

University of New South Wales Law Research Series

ACADEMICS METRICS AND POSITIONING STRATEGIES

JANET CHAN, FLEUR JOHNS AND LYRIA BENNETT MOSES

In B Ajana (eds), Metric Culture (Emerald Publishing Limited, 2018) p. 177-195

[2020] UNSWLRS 84

UNSW Law UNSW Sydney NSW 2052 Australia

E: unswlrs@unsw.edu.au

W: http://www.law.unsw.edu.au/research/faculty-publications
AustLII: http://www.austlii.edu.au/au/journals/UNSWLRS/
SSRN: http://www.ssrn.com/link/UNSW-LEG.html

This is the accepted version of a paper published as Chan, J., Johns, F. and Moses, L.B. (2018), "Academic Metrics and Positioning Strategies", Ajana, B. (Ed.) Metric Culture, Emerald Publishing Limited, pp. 177-195. https://www.emerald.com/insight/content/doi/10.1108/978-1-78743-289-520181010/ https://www.emerald.com/insight/content/doi/10.1108/978-1-78743-289-520181010/full/html. 'This author accepted manuscript is deposited under a Creative Commons Attribution Non-commercial 4.0 International (CC BY-NC) licence. This means that anyone may distribute, adapt, and build upon the work for non-commercial purposes, subject to full attribution. If you wish to use this manuscript for commercial purposes, please contact permissions@emerald.com

Academic Metrics and Positioning Strategies

Janet Chan, Fleur Johns and Lyria Bennett Moses, UNSW Law

Abstract

Since the 1980s, higher education institutions in many developed Western countries, facing competition for resources, have undergone economic rationalisation, adopted a New Public Management style of performance management, and aspired to meet global standards of quality. This chapter explores the self-tracking practices of academic institutions and workers as they negotiate a field that has moved away from a quality evaluation system based primarily on social reputation towards one based increasingly on quantified outcome indicators. Universities typically measure research performance not only in terms of quantity of outputs but also the "attention capital" they receive, e.g. the number of citations or awards and prizes. These metrics and the emphasis on attention capital generally encourage a culture of competition rather than collaboration, while promoting the "celebrification" of academic life. We argue that this trend has been intensified by technologies that gamify research achievements, continuously update citation and "read" counts, and promote networked reputation. Under these conditions, academic institutions and workers have attempted to pursue a variety of positioning strategies that represent different degrees of conformity, resistance and compromise to the power of metrics.

Keywords

Academic performance, Metric power, Attention capital, Presentation of self, Celibrification

Introduction

[W]e are created and recreated by metrics; we live through them, with them, and within them. Metrics facilitate the making and remaking of judgements about us, the judgements we make of ourselves and the consequences of those judgements as they are felt and experienced in our lives. We play with metrics and we are more often played by them. (Beer, 2016, loc. 135)

The above observation by David Beer in his book *Metric Power* highlights the dominance and embeddedness of metrics in contemporary life especially in developed nations. While metrics (or quantitative measurements) are not new, with counting and the use of statistics going back a number of centuries (Hacking, 1990), there has been a clear shift in recent decades towards measurement "as a replacement or substitute for more qualitative judgement" (Beer, 2016, loc.515). Not surprisingly, such a shift has become evident in the higher education sector. Since the 1980s, universities in many developed nations ¹, facing competition for resources, have undergone economic rationalisation, adopted a New Public Management style of performance management, and aspired to meet global standards of quality (Paradeise & Thoenig 2013). As a result, the evaluation of academic research has moved away from a system based primarily on social reputation towards one based increasingly on quantified outcome indicators. Universities typically measure research performance not only in terms of quantity of outputs but also the "attention capital" (Franck, 2002) they receive, for example the number of citations or awards and prizes.

This chapter explores the self-tracking practices of academic institutions and workers as they negotiate this trend towards metrification of performance evaluation. The analysis is developed in three parts. Part 1 describes changes in the field of higher education at the *macro* level, focusing on the transformation of how the quality of universities is assessed. Part 2 analyses changes at the *meso* level, noting a shift in how universities evaluate academic staff for promotion. Part 3 discusses changes at the *micro* level, observing how academic workers position themselves in this reconfigured world. We argue that the dominance of performance metrics and the emphasis on attention capital generally encourage a culture of competition rather than collaboration, while promoting the "celebrification" of academic life. This trend has been intensified by technologies that "gamify" ² research achievements, continuously update citation and "read" counts, and promote networked reputation. Under these conditions, academic institutions and workers have attempted to pursue a variety of positioning strategies that represent different degrees of conformity, resistance and compromises to the power of metrics.

Transformation of the sector: Judgement of quality

¹ Paradeise and Thoenig's (2013) analysis suggests that international ranking systems developed by academic institutions, the media, governments, and international accreditation associations, have widespread influence, spanning both European and other OECD countries.

² By gamification, we mean the introduction to non-game contexts – for our purposes, academic performance management – of design features, principles and practices drawn from games; that is, from technologies and activities designed for amusement, diversion and entertainment.

