. In an increasingly expanding range of activities (education, work, leisure, etc.), individuals’ performance is measured. As Deleuze (2003: 244, our translation) puts it, ‘the language of control is made of numbers’: control is exerted through the continuous monitoring of these quantitative indicators, which creates powerful processes of subjectivation (Lazzarato, 2006: 180). Individuals not only are pressurized to perform but also internalize high performance as a moral ideal.

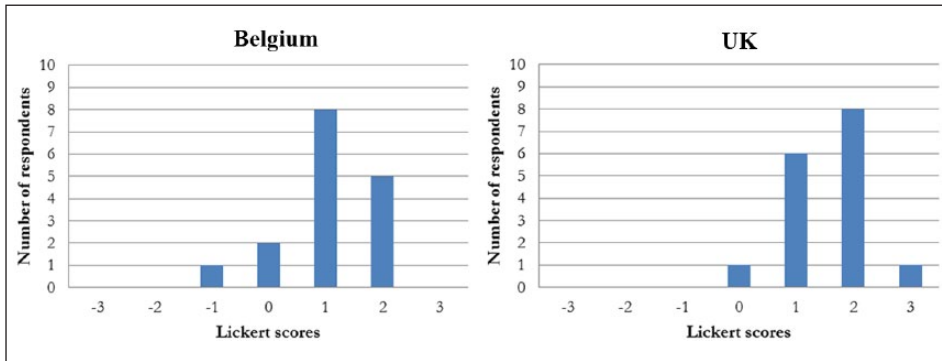
To sum up, the Foucauldian and Deleuzian approaches together highlight the fact that quantitative evaluations and classifications are not simply isolated tools that simply provide a value-neutral aid to perception. Rather, they are an essential mechanism in the working dynamics of power in liberal societies. In fields where traditional codes have been replaced by quantity-based control, they (a) *shape perceptions* by providing a norm which is quickly internalized as a moral rule, thereby standardizing perceptions and behaviours (and creating deviant practices) and (b) *erode old codes of identities and meanings* that used to structure sectors of social life, without any real possibility of resistance that does not include numbers. The prevalence of these two effects in academia in general, and political science more particularly, is analysed in the next section.¹²

The impact of metrics on academic work

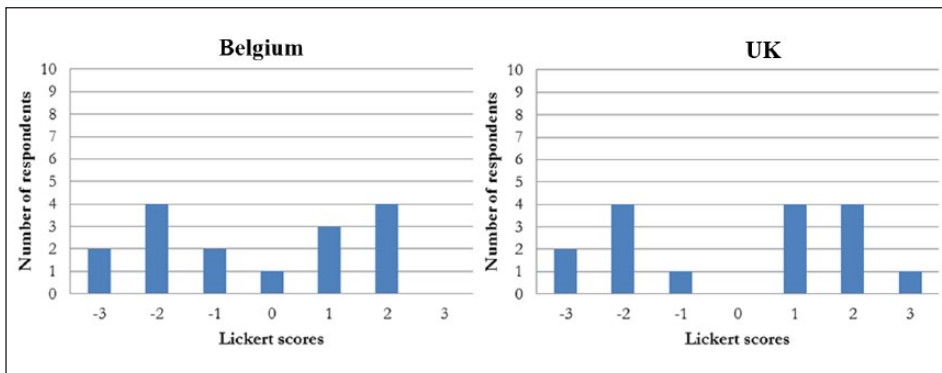
To investigate and discuss these two effects, we use information from the literature already produced on academic rankings and the ‘marketization’ of higher education and support our analysis with comparative evidence from a pilot survey which asked political scientists to reflect on the impact of metrics within their professional environment. Using Belgium as a baseline of a Western academic environment with almost zero quantification and comparing it with United Kingdom, where quantification is extremely prominent,¹³ allows us to reveal quantification’s working dynamics and its two main effects. We sent the hyperlink of an online survey with 30 Likert-scaled questions and additional open-comment boxes, to the listserv of the French-speaking association of political scientists in Belgium and to all members of a UK-based Department of Politics located in a Russel Group institution. This latter institution, where metrics occupy a central place in management, stands as an exemplar place to identify the effects of academic metrics – the formal use of measurable benchmarks by university management is more extensive and systematic than UK average, including other Russel Group universities (e.g. precise funding metrics are included in progression criteria). It is important to note that this intervention was not designed as a rigorous random-sampling survey, but rather as a pilot on which to base further, more systematic research, using a convenient sample to sketch the strongest identifiable trends. Overall, 16 political scientists working in French-speaking Belgium took the survey,¹⁴ exactly the same number as in the UK department. Their answers are provided here in a purely descriptive way; because we do not control for other factors that can potentially play a role (e.g. gender, career stage, ideological affiliation), these results should not be overgeneralized even when strong trends are clearly visible.

Standardizing perceptions and behaviours

Do metrics standardize thinking and behaviour? Both the literature and the results of our poll suggest so. A good starting point is to notice that the vast majority of scholars in



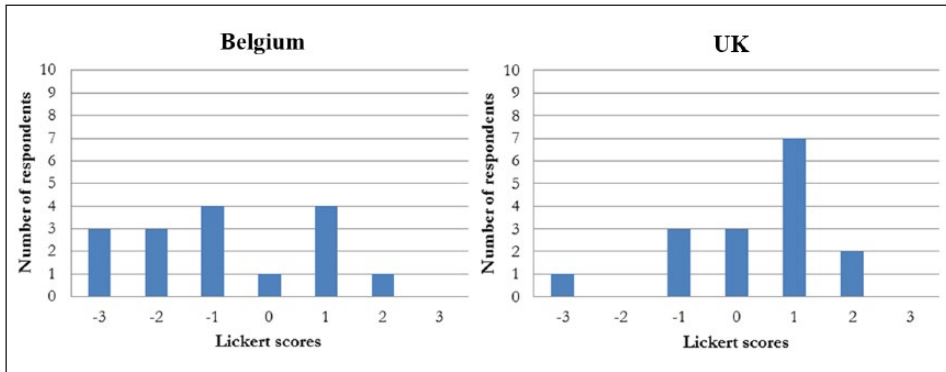
Graph 1. ‘You have a quite accurate idea of where academic journals, institutions and scholars stand in their respective rankings’. Left-hand graph Belgium, right-hand graph UK.



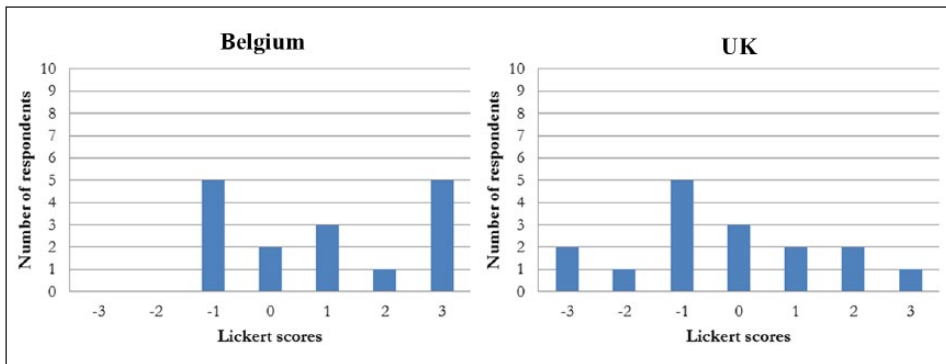
Graph 2. ‘You regularly consult ratings and rankings on various aspects of your job (e.g. journal rankings and impact factor, individual scholars’ h-index)’. Left-hand graph Belgium, right-hand graph UK.

Belgium and the United Kingdom acknowledge having a ‘quite accurate idea of where academic journals, institutions, and scholars stand in their respective rankings’ (Graph 1),¹⁵ and that the distribution of people who ‘regularly consult ratings and rankings on various aspects of their jobs’ (Graph 2) is almost identical in each environment. It therefore seems correct to claim that measurements are now ‘dominating minds’ (Lawrence, 2007: 583) even where they don’t have a direct impact.

