

RESEARCH PAPER

The cult of the quantifiable: the fetishism of numbers in higher education

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ABSTRACT

This paper examines the ‘fetishism of numbers’ (Gudeman, 1998, p.1) that has taken hold in restructured, market-oriented institutions of higher education. As all areas of academic life have been rendered down to the quantifiable, and university environments have become dominated by the rituals of counting, numbers have been imbued with a potency of almost preternatural proportions. The points of comparison between the power ascribed to the numerical in diverse mystical, magical practices and the overriding significance accorded to numbers in restructured universities are explored. When the near-obsessive focus on numbers is viewed as a form of fetishism, some of the reasons why numbers have been elevated to a position of excessive importance come to the fore, as does the illogical nature of such reasoning. Although numbers have been valorized on account of their ostensible accuracy, transparency, objectivity and impartiality, this study contends that the present-day fetishism of numbers in higher education is neither rational nor practical. Neither does it ensure fairness and accuracy. Instead, it stems from and fosters delusion, deception, inequity and irrationality, vanity and greed.

Introduction

Counting itself may be logical, but particular ways of counting are not. (Seidenberg, 1962, p.2)

These things, far from being under their control, in fact control them. (Marx, 1976, pp.167–8)

Institutions of higher education in South Africa and elsewhere have fallen under the sway of neoliberal economic imperatives and many of those within them have come to perceive themselves, their colleagues, their students, their own institutions and other universities in terms of calculable, quantifiable criteria. A ‘fetishism of numbers’ (Gudeman, 1998, p.1) has taken hold (Wood, 2018, pp.134–5). Numbers have acquired almost sacred qualities, the act of counting has become ritualistic, and the significance attached to that which cannot easily be quantified and enumerated has declined. Numbers – sometimes augmented by, or substituted with, the alphabetical – have become a talisman. When Masakazu Tanaka (2011, p.132) describes how individuals and organizations have ‘become bound by and obsessed with numbers . . . production quotas, numerical targets and other quantifiable values’, he could be making specific reference to market-oriented universities. Indeed, numbers have come to constitute one of the foremost features of the academic environment, shaping many features of university procedure. Metrical symbols of status and achievement are coveted and extolled.

When the present-day cult of the numerical is viewed as a fetishistic practice, many of the reasons why disproportionate value has been attached to numbers become apparent, as does the illogical nature of such reasoning. The fetishism of numbers is based on a body of myth masquerading

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as objective, logical fact. The fallacies underpinning this myth-making and the neoliberal economic approaches informing them are explored. Although numbers have been foregrounded on account of their ostensibly objective, logical, impartial and reliable qualities, it will become evident that the fetishism of numbers is neither rational nor practical, and neither does it ensure fairness and accuracy. Instead, it stems from and fosters delusion, deception, irrationality and inequity – and also vanity and greed. The inordinate significance vested in the numerical in institutions of higher education will be analysed partly in terms of early ethnographic concepts of fetishism, shaped as these were by colonial perspectives.¹ In various respects, such notions of fetishism are more applicable to present-day institutions of higher education than they ever were to the West African peoples to whom they were originally (and erroneously) applied.

In market-oriented institutions of higher education, the foregrounding of the quantifiable, and the rituals of counting accompanying it, are viewed as part of a process of innovation, since they are supposed to improve efficiency and productivity, while also enhancing transparency and accountability, all of which are believed to increase profitability. Innovation is said to be crucial for the development and success of an organization. However, it will become evident that the pre-eminence of the numerical in contemporary universities is liable to constrain and undermine them in many respects.

The current preoccupation with metrics is indicative of the extent to which the neoliberal ethos, which prioritizes the measurable and quantifiable at the cost of much else, has permeated higher education. In the UK, for instance, neoliberal economic approaches promoting the marketization of the public sector have been shaping the nature and direction of higher education since the early 1980s. Comparable changes have been taking place in South African universities since the 1990s (see Bertelsen, 1998, p.130; Olssen and Peters, 2005, p.314; Collini, 2012, p.22). Accordingly, academic activities have been rendered down to the quantifiable; and the pressure upon university employees to provide measurable evidence of performance is emblematic of the extent to which they and their institutions have been subordinated to the codes of the marketplace, with everything weighed, measured and valued accordingly (see, for instance, Stewart, 2007, p.141; Ozga, 2011, p.145; Wood, 2018, pp.109, 115).