The transformation of higher education in developed nations in recent decades has been the subject of numerous academic analyses. Shore and Wright (2017) have identified seven key trends in what they refer to as the "seemingly unending series of reforms" in public universities in the UK, Australia and New Zealand since the 1980s. These include: the "divestment" of government support for higher education; the creation of new regimes to promote competition between universities (such as university rankings); the growth of performance measures to improve accountability; the "bloat" of university managers and administrators or the shift in power to the "administeriat"; the rise of the "entrepreneurial university"; and the "recasting [of] university education as a private and positional investment rather than a public good" (Shore & Wright, 2017, pp. 3-10). Other researchers have pointed to evidence of the "accelerated rationalization" that the higher education and research sector have undergone since the 1980s:

International influences, such as private or public evaluations and league tables for universities, research journals, research institutes and diplomas, are increasingly driving national developments. The use of references and tools inspired by New Public Management (NPM) converges with the dissemination of national and international soft law indicators and rankings... They foster the vision that there is one good way, and only one, to produce and judge quality in higher education and research. Such apparently voluntary soft law instruments nevertheless are to a large extent out of the discretionary control of local and national public authorities, and are effectively mandatory. Contingent on the expanding use of indicators as reliable traces of academic activity, quality is ontologically supposed to be what is summed up by the measure of "excellence". (Paradeise & Thoenig 2013, pp. 190-191)

Employing ideal types, Paradeise and Thoenig (2013, pp. 194-195) have contrasted this style of judging quality (what they call "Excellence" or "Expert evaluation") with an alternative style ("Reputation" or "Social evaluation") as follows: while the former is explicit, based on actual outcomes (e.g. a basket of indicators), a-contextual, and ordinal (numerical), the latter is implicit, linked to image or brand awareness (e.g. through social or personal networks), contextual, and cardinal. The fact that "excellence" or "expert evaluation" judgements are designed to facilitate comparison across institutions or units means that they are "the preferred tools for new rationalizing institutional management and governance" (2013, p. 195).

In spite of these pressures to rationalise and conform to a uniform standard of "excellence" using (predominantly) quantitative indicators, it should not be assumed that all universities have uncritically pursued high rankings and followed the path towards uniform standards. Paradeise and Thoenig's (2013) 27 case studies of departments in different countries and research fields have uncovered a range of positioning strategies, from those giving high attention to both international standards of "excellence" and "reputation", to those giving emphasis to one or the other, or neither of these judgement standards. They create four ideal types of institutional positioning depending on their emphasis on "excellence" and "reputation": (1) "The top of the pile" (High, High), universities or units that give high strategic priority to both "excellence" (expert evaluation) and "reputation" (social evaluation), (2) "The wannabes" (High, Low), those that give high priority to meeting the international standards of

"excellence" at the risk of undermining the reputational basis of its quality, (3) "The venerables" (Low, High), those that pay low attention to quantitative indicators but high attention to collegiality and established reputation, and (4) "The missionaries", those that pay low attention to both quantitative indicators and social evaluation but are committed to egalitarianism and educational outcomes (2013, pp. 198-209). In practice, universities do not fall neatly into one of these ideal types, but often adopt hybrid strategies. Similarly, many mechanisms of institutional assessment hybridise expert evaluation and social evaluation. Even within one university, different strategies or practices can co-exist without necessarily leading to detrimental consequences³. The emergence of global measures and uniform quality standards does not always lead to homogeneity and the demise of local orders. Nevertheless, one of the "collateral consequences" of emphasising quantitative indices and rankings is that universities are obliged to follow a set of quality judgements imposed by external parties and processes, often resulting in a shift of attention away from the knowledge content of their academic work to the attention "allocated to the signals – number of articles, status of the journals in which they are published, number of citations, etc." (2013, p. 15).

Changes within institutions: Promotion and hiring

While individual universities or departments may choose not to conform to external demands for quantitative metrics, the history of processes and criteria used by universities in making decisions about promotion helps illustrate the attraction of quantitative measures. Particularly in the 1960s and 1970s, concerns were expressed by faculty members in some Anglophone nations about the arbitrary and non-transparent nature of promotions decisions. There were specific concerns about bias, particularly against women, which were difficult to prove or resolve in the absence of accepted measures of quality. The introduction of quantitative measures was thus sometimes perceived as a necessary reform by academics generally and particularly by those concerned about equity.

A brief survey of studies⁴ that focus on promotion practices in universities helps illustrate how such practices have evolved in recent decades. In some cases, these look at promotion together with other matters (such as hiring practices or salaries). Hiring practices and promotion policies were often blurred in Australian universities where professorial appointments were often made following the death, resignation or retirement of an incumbent, rather than through an internal promotion process (Over, 1985).

Studies in the 1960s and 1970s suggest that promotion criteria were often unclear and non-transparent. Luthan's survey (1967, p. 388), which covered the discipline of business in 47 large public universities, revealed that 5 per cent of faculty members stated that there were "absolutely no policies whatsoever" dealing with promotion and an additional 26 per cent stated that any policy was "so nebulous and confused that it

³ The University of California, Berkeley, was cited as an example where "a department in the humanities which is ranked academically at the very top internationally constructs its own quality references even when they are in opposition to the standards dominating the discipline internationally" (Paradeise & Thoenig, 2013, p. 210).