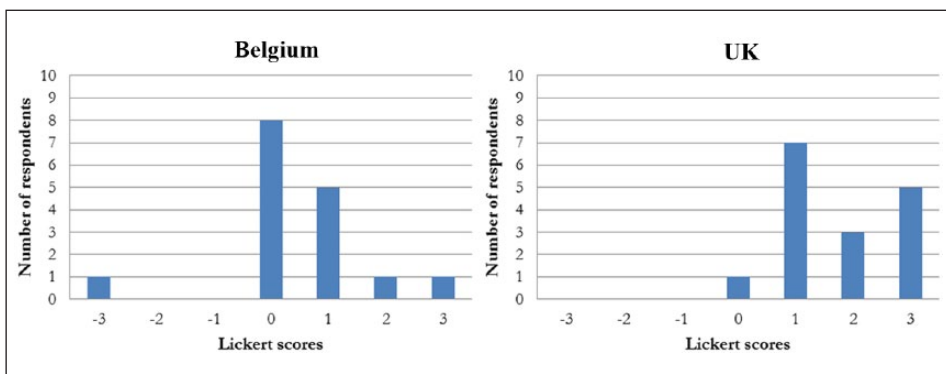
Foucault’s analysis of neoliberal governmentality and Deleuze’s reflexions on the capitalist axiomatic and societies of control suggest that the repeated use of metrics tends to make them less contested, more accepted as ‘true’ and ‘objective’. Graph 3 indeed shows that there is greater agreement in the United Kingdom that academic metrics ‘objectively reflect the reality they seek to measure’, and conversely disagreement with the idea that they are ‘bad for the field, a phenomenon that should be resisted’ (Graph 4) – although UK-based political scientists overwhelmingly agree that metrics are ‘misused’ (Graph 5) and ‘participate in, a key component of a broader political agenda’ (Graph 6). As one UK-based respondent boldly noted, this agenda ‘is to reorganise the university along the lines of a for profit firm’, which echoed a Belgian respondent’s identification of a ‘managerialization of research’ agenda. But while most UK-based



Graph 3. 'By and large, academic metrics (e.g. rankings) objectively reflect the reality they seek to measure'. Left-hand graph Belgium, right-hand graph UK.

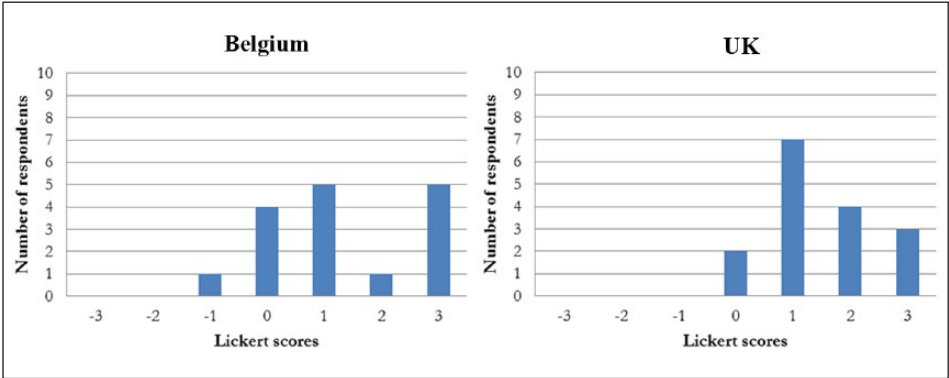


Graph 4. 'Academic metrics are bad for the field, it is a phenomenon that should be resisted'. Left-hand graph Belgium, right-hand graph UK.

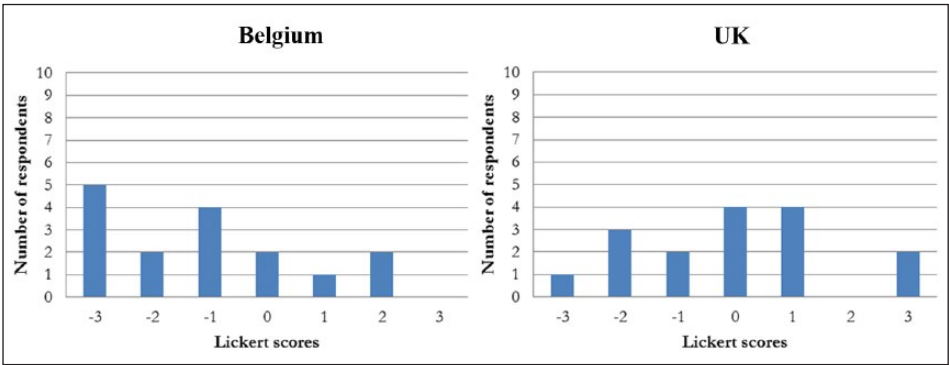


Graph 5. 'Academic metrics tend to be misunderstood and misused beyond their original, specific intent and aim'. Left-hand graph Belgium, right-hand graph UK.

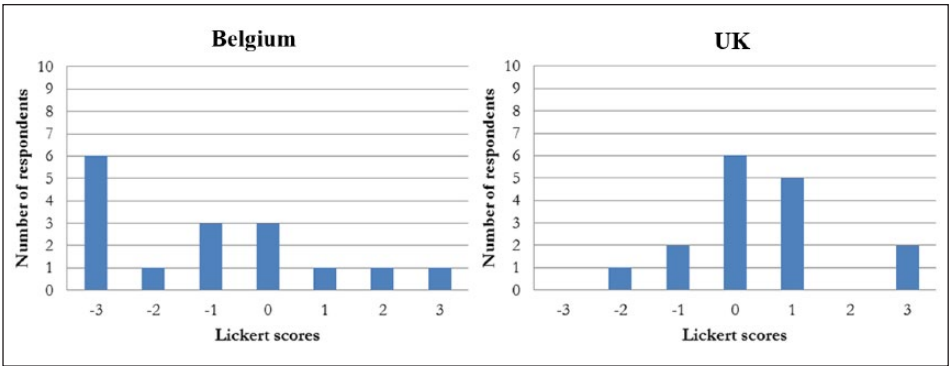
academics do not adhere to this agenda, they nonetheless tend to agree that metrics 'drive excellence' (Graph 7) and 'increase productivity and, conversely, a lack of metrics encourages laziness' (Graph 8), in stark contrast with their Belgian colleagues. This



Graph 6. ‘Academic metrics participate in, are a key component of, a broader political agenda’. Left-hand graph Belgium, right-hand graph UK.

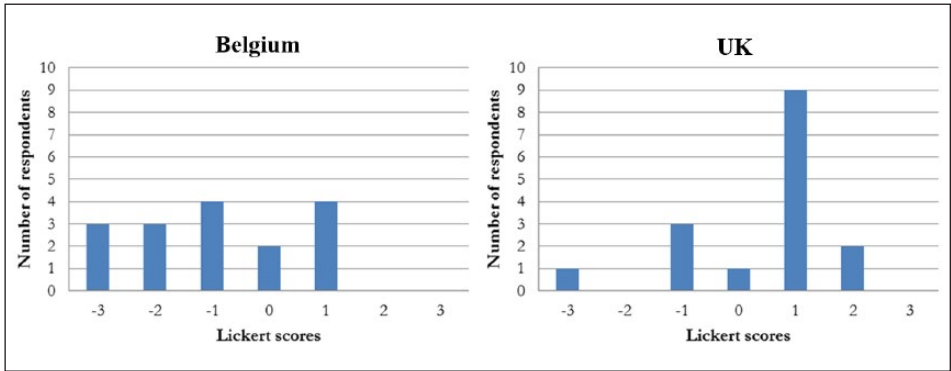


Graph 7. ‘Academic metrics drive academic excellence’. Left-hand graph Belgium, right-hand graph UK.

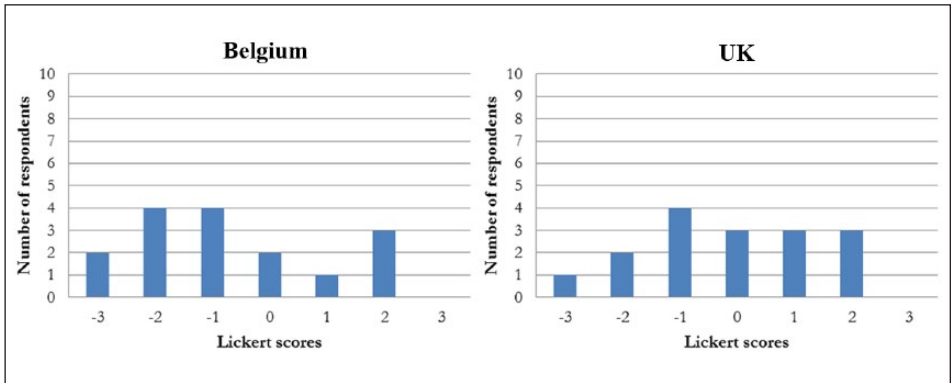


Graph 8. ‘Academic metrics increase productivity – and conversely, a lack of metrics encourages laziness’. Left-hand graph Belgium, right-hand graph UK.

difference between UK- and Belgium-based scholars on the objectivity of metrics is particularly true for Department rankings (Graph 9),¹⁶ while individual scholars rankings stand out as the only metric which is perceived in both places as not objective



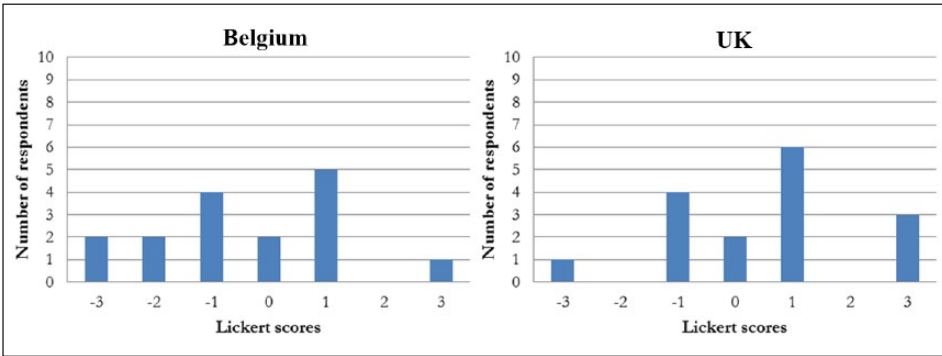
Graph 9. ‘More specifically also, universities/departments ratings and rankings objectively reflect the importance and quality of universities/departments’. Left-hand graph Belgium, right-hand graph UK.



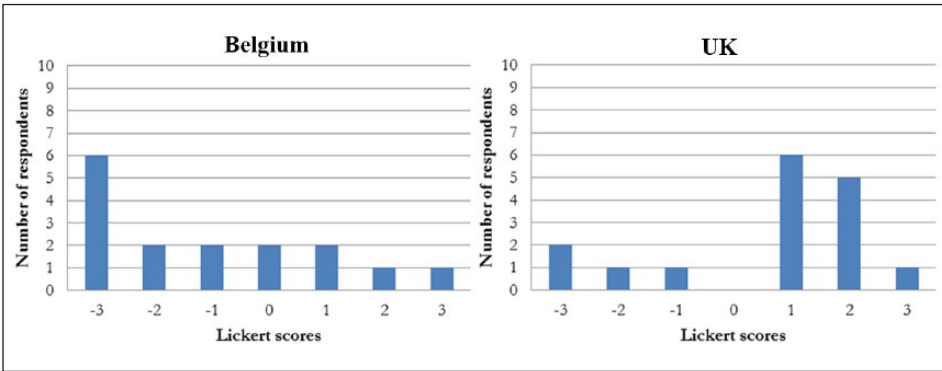
Graph 10. ‘More specifically also, individual scholars’ ratings and rankings (e.g. h-index, TRIP reputation) objectively reflect their importance and quality’. Left-hand graph Belgium, right-hand graph UK.

(Graph 10). These results illustrate Nkomo’s (2009: 106) claim that scholars who work in metrics-heavy environment ‘have all in some way or another fallen under the seductive power of academic journal rankings even as we harbour serious reservations about their value’ and shed a new light on previous surveys which all documented a strong opposition to the kind of academia structured by metrics but without investigating whether respondents would nonetheless paradoxically claim that metrics are objective, accurate and favour greater achievement (Graph 11).¹⁷

It is well known that metrics vary widely depending on how they are calculated (e.g. Chan et al., 2006; Inkpen and Beamish, 1994) and that they create, as well as freeze hierarchies that handicap disadvantaged groups because they are blind to these disadvantages (e.g. size of endowments in institutional rankings and age, family situation, or gender in individual scholars’ rankings.). However, despite this bias towards those already in an advantaged position, some academics defend the ‘objectivity’ of metrics by attacking the older practices and codes of academia as ‘subjective’ and ‘irrational’, in a fashion congruent with the theories of governmentality and societies of control exposed in our first section. As one of the UK-based respondents to our poll justifies, ‘qualitative measures like



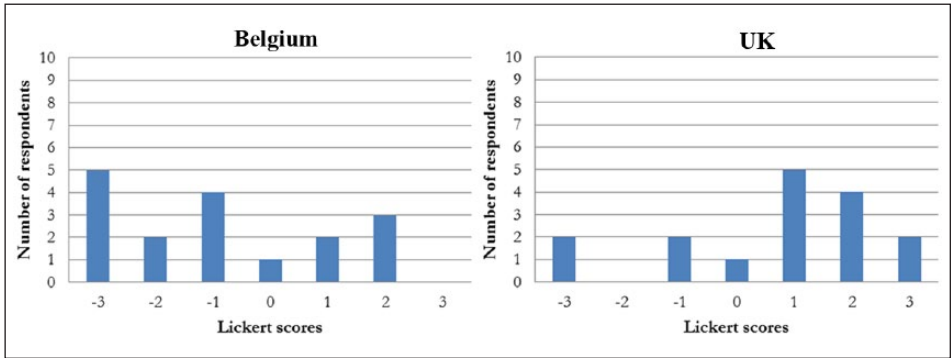
Graph 11. 'More specifically, academic journal ratings and rankings objectively reflect the importance and quality of journals'. Left-hand graph Belgium, right-hand graph UK.



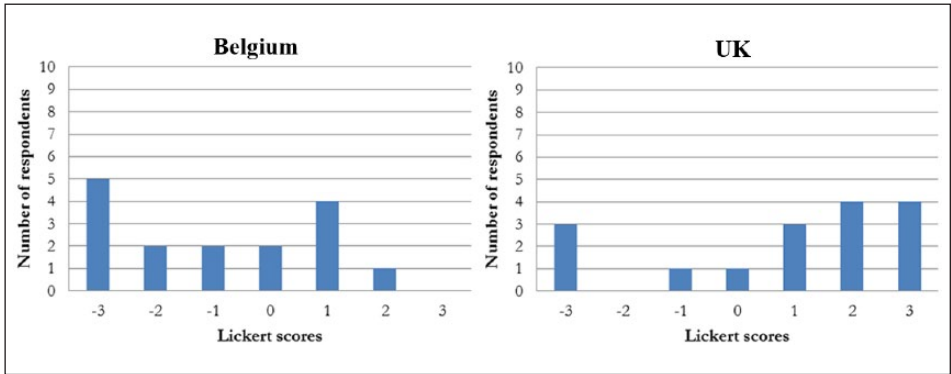
Graph 12. 'Generally speaking, your work is influenced, shaped by academic metrics'. Left-hand graph Belgium, right-hand graph UK.

peer review produce bad outcomes, e.g. the tenure system in the US can be really stressful, arbitrary and politicized', echoing the views of many respondents in a *Nature* 2010 poll who want metrics to 'break the old boys' networks' (Anon, 2010a: 861) and those who think that metrics in the ERA process 'promote transparency instead of network nepotism' (Young et al., 2011: 81). Indeed as Adler and Harzing (2009: 74) rightly explain, 'the stated reasons for creating and using such academic ranking systems usually include "fairness" in universities' hiring, promotion, and tenure decisions'.¹⁸ In sum, the intensive use of metrics in the United Kingdom in general, and the Politics Department selected here in particular, has now created a standardized perception that despite their misuse and role in highly contestable political agendas, metrics are somehow nonetheless objective and produce desirable outcomes. Just like the Foucauldian scholars cited above have observed (Baele, 2014; Molle and Mollinga, 2003), those who do not like rankings fail to imagine a non-quantitative alternative – for example, one UK-based respondent argued that 'if we deny any metrics, governments will simply create their own and use them to determine funding, etc. We need to remain involved in the selection of metrics to have some say'.