⁴ This brief survey draws on studies focussed on a number of narrowly defined populations in different countries from the late 1960s to 2015. It is not a comprehensive review of this literature but provides an indication of prevailing practices during these years.

could not be communicated to anyone". Katz's (1973, p. 469) study of nine departments within one US university observed that "little is known about the process of evaluating and rewarding university professors⁵" given the "difficulty of obtaining good data". Only two of the nine departments had a written policy regarding promotion that was available to faculty members, resulting in promotion and salary processes that "are usually cloaked in secrecy". Assessment of faculty members in the course of promotion processes often relied on beliefs and intuition, particularly with regard to teaching. For example, Katz (1973, p. 470) describes how teaching was only evaluated on the basis that "[administrators] thought they knew who were the 'good' and 'bad' teachers". Ultimately, teaching quality was found to be of minimal relevance in predicting who would be promoted (Katz, 1970, p. 471). Luthans' (1967) survey revealed that a substantial publication record was not always necessary to obtain a promotion. In particular, just under one-third of full professors and half of associate professors in Business had a maximum of three articles and no books. Further, assessments often relied on qualitative rather than quantitative assessments of the quality of the publications themselves (directly or indirectly) or the quality of proxies such as journals. For example, Katz (1973, p. 470) states that "department chairmen and heads agreed that they could easily evaluate research ability by examining the quality of journals (usually refereed) in which articles appeared and by reading book reviews". Nevertheless, measures of quality were emerging during this period, including those based on citation counts (Cole, S., & Cole, J.R., 1967, pp. 379-380) and perceptions of journal quality (Oncken, 1971, pp. 41-42).

At the time, there was evidence of considerable dissatisfaction with promotion practices. Luthans' (1967, p. 388) survey of Business schools found that one-third (34%) of professors rated the promotion system as "poor" or "very poor" while one quarter (26%) rated it as "not very good". The survey also found large differences between central administrators, 85 per cent of whom believed that they could evaluate research activities, while the vast majority of faculty members (80%) believed that central administrators could not evaluate research. Jolson (1974, p. 151) similarly noted differences in the preferred rankings of six factors of appraisal between administrator and some important faculty segments. Katz (1973, p. 477) argued that the "arbitrary and chaotic" process of rewarding professors, through promotion and salaries, should be replaced with a more equitable system. Luthans (1967, p. 393) also called for "improved promotions policies", "more objective methods of evaluation" and greater transparency, including through the use of journal rankings. Not everyone agreed with this proposition. Jolson (1974, p. 154), for example, argued that due to the differing goals of academic institutions and the difficulty of establishing objective measures, appraisal (for promotion and tenure) should "include a strong personal dimension" based on frequent conversations with department heads so that the latter could "know him [sic] and his work intimately".

Several studies in the 1970s attempted to identify factors correlated with promotion outcomes. Katz (1973), for example, noted the reputation of the department from which a graduate degree was obtained as having a long-standing impact on promotion prospects ⁶. The difficulty of determining the reason why particular factors are

⁵ The term "professor" in American universities covers the full range of academic staff, from junior to senior ranks.

⁶ It is difficult to tell from Katz's study whether this was merely a question of correlation (those who get accepted to prestigious graduate schools also perform well as academics), causation without bias

correlated with promotion becomes particularly controversial when looking at the role of gender in promotion outcomes and for related processes such as salary determination. For example, Katz (1973) detected a difference in the salaries paid to women and men, but again his methodology did not enable inferences to be drawn as to the reasons for this. He suggested that this difference in salaries could be explained partly by the policy of hiring a professor's wife to convince him to accept a job at the university. The same gender differences was evident in Australia in the 1980s, with Over (1985, p. 505) noting that while the numerical inequality of women did not constitute proof of discrimination, there was some self-report survey evidence of bias against women in recruitment and promotion.

A more explicit promotions policy was thus perceived as potentially advantageous to female academics, as illustrated through the events at one Australian university. The Bramley-Ward Report to the Council of the Australian National University had recommended a more explicit promotion policy based on concerns that the vaguely worded policy disadvantaged women (Sawer, 1984). The University responded by changing its policy for promotion to senior lecturer, which had referred only to "educational attainments, professional recognition of standing as a scholar, contribution and service to the University", to a more explicit list with weightings for different dimensions⁷ of academic work that could be adjusted by the applicant (within defined bounds). As well as providing greater clarity around expectations, this allowed applicants to ensure that teaching performance played a role in promotion decisions. In particular, there is some evidence that academics were concerned that teaching performance and effectiveness as well as (to a lesser extent) student evaluations should be given more weight in promotions procedures (Boud and de Rome, 1983). However, teaching performance was more difficult to quantify, with Genn (1983, p 48) commenting on the fact that data in this area could not "do justice to the richness, complexity and variety of phenomena that university teaching may comprise" and reliance on quantitative measures would be "a dangerous over-simplification".