This standardization of perceptions has a clear impact on practices: many more people in the United Kingdom agree that their work 'is influenced, shaped by academic metrics' (Graph 12), both in research-related decisions (Graph 13) and in career-related decisions



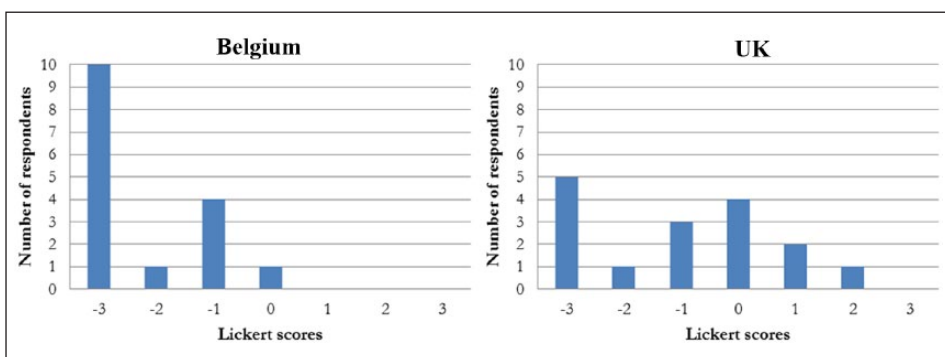
Graph 13. ‘More specifically, your research-related decisions at work strategically take metrics into account’. Left-hand graph Belgium, right-hand graph UK.



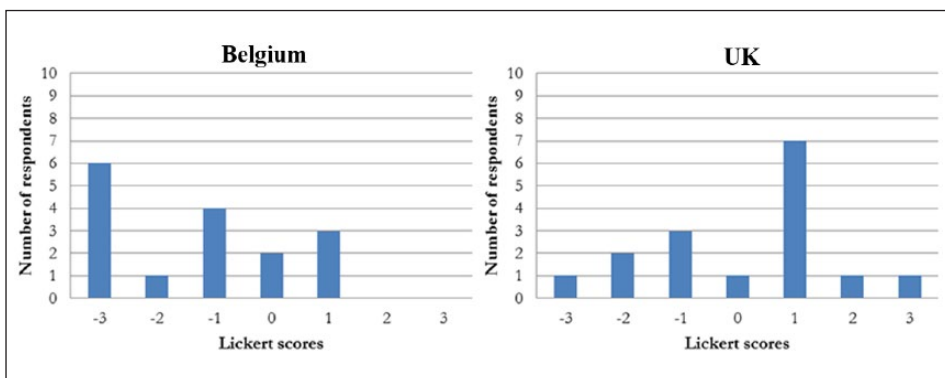
Graph 14. ‘More specifically also, your career-related decisions (e.g. promotion, choice of host institution) strategically take metrics into account’. Left-hand graph Belgium, right-hand graph UK.

(Graph 14). Clearly, academic metrics are ‘reactive measures’ (Weingart, 2005: 125). The differences with their French-speaking Belgian colleagues are striking but remarkably, teaching-related decisions (Graph 15) tend to escape this difference, certainly because there is no strong teaching-related ranking yet – something the TEF is due to ‘correct’. As a consequence, UK-based political scientists tend to work in identical ways. They are much more likely to ‘routinely implement strategies to maximize their performance as measured by particular rankings’ (Graph 16), leading to a standardization of research at three interconnected levels.

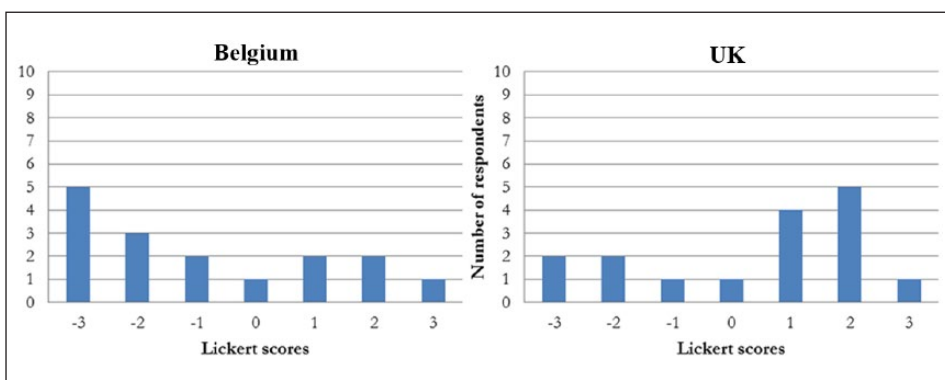
First, our poll shows that scholars in high-metrics environments are much more likely to only publish the kind of papers that ‘count’ in metrics (Graph 17). One UK-based respondent clearly admitted being ‘less willing to participate in an event if I think the organizers will then want to publish my paper in an outlet that the university would not think sufficiently prestigious’. This stands in line with previous findings. For example, Young et al.s’ (2011: 83) survey of Australian academics revealed a sharp adaptation of publication strategies after journal rankings were introduced to the ERA, with an extreme reluctance to send papers to non-A-ranked journals. *Nature*’s poll result similarly shows that more than 50% of academics changed their behaviour in accordance with relevant rankings’ designs, the same score highlighted by Harley’s (2002: 197) study of the effects



Graph 15. 'More specifically also, your teaching-related decisions at work strategically take metrics into account'. Left-hand graph Belgium, right-hand graph UK.



Graph 16. 'You routinely implement strategies to maximize your performance as measured by particular rankings'. Left-hand graph Belgium, right-hand graph UK.



Graph 17. 'You are reluctant to engage in kinds of work (e.g. particular output formats) that are not likely to be rated and ranked, or less likely to be highly rated or ranked'. Left-hand graph Belgium, right-hand graph UK.

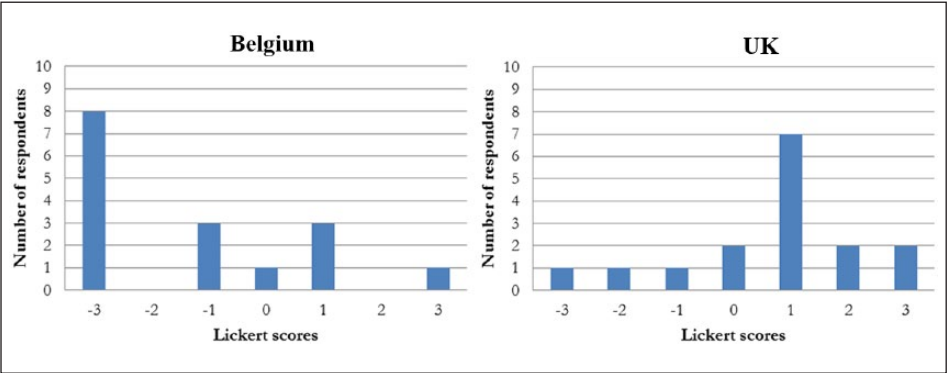
of the 1996 RAE. Nkomo (2009: 109) is therefore right when he argues that ‘scholarly ranking mechanisms may create a general state of myopia’: academics format their research according to the affinities and narrow standards of the handful top-journals of their field.

Second, this means privileging a specific kind of publication that favours strong empirical results to the detriment of critical, theory-based challenges to the mainstream. Indeed, publishing in high-impact, established journals ‘encourages conservative research that asks familiar questions using accepted methodologies rather than research addressing new, often controversial questions that are investigated using innovative methodologies’, creating a situation where ‘much academic research is rigorous but irrelevant’ (Adler and Harzing, 2009: 80). Weingart (2005: 126) concurs that scholars ‘under a regime of evaluation-based funding publish more but less risky, mainstream rather than borderline papers’, a view similar to that of de Rond and Miller (2005: 322) who claim that the ‘emphasis on productivity at the expense of innovation, generates output that may be seen as relatively incremental, lacking in significance and substance, and too often restating the obvious’. This results in a narrowing of the academic debates around standard mainstream methods and ‘controversies’, which favours a narrow definition of scientific disciplines against real interdisciplinary enquiries (Hazelkorn, 2009: 9). As one Belgian respondent explains, metrics

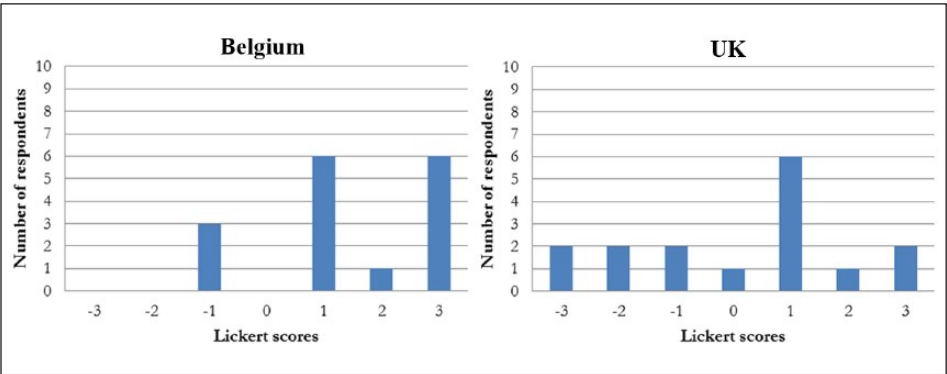
erase REAL diversity. They maintain the FORMAL diversity without which the debates that justify publishing could not be maintained. Diversity still exists but there is an agreement on how legitimate disagreements can and shall be expressed. There is an agreement on the people with whom you shall agree or disagree.

Another Belgian respondent agrees, ‘[metrics] homogenize thinking and reduce cultural and intellectual diversity’, and another argues that metrics ‘drive concentration and standardisation of research’. However, once again the argument against ‘subjective’ non-quantitative evaluations of research outlets is evoked among UK academics to justify the standardized practice of always submitting to the same limited group of ‘top’ journals. For example, a UK-based respondent explains that the alternative to submitting to ‘top’ journals is to ‘just publish in books edited by my friends’. This reflects a clear trend: UK-based political scientists overwhelmingly think that ‘metrics encourage them to produce stronger research, incentivize them to reach excellence’, at the exact opposite of their Belgian colleagues (Graph 18) who strongly agree that metrics ‘erase diversity’ (Graph 19).

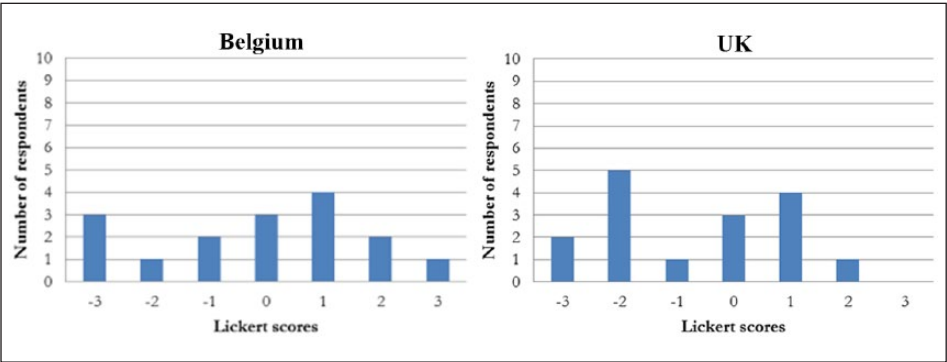
Third, scholars are less likely to engage in long-term, risky research programmes when they are constrained by their management to keep a strong publication pace, instead favouring less ambitious quickly written papers that only seek to ‘fill gaps’ with easily available data and no real theoretical originality – a standard behaviour which once again contributes to the broader standardization of scholarship. Many academics warn that this standardization of research away from risky, long-term research agendas makes great scientific achievements less likely, deteriorating the overall quality of scientific work (Graph 20). Lawrence (2008: 1) strongly argues that ‘scientists have been forced to downgrade their primary aim from making discoveries to publishing as many papers as possible [...]’. Consequently, scientific behaviour has become distorted and the utility, quality, and objectivity of articles have deteriorated’. Although our poll does not document a big gap between Belgium- and UK-based colleagues’ respective propensities to rush submission (Graph 21), one UK respondent nonetheless agrees that ‘institutional incentives do this, i.e. having



Graph 18. ‘Academic metrics encourage you to produce stronger research, incentivize you to reach excellence’. Left-hand graph Belgium, right-hand graph UK.

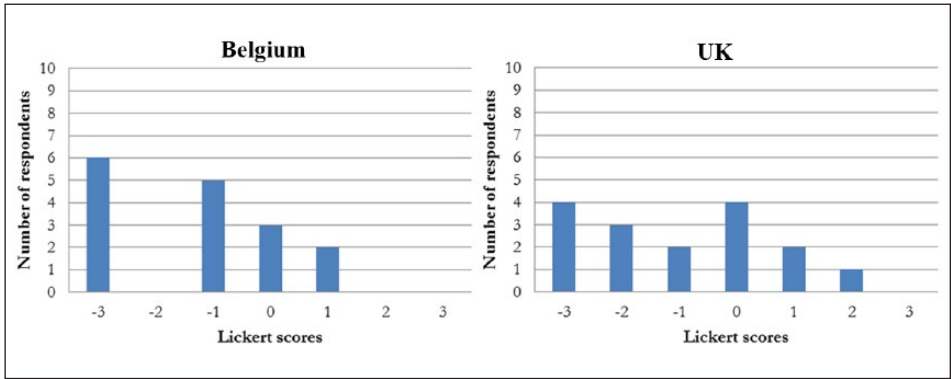


Graph 19. ‘Academic metrics erase diversity’. Left-hand graph Belgium, right-hand graph UK.

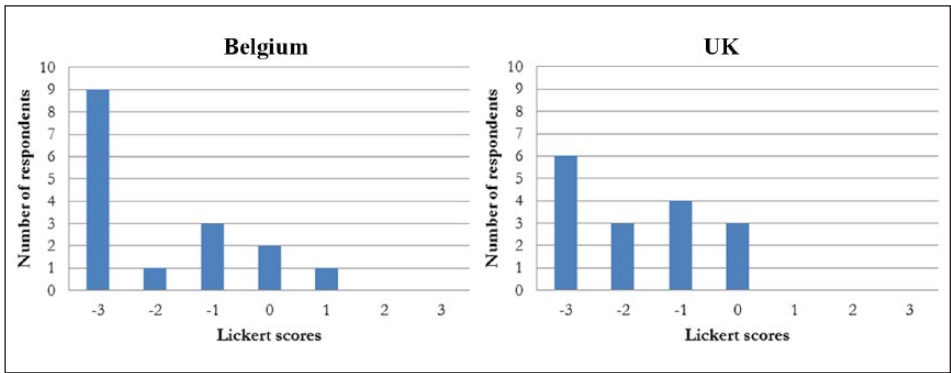


Graph 20. ‘The quality of your work (scope, ambition, innovation) is constrained, depressed by metrics’. Left-hand graph Belgium, right-hand graph UK.

the requisite number of publications for probation/promotion’, while one of his or her colleagues admits that his or her focus on ‘quick papers’ is ‘likely to increase in the future



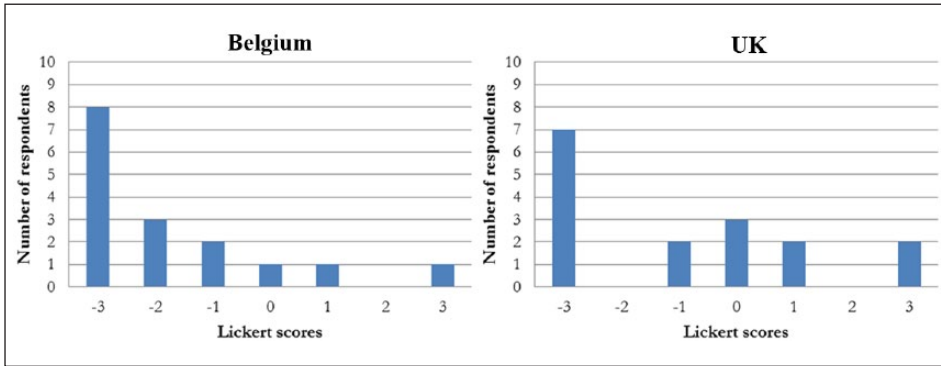
Graph 21. ‘Academic metrics push you to submit your work for publication quicker than it should ideally be’. Left-hand graph Belgium, right-hand graph UK.



Graph 22. ‘You try to “game” metrics, i.e. hide, manipulate or shape information on you in order to maximize your position on metrics’. Left-hand graph Belgium, right-hand graph UK.

given the [new career development scheme’s]¹⁹ high expectations’. In Belgium, one political scientist denounces a ‘meaningless overproduction under the constant pressure of “publish or perish” [...] at the expense of quality. Good research needs time’, while another respondent crudely argues that metrics ‘increase the production of crap’.