More quantitative approaches seemed to gain ground in the 1980s and 1990s, particularly in Australia where a number of the studies were conducted. For example, Moses (1986) found that the majority of interviewed staff in an Australian university believed that they were advantaged in promotion processes by pursuing quantity over quality. Allen (1988) described a movement in Australia towards greater accountability within the university sector. In particular, the Universities' Council of Commonwealth Tertiary Education Commission (CTEC) conducted a Review of Efficiency and Effectiveness in Higher Education in 1986 that recommended that universities develop regular procedures for evaluating academic performance. Thus, by 1988, there were formal procedures through which Australian academics could apply for promotion, with the focus primarily on research and publication (Allen 1988). Promotion came to be correlated with criteria that are recognisable today – applications for research grants, published articles, average rates of citation, PhD examinations, academic networking and attendance at international conferences, and prioritising research over teaching

(a prestigious graduate education provides better training for an academic career) or causation with bias (candidates for promotion with prestigious graduate degrees are consciously or unconsciously preferred).

⁷ The dimensions were teaching performance, research achievement and professional recognition (including educational attainment), administrative and committee work and community activities related to profession and which reflect favourably on the University.

(Over, 1993). There were no longer significant differences based on academic background (other than obtaining a PhD degree), age, sex, marital status, number of children or age when first child was born although there were personality differences (Over, 1993, p. 321). A recent Australian study has also linked promotion with a quantitative measure, in particular the number of papers and books published (Dobele & Rundle-Theile, 2015).

The quantification of academic performance measurement has historically been made necessary and expedited by government funding policies. In Australia, for example, allocation of university funding has been based on a combination of student enrolment and research performance indicators. The collection of detailed information on research grant incomes and outputs has been mandatory from the early 1990s (see University Australia website: https://www.universitiesaustralia.edu.au/australias-universities/keyfacts-and-data/Research-Intensity---Output#.WY zn9OGMUE). introduction of research quality assessment exercises was not meant to be used to rank Australian universities by research quality, ERA ratings were nevertheless interpreted as such. The ERA prompted high-rating universities to adopt a flexible, market-oriented approach to hiring and promotion that bypasses established procedures. For example, universities engaged in the strategic appointment of high-performing academics and research teams from other universities⁹ to improve ratings, as well as introducing nonstandard promotion or salary increases to retain researchers and prevent them from being "poached" by others. The definition of high performance in this context has often been based on quantified metrics.

This brief review suggests that universities have generally moved towards providing greater clarity in promotion criteria and increased reliance on quantitative measures over time. This move is consistent with the macro imperative described in the last section for universities to move away from an implicit, contextual and social reputation-based judgement of quality towards a more explicit, ordinal and metrics-based judgement. Our analysis shows that such a shift was originally justified for reasons of equity and transparency, but more recently driven by the competition for funding, market and prestige.

Individual strategies: Presentation of self

In the context of promotion and elsewhere, one of the many ways in which academics navigate the presentation and packaging of professional self for imagined audiences of various kinds is in the preparation and circulation of curriculum vitae (CVs), résumés and short professional biographies. As in the other areas on which we focus, this is a context in which the uptake and reproduction of metric culture have become subtly apparent since physicist Jorge Hirsch first proposed the h-index in 2005 (Hirsch, 2005). This may be discerned from reading a small sample of the immense amount of scholarly and popular literature offering guidance on the navigation of academic recruitment processes, and on academic career success more broadly, published from the late 1980s to the late 1990s, alongside more recent examples of the same, published since 2010 (e.g., Zillman, Angel, Laitos, Pring, & Tomain, 1988; Gordley, 1993; Drezner, 1998;

⁸ This was initially proposed as the Research Quality Framework, or RQF, for 2008-2009 implementation, but eventually introduced as the Excellence in Research for Australia – ERA, beginning in 2010 – see http://www.arc.gov.au/excellence-research-australia

⁹ See Lewis and Shore (2017) on "strategic hiring" in New Zealand.

Boden, Epstein, & Kenway, 2011; Ale Ebrahim, Salehi, Embi, Habibi, Gholizadeh, Motahar, & Ordi, 2013; Piwowar & Priem 2013). In each case, our focus has been on English language writings, with examples mostly referring to US, UK and, to a lesser extent, Australian higher education institutions and pertaining mainly to the legal, humanities, social sciences, and education fields.

Reading these sorts of writings from two or three decades ago is a little like studying images of the extraordinary wall paintings in the Chauvet-Pont-d'Arc Cave. The images of horses, deer, lions and other animals in the latter are some 30,000 years old (Clottes, 2003). In both content and style, they seem contemporary, apt and compelling; they still seem right. Yet they unmistakably bespeak a time that has passed.

The curriculum vitae is, of course, by its Latin name already historically out of joint in contemporary usage. The Oxford English Dictionary traces its prevalence back to 1902 (OED, 2017). One Swedish-based researcher claims that its "professional use...has its roots in the late 1400s, when it was introduced by Leonardo da Vinci", but concedes that "it was not until the second half of the twentieth century that the modern CV took on a more definite shape" (Forsberg, 2016). Another pair of British-based researchers likewise date "the arrival of the CV as an essential adjunct to academic careers" to the second half of the twentieth century (Miller & Morgan, 1993). Whatever its provenance, the CV has long been a critical medium for academics "crafting a disciplinary aligned presence" individually and in a range of collective configurations (those of department, school, faculty, university, scholarly association, conference, journal, and so forth) (Tse, 2012). How academics craft this presence in CVs and cognate genres of writing has not been untouched by, and indeed may have contributed significantly to, the changes that we have canvassed so far.