This standardization of thinking and practices simultaneously creates specific ‘deviant’ behaviours that tempt those who struggle to ‘fulfil the metrics’ (to take the expression used in the email to Prof. Grimm) – indeed, Foucault’s analysis of ‘deviant’ behaviours claims that these are not only defined by, but also produced and shaped by the main logic guiding categorization. Our poll does not directly support this claim, but produces some interesting insights. On one hand, there is an apparently overwhelming consensus on not engaging in the most obviously deviant metrics-related behaviour: ‘gaming metrics, i.e. hide, manipulate, or shape information on you in order to maximize position in metrics’ (Graph 22). On the other hand, there is some clear evidence for a temptation for ‘borderline’ practices, and the line between ‘normal’ and ‘deviant’ behaviours is thin. For example, if Graph 23 documents a widespread reluctance to pay to artificially improve self-standing in rankings, it simultaneously shows that in the UK Politics Department 4



Graph 23. ‘Assuming it would be possible, you would be ready to pay to superficially enhance your position in ratings and rankings (e.g. by moving one of your papers from a lower-ranked journal to a higher-ranked journal, by getting more citations)’. Left-hand graph Belgium, right-hand graph UK.

out of the 16 respondents openly answered that they would consider this practice, against zero in Belgium. This number alone suggests that metrics *produce* specific numbers-gaming behaviours at various level of gravity, which have played a role in most recent cases of academic fraud (Weingart, 2005: 128).²⁰ The presence of these behaviours or at least their appeal is reflected by one of the most significant results of the *Nature* survey (Anon, 2010a), where 71% of respondents are worried that their colleague cheat or game the metrics to gain relative edge.

The above paragraphs have highlighted the various standardization effects produced by a high use of metrics. In spite of a cross-country general agreement on the bad use of metrics and acknowledgment of their underlying political agenda, they are more trusted and less contested where their use is intensive, leading to a standardization of behaviours (chiefly research practices). Even when they disagree with what metrics stand for, scholars in a high-metrics environment nonetheless internalize their presence, rationalize them, and justify their use, lauding their ‘objectivity’ and acting in accordance, in line with Timmermans’ and Epstein’s ‘practice standards’ evoked earlier. This also related to a surprising result of the *Nature* poll: even though almost 75% of respondents were not satisfied with rankings, the vast majority of them nonetheless wished to be evaluated on the basis of the most notoriously imperfect quantitative indicators (journal impact factor, h-index) (Anon, 2010a: 862). A similar finding was already present in the 1996–1997 survey conducted by Harley (2002), which showed strong discontent with metrics, yet at the same time, significant compliance with the new rules, and even an active promotion of the new logic of the quantitative audit. This paradox is well explained by the fact that arguing against numbers is extremely difficult due to their ‘objective’ aspect – indeed ‘how can we quarrel with something that is said to be scientific since it provides comfort that our subjective judgments are minimized?’ (Nkomo, 2009: 108).

Eroding identities

As highlighted earlier, the standardization of thinking and behaviours along quantitative lines is done at the expense of ‘old’ values structuring specific social fields, thereby lowering the sense of purpose and meaning among individuals. This claim has already been made in the literature on neoliberal higher education in general and academic metrics in

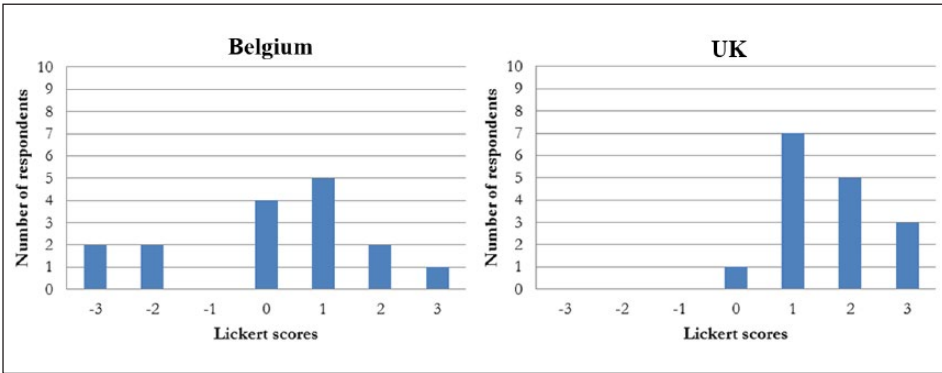
particular, which echoes Deleuze's powerful claims on the role of the quantification in the erosion of field-specific traditional values – here for example 'quality of research', 'care for students' or 'autonomy'. For example, Lawrence (2007: 585) argues that the demands of metrics-based management on academics 'lay waste their sense of purpose and attack their self-esteem', while de Rond and Miller (2005: 325) claim that metrics diminish a scholar's self-esteem in 'contributing to their irrelevance'. Beck and Young (2005) go as far as arguing that the marketization of academia is an 'assault' on the profession that works through the erosion of academics' 'inner dedication' to their traditional codes of conducts. In a quantitative benchmarking environment, academics 'live an existence of calculation' (Clegg, 2008). As one of the respondents in Harley's (2002: 202) survey tells:

[rankings] have increased competition, jealousy. [...] the RAE has made me more anxious about my achievements, work record, and makes it difficult for me. [...] It ranks individuals and departments in a crude and materialistic way – and is psychologically destructive to many. (Harley, 2002: 202)

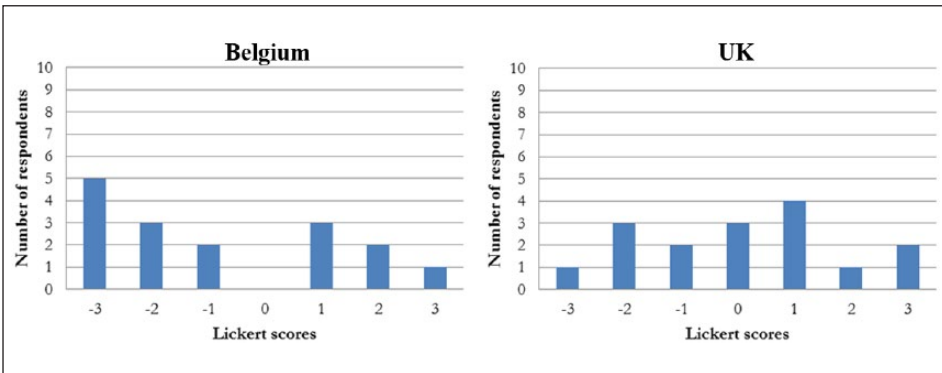
Another respondent observed that 'colleagues in other parts of this university who were graded have been very badly affected by the judgement, their self-esteem has been very badly dented' (Harley, 2002: 202). In this context, the only way to reconstruct meaningful identities is once again endorse the logic of numbers, 'playing the game becomes an arena for maintaining self-esteem and the construction and protection of our identities' (Nkomo, 2009: 109). The next paragraphs try to unveil the dynamics through which identify erosion/shift is produced by metrics and to expose some of the consequences of this process – chiefly the worsening of work-related stress.

Our poll further clearly documents the impact of the expansion of the society of control into the academic world. Indeed, the UK-based political scientists strongly agree with the fact that 'scoring high on ratings and rankings increases confidence, and conversely scoring low increases self-doubt and decreases self-esteem' (Graph 24) – one respondent even comments that 'this is rather obvious'. Another UK scholar adds that 'because academics' self-identities are often *defined* by their research, failing to place work in top-ranked journals lowers self-esteem' (our emphasis), exemplifying the ongoing shift in academic identities. Several respondents made clear that even though they do not like this evolution, they cannot avoid thinking about their identity in these terms. One UK-based academic for example regrets that 'even though I know how poorly impact factors relate to my own understandings of quality, it's pretty ingrained', while another agrees, 'It's ridiculous to think in this way, but yet we can't help doing it'. This echoes Harris' (2005) observation that benchmarking management practices force academics to shift their identities towards that of an ideal 'high impact professor', and stands in line with Deleuze's description of societies of control where individuals are not only pressurized to perform but also internalize high performance, defined by metrics, as a moral ideal.