It is by no means the case that metrics have come to dominate CV writing. Many have cautioned against the numerical embellishment of CVs (Wildgaard, 2014). Current, popular guides to academic CV writing do not generally recommend their inclusion (e.g. Vitae, 2017; Boden et al., 2011). Moreover, to the extent that CVs do invite and provide data for quantitative evaluation, this may long have been the case to some degree; Metcalfe wrote, for example, in 1992 of the familiar scene of members of appointments committees nodding their heads "as they count publications" (Metcalfe, 1992). Nonetheless, there has been a discernible shift in the style and tone that academic CV writers are encouraged or socialised to adopt. This shift makes it not entirely surprising that some would report a growing propensity of candidates to include hindexes on their CVs (Ball, 2007).

Throughout the period under consideration, CVs have straddled multiple sites and modes of appraisal, the regularity of appraisal being one of the characteristic features of contemporary academic life (Knights & Clarke 2014). The writing and tweaking of a CV is at once an exercise in self-appraisal, a response to past appraisal, and a task undertaken in anticipation of future appraisal (Metcalfe, 1992). It is also a practice that straddles seemingly incommensurable ways of understanding and evaluating scholarly corpora. As Miller and Morgan have written:

Production of a CV takes place...between two worlds. On the one hand there is the traditional academic world where quality is supposed to elude quantification and where the mysteries of a craft are embedded in sets of inter-personal understandings and invisible colleges. On the other hand, there are the increasing pressures to emphasise quantity, whether it be in terms of the number of publications, the size of research grants or the number of 'all expenses paid' international gatherings. (Miller & Morgan, 1993, p. 137)

Both in their earlier (1980s and 1990s) incarnations and more recently (since 2005), writings counselling for success in the academic "marketplace" keep both these registers of value in circulation. Nonetheless, what has shifted, between these two periods, is the composition of the "inter-personal understandings" considered most significant in the first (qualitative) of these registers. So too have the inputs characteristic of the second (quantitative) of these registers changed, albeit subtly, over this time.

In 1980s and 1990s-era advice on self-presentation for academic recruitment (in CVs and otherwise), emphasis was placed on a candidate's relations with scholarly peers or would-be peers, especially with those from whom "favorable comment" might be drawn (Gordley, 1993, p. 367). Even in the absence of European-style scholarly apprenticeships, it was "former professors" who were, in large part, expected to direct one's CV into the right hands (Zillman et al., 1988, p. 347). Relatively little, if anything, was expected of academic entrants by way of scholarly publications (Drezner, 1998). In 1993, Gordley wrote that US law schools, for instance, had "no standard for hiring other than mere brilliance...[or] raw brainpower" as deduced from recommendations, interviews and examples of written work (Gordley, 1993, p. 383). "[A] candidate can possess top-notch credentials without writing much", Gordley explained, "or indeed, anything" (Gordley, 1993, p. 368). Similarly, in 1998, Carter and Scott, stressed the importance of personalised recommendation letters alongside some – albeit limited – evidence of writing and research capacity ("a record of conference paper presentations and some pieces under review") (Carter & Scott 1998, pp. 616-7). They also cautioned those navigating the (US) academic job market as follows: "it is imperative that you do not engage in overselling yourself" (Carter & Scott, 1998, p. 618).

By the second decade of the 2000s, however, those looking to enter or build an academic career were advised to devote considerable effort to preparing and maintaining their CVs as "a collaborative, interactive and iterative process" (Boden et al., 2011, p. 4). Boden, Epstein and Kenway's 2011 discussion of the publications section of an academic CV conveyed an expectation that candidates would likely have multiple types of scholarly publication to report, and that they should be able to "give an indication as to any impact" of their research (Boden et al., 2011, p. 17). Likewise, candidates of this era were encouraged to report on their contributions to public debate, media appearances, and details of any efforts to "[p]opularis[e] [their] discipline or subject", as well as using Altmetrics (metrics measuring scholarly impact in an online environment) to "capture social media references... and reflect public engagement" (Boden et al., 2011; Piwowar & Priem, 2013, p. 10). "Most researchers", a group of Malaysian and Iranian researchers wrote in 2013, "are evaluated based upon their publications as well as the numbers of citations their publications receive" (Ale Ebrahim et al., 2013, p. 93). This may be truer in some research fields than others, and less true of entry-level scholars than later-stage candidates. Nevertheless, there did appear to be a discernible shift, between these two periods, from implicit to explicit "impression management" in CV writing (Knouse 1994). If one understands the CV as

an invitation to applicants to present themselves "as certain sorts of subjects, whether 'actually' as they appear, or...as if they were', then candidates for academic jobs seem recently to have been encouraged towards far more assertive and voluble sorts of subjectivity than in the earlier era described above (Grey, 1994, p. 485). Far from being counselled away from "overselling" themselves, academic CV writers are now encouraged to sell as many "products" as possible and to provide evidence of those products' appeal to the broadest possible market of consumers. Thus, a far wider range of relationships become significant for and evoked by the contemporary CV than earlier iterations of the same. Alongside the assurance of brilliance that referees are supposed to provide, more impersonal relations – such as relations with the media and the general public – have been brought to the fore. For this purpose, it is important that the evidence in question be as accessible and universalisable as possible; hence the propensity to rely on quantitative metrics alongside or over subjective assessments. As historian Theodore Porter has observed, reliance on quantitative measures is crucial in maintaining "impersonal" exchange as the "ideal" form of human-to-human transaction on which most other relations are modelled, including relations in which scholars are embedded. In such transactional settings, faith in numbers often supplants personal trust (Porter, 1996, pp. 23-4).