These new identities of 'performing' versus 'under-performing' academics also shape judgments about colleagues, which are less and less based on criteria related to 'old' academic values. As one UK-based respondent observes, 'I've certainly seen this, other people making nasty comments about people just going after higher metrics'. Graph 25 documents this: asked whether they 'tend to regard colleagues who score high in ratings and rankings more highly than colleagues who score low', respondents in Belgium disagree more than those based in the UK Politics Department. There is clear indication that those who agreed tend to feel sorry to think in these terms. In the United Kingdom, one political scientist confesses that 'once again there



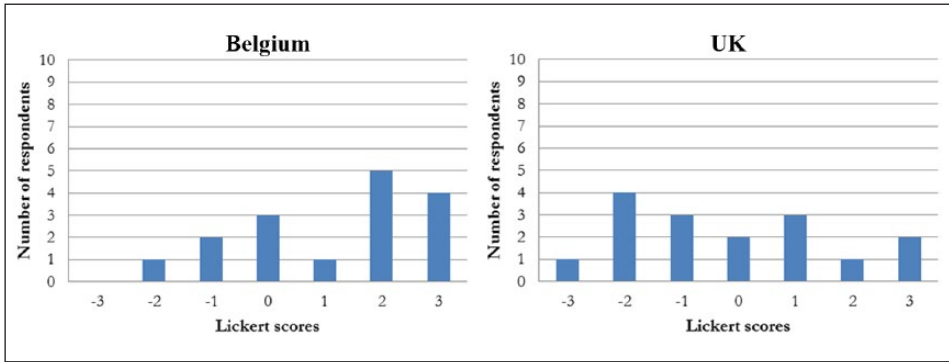
Graph 24. ‘Scoring high on ratings and rankings increases confidence, and conversely scoring low increases self-doubt and decreases self-esteem’. Left-hand graph Belgium, right-hand graph UK.



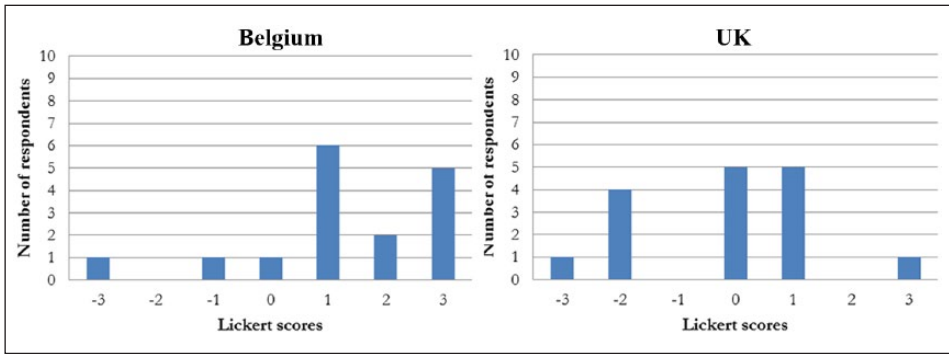
Graph 25. ‘You tend to regard colleagues who score high in ratings and rankings more highly than colleagues who score low’. Left-hand graph Belgium, right-hand graph UK.

is no reason to do this but the logic of metrics have permeated our judgments about others’, and another points to the ‘corrosive envy among colleagues that can be produced by failure in metrics’.²¹ Even in Belgium, a respondent admits that ‘unfortunately, I increasingly do’, while another regrets that ‘we are getting there, we are getting there’. It therefore indeed appears that when it comes to defining academic identities and shaping judgments about others’ qualities, ‘the lure of quantitative measures appears to be increasingly attractive’ (Weingart, 2005: 118).

This shift in the codes of academic identity, this environment where metrics define judgments about others, has a direct negative impact: it reinforces work stress which was already very high in higher education (e.g. Barkhuizen and Rothmann, 2008; Kinman, 2001; Tytherleigh et al., 2005). Since metrics precisely intend to introduce a comparative element, they intensify competitive pressure and exacerbate the risk of cementing hierarchies (Marginson and van der Wende, 2007), encouraging ‘a soccer-league mentality of dubious relevance’ (Anon, 2010b: 8). Graph 26 illustrates a general agreement on the fact that metrics encourage ‘competition rather than collaboration’.

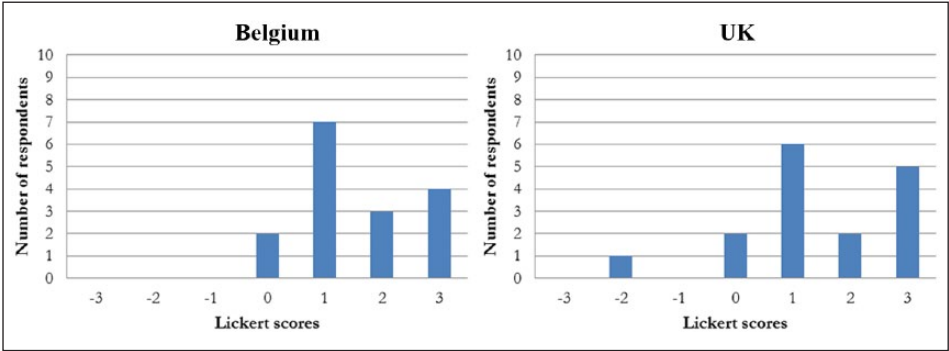


Graph 26. 'Academic metrics encourage competitive behaviours, and not collaborative ones'. Left-hand graph Belgium, right-hand graph UK.

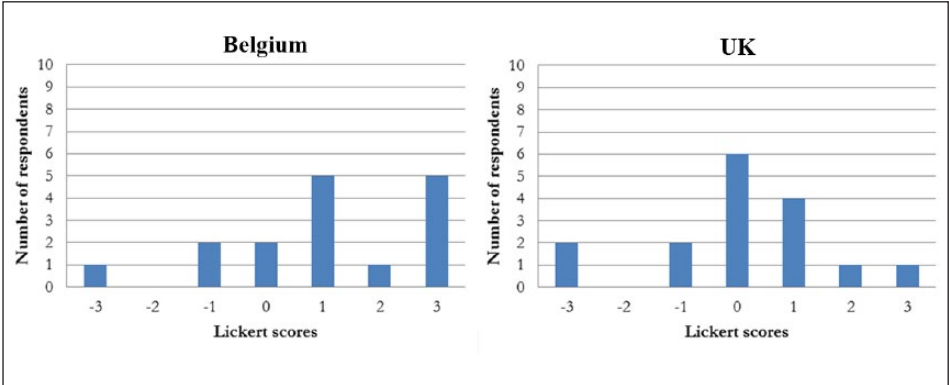


Graph 27. 'Academic metrics encourage nasty behaviours, and not nice ones'. Left-hand graph Belgium, right-hand graph UK.

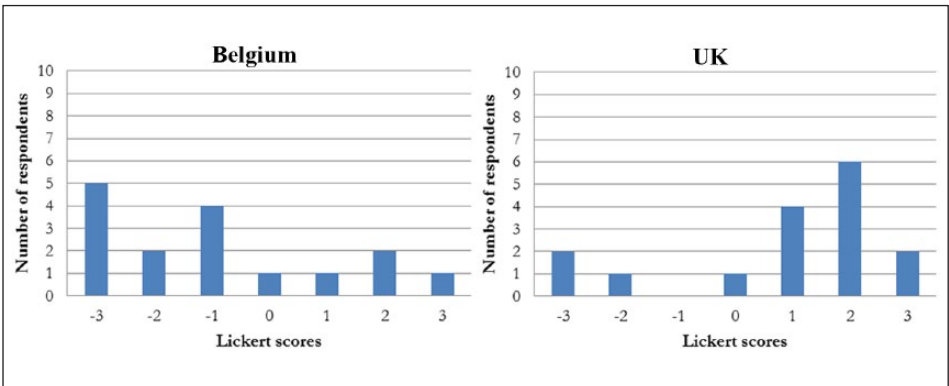
This has been claimed to reinforce stress by 'rewarding aggressive, acquisitive and exploitive behaviour' (Lawrence, 2008: 3) favouring 'those who are prepared to show off and to exploit others have acted against modest and gentle people of all kinds' (Lawrence, 2007: 585). In general, respondents agree that metrics encourage 'nasty behaviours rather than nice ones' (Graph 27), especially in Belgium (in the UK department the responses were very polarized). All the main drivers of stress in British higher education identified by Kinman (2001: 481) are exacerbated by metrics,²² chiefly because they exacerbate the difficulty already experienced by academics to operate a work/home distinction (Harlow and Cantor, 1994; Kinman, 1998).²³ Graph 28 shows an overwhelming consensus in both countries on the idea that metrics are producers of stress, by further 'blurring the work/home distinction' (Graph 29). UK academics are tellingly much more ready than their Belgian colleagues to 'spend several weekends at work instead of home' to improve metrics (Graph 30). One Belgian scholar notes that 'they [metrics] contribute to create sometimes exaggerated pressure on academics and increase stress at work', while a UK-based academic agrees by saying that 'I'm not sure if they [metrics] are bad but they are certainly dangerous', and several openly blame the use of metrics by their management rather than metrics themselves.²⁴



Graph 28. ‘Academic metrics are an important source of, or contributor, to workplace stress’. Left-hand graph Belgium, right-hand graph UK.



Graph 29. ‘Academic rankings (and/or their use) contribute to blurring the work/home distinction’. Left-hand graph Belgium, right-hand graph UK.



Graph 30. ‘Assuming it would be possible, you would be ready to spend several weekends at work instead or home if it would result in having one of your publications automatically transferred to a significantly higher-ranked journal’. Left-hand graph Belgium, right-hand graph UK.

Conclusion

In their critique of academic rankings, Adler and Harzing (2009: 84) boldly ask, ‘Given the blatant dysfunction of current ranking systems, why do they continue to exist?’. The answer, we have shown, lies in the intrinsic connection between quantification and neo-liberal societies: higher education is only one more field of the social – maybe one of the very last – where the liberal governmentality described by Foucault reorganizes power relations and ways of thinking according to the metrics-based logics of control theorized by Deleuze. To ask for a temporary moratorium like Adler and Harzing (2009: 72) might therefore be a naïve suggestion, simply because there seems to be no way to stop this powerful logic expanding into academia. As Deleuzian scholar Toscano (2005: 18) claims, the capitalist axiomatic is ‘the most formidable apparatus of domination’. Among others, we have indeed documented how deeply ingrained and internalized the logic of rating and ranking has become even among ‘resisting’ academics. We have also shown that this logic standardizes perceptions and practices, and re-shapes academic identities in a way that erodes scholars’ sense of purpose while increasing their levels of stress.

We do not take at face value that there is no alternative to the marketization of academia – ‘there is no alternative’ is after all a central and recurring neoliberal claim – yet we acknowledge the organizational and psychological barriers to resisting this project; however, we suggest that the powerful effects of quantification can nonetheless be mitigated ‘from within’, that is, by designing and implementing what Foucault called ‘counter-practices’, that is, practices that play the numbers game against its intended outcome so as to make it irrelevant.²⁵ A major example of such counter-practices has appeared in our survey: one UK respondent suggested that ‘it is possible to “game” metrics through cooperation’, pointing to the opposite of the ‘names gatecrashing’ practice identified by Lawrence (2007: 583). Including as many colleagues as possible as co-authors in papers or co-PIs in grants when they only played a minor role in the process is used by metrics-resisting scholars to help those included to boost their publication/grant records with minimal effort, hence bypassing potentially aggressive metrics-based management. Only this and other similar practices can be effective in resisting the re-shaping of academic identities in accordance with the logics of an ever-expanding society of control.

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Notes

- 1 ‘The use of metrics can vary markedly between countries’ (Anon, 2010a: 861), and nowhere is this truer than with a comparison of French-speaking Belgium with the United Kingdom. It is beyond the scope of this article to offer a detailed comparison, yet here are some elements supporting our choice. None of the political science departments in French-speaking Belgium include quantitative objectives or benchmarks in contracts or progression criteria, and the government is highly reluctant to implement metrics, which goes as far as explicitly prohibiting the international experts in charge of evaluating the teaching programmes across universities (AEQES evaluations) to quantify anything in their reports – see, for

example, the last report for Political Science programmes (2009–2010). There is no rating or ranking of programmes or departments in the national press. By contrast, the UK academic environment is characterized by widespread ‘coercive accountability’ based on metrics (see – already – Shore and Wright, 2000), which are produced by the government, the press, for-profit organizations, and universities themselves. Metrics are included in most work contracts and structure the vast majority of progression pathways. As Adler and Harzing (2009: 84) crudely put it, one needs only to observe the UK university system in general and its job market in particular ‘to witness the dysfunction of the current [metrics-based] system’.

- 2 Read, for example, Prof. David Colquhoun’s long attack on metrics in his *DC’s Improbable Science* blog, which served as a central place for discussion and inquiry following Prof. Grimm’s death: <http://www.dcsociety.net/2014/01/16/why-you-should-ignore-altmetrics-and-other-bibliometric-nightmares/>
- 3 See <http://www.ascb.org/dora/>. One of the many signatories of Declaration on Research Assessment (DORA) is the Royal Society.
- 4 See <https://responsiblemetrics.org/>
- 5 See also Anon (2007) on ‘Academics Strike Back at Spurious Rankings’.
- 6 The Russell Group ‘represents 24 leading UK universities which are committed to maintaining the very best research, an outstanding teaching and learning experience and unrivalled links with business and the public sector’ (<http://russellgroup.ac.uk/>). It unites institutions like Cambridge, UCL, Liverpool or Durham.
- 7 As attested, for example, by Deleuze’s (2004 [1986]) book *Foucault*.
- 8 Both books offer a wide range of insights, which are notoriously complex to interpret. We do not aim here to provide a definitive exegesis of Deleuze’s social theory, not do we claim to precisely connect it to Foucault’s work on governmentality. Rather, we more modestly highlight one of its main arguments in a straightforward and analytically useful way.
- 9 See, for example, Baele’s (2014) analysis of immigration policies which have historically moved from openly racist rationales to ‘value-neutral’ approaches based on potential immigrants’ net financial contributions/costs.
- 10 For example, the EU Commission voiced its dissatisfaction with the major university rankings, yet responded by creating its own set of quantitative performance indicators – the U-Multirank – which is supposed to provide a ‘better’ evaluation.
- 11 Read, for example, Allen and Preiss (1997).
- 12 Although our enquiry could trigger discussion in other disciplines, our empirical study focuses only on Political Science, which has its specificities. Further work could examine the differentiated impact of metrics in disciplines with different traditions or ‘statuses’.
- 13 If we take Brown’s (2010) typology of higher education systems relative to their permeability to market forces, the United Kingdom is a ‘marketized’ or at least strongly ‘marketizing’ system, whereas French-speaking Belgium is a clear example of the opposite, ‘Continental’ European system where (1) tuition fees are low, (2) competition for students is nonexistent, (3) private involvement and fundraising is almost nonexistent and (4) state control is extreme.
- 14 Given the limited amount of political scientists working in French-speaking Belgium, this is actually a high participation rate.
- 15 This is probably partly due to the consistently high ‘rank’ of the studied UK Politics Department in most national tables.
- 16 For example, Young et al. (2011) for Australia, Harley’s (2002) post-1996 RAE poll for the United Kingdom, or the *Nature* 2010 survey (Anon, 2010a).
- 17 We do not pretend here that traditional qualitative practices like peer-review work perfectly nor that they leave no room for nepotism – indeed the dramatic scale of peer review inconsistencies have been well documented (e.g. Cichetti, 1991; Cole et al., 1981). Rather, we claim in line with Deleuze’s analysis of capitalism that metrics are no less subjective or biased in favour of already privileged individuals and institutions, but this subjectivity is hidden by numbers.
- 18 The name of this career development scheme has voluntarily been removed.
- 19 To take the Michel LaCour case, which is certainly the most prominent recent example in Political Science of the fabrication of research results. Foster (2015) rightly observed that beyond the details of the individual case, this affair is symptomatic of, and indirectly caused by, an academic world where the pressure to publish is extremely high and where it is common for authors to sign papers they have not really contributed to – two direct effects of academic metrics.
- 20 Cf. Adler and Harzing’s (2009: 84) claim that academic rankings have a ‘corrosive’ effect.
- 21 These are as follows: ‘difficulties in obtaining funding’, ‘RAE demands driving research activity’, ‘lack

- of time', 'lack of institutional, human and technical support', 'pressure to publish findings'.
- 22 This further makes women more likely to be affected by metrics-related stress (see Menzies and Newson, 2008).
 - 23 Among others, 'the emphasis on them in my institution is distracting and stress-inducing'; 'the unreflective use of metrics for management purpose (promotion & progression, etc.) here is completely unnecessarily stressful'; '[metrics trigger] especially nasty behaviors from university management towards academics, not necessarily between academics'; 'metrics-related stress depends rather significantly on the institutional culture as well'.
 - 24 The original French concept of '*contre-conduite*' is sometimes translated as 'counter-conduct' in order to emphasize the fact that it seeks to disturb the conduct of subjects' thinking and behaviour.

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