This reflection on the evolution of the CV suggests that over the past three decades there has been a more than subtle shift from relying on an interpersonal, contextual and reputation-based presentation of self to one employing more explicit use of metrics and impersonal indicators of achievements. In the past, this approach would have had to depend on individual academic worker's vigilance in monitoring and documenting their latest publications and citation counts. However, advances in digital technology have made the collection of academic metrics much easier, with some exceptions, and more systematic. Moreover, the gamification of academic performance has led to a host of new websites and data services that act as a kind of Facebook for academic researchers (Duffy & Pooley, 2017). These services help to escalate the game-like quality of surveillance and self-governance by introducing virtual rewards and reputation scores at no costs to the users (Whitson, 2013). Researchers are lured to join these services in order to showcase their research to a global audience in the hope of improving their citation counts. These data services in turn send regular updates to researchers about new citations, new "followers", and new requests for copies of their publications. Artificial milestones are set up so that researchers are "congratulated" for reaching a landmark number of citations.

The dominance of digital communication has in some ways made the CV redundant. Most academics have their own webpages, usually within their institutions, detailing their academic achievements, often with hyperlinks to full-texts of their publications or webpages of their media stories. The Internet has also made it possible for the "celebrification" of academic researchers and the "celebritization" of academic life¹⁰ (Van Krieken, 2012; Driessens, 2012). That academics are increasingly chasing after "celebrity capital" (Driessens, 2013) is evident in the pressure they feel to promote themselves as *brands* (Duffy & Pooley, 2017). The imperative for self-promotion and "strategic impression management" is, of course, not new in business circles and

_

¹⁰ Driessens (2012) has advocated a distinction between 'celebrification' and 'celebritisation'. Celebrification refers to the 'process by which ordinary people or public figures are transformed into celebrities', whereas celebritisation is a 'meta-process that points to certain changes in the nature of celebrity and its societal and cultural embedding' (2012, pp. 643-644).

especially among workers in the creative industries whose job security is as precarious as it is dependent on self-branding. However, as Duffy and Pooley (2017, p. 2) point out, "discourse of self-branding have mushroomed over the last decade, in parallel with the rapid ascension of social media sites, which are especially propitious platforms for the curated self". This "logic of self-branding among scholars", as Duffy and Pooley have argued, is amplified and accelerated by academic research sharing websites such as Academia.edu:

Even as the site's feedback and "recommendation" features encourage expressions of reciprocal validation, the fixation on analytics reinforces a culture of incessant self-monitoring—one already encouraged by university policies designed to measure quantifiable "impact." If academics are experiencing a "metric tide" (Wilsdon et al., 2015) imposed from above, Academia.edu is prodding us to internalize its analytics mindset. (Duffy & Pooley, 2017, p. 2)

How individual academic workers negotiate this pressure to conform to standards of achievement set by indicators of "excellence" is uncertain. It is possible that individuals—just as the academic departments in Paradeise and Thoenig's (2013) case studies—have adopted different positioning strategies. For example, so-called "academic stars" would be comfortable pursuing both quantitative measures of "excellence" while maintaining reputation through interpersonal and social networks. Other academics might join together to find ways of fighting or resisting these developments¹¹. Still others might engage in "secondary adjustments" (Goffman, 1961, p. 189) that "get around" institutional pressures.

Conclusion

The dominance of a metricised approach to judging academic quality has often been attributed to the rise of neoliberalism and the audit culture which imposes the practices of business and accounting on academic life (e.g. Strathern, 2000). While the usefulness of neoliberalism as a concept has been debated in recent years, Beer, (2016, loc. 368) has argued that since competition is central to neoliberal thinking, neoliberalism is still useful for showing how metrics can be linked to the "political formations of the day and to the historical genealogy that has led to these connections". This is because "[m]etrics are the very mechanisms and apparatus by which competition can be realised; metrics afford differentiations to be created and inequalities to be cemented" (2016, loc. 431). Yet the use of metrics has its own appeal. As Power (2004) points out, quantification has positive as well as negative attributes. It enables commensurability, thus potentially reducing cronyism, subjectivity or bias in the assessment of academic quality. On the other hand, it simplifies a complex product and may lead scholars to

¹¹ The Analogue University (2017) reported the success in 2015 of academics at Newcastle University in the UK in resisting the launch of a performance-based regime ("Raising the Bar") that attempted to reposition the university in the Research Excellence Framework audit and other ranking systems.

¹² Goffman (1961, p. 189) coined the term "secondary adjustments" to capture "any habitual arrangement by which a member of an organization employs unauthorized means, or obtains authorized ends, or both, thus getting around the organization's assumptions as to what he should do and get and hence what he should be." They represent ways in which a member of an organisation "[reserves] something of oneself from the clutch of an institution" (1961, p.319). They represent "a special kind of absenteeism, a defaulting not from prescribed activity but from prescribed being" (1961, p. 188).

narrow their "outputs" to those that are recognised and rewarded in the measurement process. More generally, as Beer points out:

... measurement, calculation and numbers have the power to force us to overlook aspects of the social world. The visibility created by numbers is narrow even as the scope of measurement [expands]. Metrics lead to particular "lines of sight" (Amoore 2013, p. 93). Hence measurement is powerful not just for what it captures and the way it captures it, it is also powerful because of what it conceals, the things it leaves out, devalues, or ignores. (2016, loc. 1263)

As we have shown in this chapter, the use of quantified, decontextualised indicators have led to the "stripping out" of narratives, in effect "leaving a vacuum to be filled by new narratives based solely on the data" (Beer, 2016, loc. 1645; see also Espeland, 2015).

A pessimistic reading of the current condition is that the power of metrics is already too deeply entrenched in academic institutions for resistance to be effective. It may be that the rise of performance metrics has already generated among academics new "structures of feelings" that internalise market values (Burrows, 2012). More insidiously, it has been suggested that it is the emergence of the "Data University" that is changing academic life. As a pseudonymous collective of geographers and other scholars at Newcastle University in the UK have written:

Influenced by Deleuze's (1992) work on new societies of control, we argue that the genesis of the "Data University" lies in our *active* desire for data and its potential to mediate human relations and modulate our *freedoms*. ... [T]oday individuals both desire and are controlled through the active generation of proliferating data streams. ... [I]t is academics themselves who seek out new forms of freedom, and are therefore controlled, through our own generation of proliferating data streams. (The Analogue University 2017)

The very fact that the argument above has been advanced pseudonymously is revealing of how institutionally treasonous these kinds of arguments, against metric culture on the whole, may appear in some higher education settings. Yet any resistance to metrics – if confined to the terms already defined by metrics – risks expanding or perpetuating their power (Beer, 2016). It may be that, as Beer (2016, loc. 3676) suggests, we need to "re-tell the stories" that got stripped out by metricisation. In Australia, we may have reclaimed some power from metricisation when the second round of research assessment exercise (ERA 2012) abandoned the use of a list of ranked journals and relied instead on expert peer review to assess the quality of research outputs.

References

- Ale Ebrahim, N., Salehi, H., Embi, M.A., Habibi, F., Gholizadeh, H., Motahar, S. M., & Ordi, A. (2013). Effective strategies for increasing citation frequency. *International Education Studies*, 6(11), 93-99
- Allen, N. (1988). Aspects of promotion procedures in Australian universities. *Higher Education*, 17, 267-280.
- Ball, P. (2007). Achievement index climbs the ranks. *Nature*, 448, 737.
- Beer, D. (2016). Metric power. Palgrave Macmillan.
- Boden, R., Epstein, D. E., & Kenway, J. (2011). Presenting yourself: Vita statistics. In *Building your academic career*. Sage Publications.
- Boud, D. & de Rome, E. (1983). What counts? Academics' perceptions of the promotions system. In I. Moses (Ed), *Tertiary education in the eighties: Paths to reward and growth*. Sydney: HERDSA, pp 87-98.
- Burrows, R. (2012). Living with the h-index? Metric assemblages in the contemporary academy. *The Sociological Review*, 60(2), 355-372.
- Carter, R.G., & Scott, J.M. (1998). Navigating the academic job market minefield. *PS: Political Science and Politics*, 31(3), 615-622.
- Clottes, J. (2003). *Chauvet cave: The art of earliest times.* (P. G. Bahn, Trans.). University of Utah Press
- Cole, S., & Cole, J.R. (1967). Scientific output and recognition: A study of the operation of reward system in science. *American Sociological Review*, 32(3), 377-390.
- Dobele, A.R., & Rundle-Theile, S. (2015). Progression through academic ranks: A longitudinal examination of internal promotion drivers. *Higher Education Quarterly*, 69(4), 410-429.
- Drezner, D.W. (1998). So you want to get a tenure-track job. *PS: Political Science and Politics*, 31, 609-614
- Driessens, O. (2012). The celebritization of society and culture: Understanding the structural dynamics of celebrity culture. *International Journal of Cultural Studies*, 16(6), 641-657.
- Driessens, O. (2013). Celebrity capital: redefining celebrity using field theory. *Theory and Society*, 42, 543-560.
- Duffy, B.E., & Pooley, J.D. (2017). "Facebook for academics": The convergence of self-branding and social media logic on Academia.edu. *Social Media + Society*, 3(1)2017, 1-11.
- Espeland, W. (2015). Narrating numbers. In R. Rottenburg, S.E. Merry, S.J. Park and J. Mugler (Eds.). *The world of indicators: The making of governmental knowledge through quantification*. Cambridge University Press, pp. 56-75. [Cited by Beer 2016]
- Forsberg, E. (2016). Curriculum vitae The course of life. *Nordic Journal of Studies in Educational Policy*, *2*, 33742
- Franck, G. (2002). The scientific economy of attention: a novel approach to the collective rationality of science. *Scientometrics*, 55(1), 3-26.
- Genn, J. M. (1983). Towards new accountability policies pertaining to university teaching. In I. Moses (Ed), *Tertiary education in the eighties: Paths to reward and growth*. Sydney: HERDSA, pp 47-59.
- Goffman, E. (1961). Asylums: Essays on the social situation of mental patients and other inmates. New York: Anchor Books.

- Gordley, J. (1993). Mere Brilliance: The Recruitment of Law Professors in the United States, *American Journal of Comparative Law*, 41, 367
- Grey, C. (1994). Career as a project of the self and labour process discipline. *Sociology*, 28(2), 479-497.
- Hacking, I. (1990). The taming of chance. Cambridge: Cambridge University Press.
- Hirsch, J. E. (2005). An index to quantify an individual's scientific research output. Proceedings of the National Academy of Sciences, 102, 16569-16572Jolson, M. A. (1974). Criteria for promotion and tenure: A faculty view. The Academy of Management Journal, 17(1), 149-154.
- Katz, D.A. (1973). Faculty salaries, promotions and productivity at a large university. *The American Economic Review*, 63(3), 469-477.
- Knights, D., & Clarke, C.A. (2014). It's a bittersweet symphony, this life: Fragile academic selves and insecure identities at work. *Organization Studies*, *35*, 335-357
- Knouse, S.B. (1994). Impressions of the resume: The effects of applicant education, experience, and impression management. *Journal of Business and Psychology*, 9, 33-45
- Lewis, N., & Shore, C. (2017). Managing the third mission: Reform or reinvention of the public university? In C. Shore and S. Wright (Eds.) *Death of the public university? Uncertain futures for higher education in the knowledge economy.* New York, Oxford: Berghahn Books, pp 47-68.
- Luthans, F. (1967). Faculty promotions: An analysis of central administrative control. *The Academy of Management Journal*, 10(4), 385-394.
- Metcalfe, A. (1992). The curriculum vitae: Confessions of a wage-labourer. Employment and Society, 6, 619-641
- Miller, N., & Morgan, D. (1993). Called to account: The CV as an autobiographical practice. *Sociology*, 27, 133-143.
- Moses, I. (1986). Promotion of academic staff: Reward and incentive. *Higher Education*, 15(1/2), 135-149.
- Oncken, G. R. (1971). The relationship of control structure to faculty productivity and satisfaction in university departments (Doctoral dissertation). Retrieved from https://search.proquest.com/docview/302467059.
- Over, R. (1985). Career prospects for academics in Australian universities. *Higher Education*, 14(5), 497-512.
- Over, R. (1993). Correlates of career advancement in Australian universities. *Higher Education*, 26(3), 313-329.
- Oxford English Dictionary Online (2017). "curriculum vitae, n." OED Online. Oxford University Press, June 2017.
- Paradeise, C., & Thoenig, J.-C. (2013). Academic institutions in search of quality: Local orders and global standards. *Organization Studies*, 34(2), 189-218.
- Piwowar, H., & Priem, J. (2013), The power of altmetrics on a CV. Bulletin of the American Society for Information Science & Technology, 39(4), 10-13
- Porter, T. (1996). *Trust in numbers: The pursuit of objectivity in science and public life*. Princeton University Press.
- Power, M. (2004). Counting, control and calculation: Reflections on measuring and management. *Human Relations*, 57(6), 765-783.
- Sawer, M. (1984). Towards equal opportunity: Women and employment at the Australian National University. Canberra: Australian National University
- Shore, C., & Wright, S. (2017). Introduction: Privatizing the public university. In C. Shore, & S. Wright (Eds.) *Death of the public university? Uncertain futures for*

- higher education in the knowledge economy. (pp. 1- 30). New York: Berghahn Books,
- Strathern, M. (Ed.) (2000). Audit cultures: Anthropological studies in accountability, ethics, and the academy. New York: Routledge.
- The Analogue University (2017, March 31). Control, resistance and the "data university": Towards a third wave critique. *Antipode* Retrieved from https://antipodefoundation.org/2017/03/31/control-resistance-and-the-data-university/
- Tse, P. (2012). Stance in academic bios. In K. Hyland, & Sancho Guinda Carmon (Eds.) *Stance and voice in written academic genres. (pp.* 69-84) Palgrave Macmillan.
- Van Krieken, R. (2012). Celebrity society. London and New York: Routledge.
- Vitae (2017). Creating an Effective Academic CV. Retrieved from https://www.vitae.ac.uk/researcher-careers/pursuing-an-academic-career/how-to-write-an-academic-cv/how-to-write-an-academic-cv
- Whitson, J.R. (2013). Gaming the Quantified Self. Surveillance & Society, 11(1/2), 163-176.
- Wildgaard, L. (2014). Just pimping the CV? The feasibility of ready-to-use bibliometric indicators to enrich Curriculum Vitae. In iConference 2014 Proceedings, 954–958. doi:10.9776/14326
- Zillman, D., Angel, M., Laitos, J., Pring, G., & Tomain, J. (1988). Uncloaking law school hiring: A recruit's guide to the AALS faculty recruitment conference. *Journal of Legal Education 38*, 345