Metrics, magic and divination

Universities resort to numbers for divination, to cast light on present circumstances and future developments, and to provide indications of what might lie in store for those who do not heed the messages numbers contain. Propitious numbers and statistics are invoked in talismanic fashion by employees and departments in the belief that they will ward off misfortune. Authority figures, both internal and external, visit punishment upon individuals, departments and entire institutions by calling upon the magical potency of numbers. Numbers have been accorded the power to determine the course of events in many market-oriented universities, bringing about success, security and material gain – or damage, disgrace and disaster.

Consider, for example, the roles played by the points on a balanced scorecard, number of performance-related targets met, number of publications in prestigious journals, number of citations, journal impact factors, university rankings and league tables, journal rankings, and rankings and ratings of institutions, schools, departments and individuals. Other metrical data, including staff-student numbers, student numbers and numbers of graduates (especially postgraduates), number of course credits, workload allocations, performance ratings, the scores awarded in research and teaching assessments, and other performance metrics are also significant in determining the fates of

¹ The use of the term ‘fetishism’ has been criticized for the way it was employed by European traders, colonizers and writers from the sixteenth century onwards, fostering distorted perceptions of West African people and their belief systems, and forming part of a pretext for colonial domination. Subsequently, the concept of fetishism has been redefined in a range of ethnographic, cultural, socio-political, philosophical and psychological contexts (see, for instance, Freud, 1927; Marx, 1976; Baudrillard, 1981; Bernault, 2013, pp.49–56; McNally, 2012, pp.126–31, 201–10).

institutions and those within them. Key performance indicators (KPIs), used to assess productivity, quality and cost-effectiveness, have major numerical features (see, for instance, Shore and Wright, 2015, p.425). Numbers (of citations, research outputs, H-index, funding) have come to dominate the academic CV.

Numbers-based forms of assessment are perceived in terms of figures of another kind, now that the rule of the cash-nexus holds sway in higher education (Readings, 1996, p.3). The increasing importance attached to grant income metrics, the money accrued through externally funded research grants, rather than the research to which such funding is attached, is indicative of this (see, for instance, Grove, 2017, pp.136, 161 and 201). Financial criteria have come to dominate measurement of performance – individuals, departments, faculties and entire institutions are evaluated in terms of their capacity to deliver VFM (value for money) (Shore and Wright, 2015, p.425). All in all, institutions and those within them are subordinated to the Gates foundation's formula: 'no metrics, no money' (cited in Sauder and Espeland, 2015, p.436).

Consequently, much that is significant in the life of an individual employee, a department or school, a faculty or entire institution, now revolves around the numerical. As Roger Burrows (2012, p.359) remarks, the entire 'life-world of the university is now increasingly enacted' through metrics (see also Gudeman, 1998, p.2; Amsler, 2013, p.7). Alternatively, to adapt an adage attributed to Pythagoras: numbers rule all things in contemporary academia. Comparably, Plato maintained: 'Numbers are the highest degree of knowledge. It is knowledge itself.' Numbers seem vested with a special authority. Surrounded as they are by an aura of objectivity, numbers seem to epitomize that which is factual, precise and logical (Merry, 2011, p.589). Their ostensible simplicity and clarity lend weight to a perception of this kind. Sally Merry (2011, p.588) describes how a numerical indicator appears to offer 'a transition from ambiguity to certainty; . . . and from complex variation and context to truthful, comparable numbers'. Numbers seem to be universally applicable. Moreover, on account of their association with mathematics and science, and their apparent reliability and transparency, numbers seem incontestable and irrefutable (Merry, 2011, p.590; see also Shore and Wright, 2015, p.430). Numbers exemplify accuracy, impartiality and, consequently, fairness. Numbers don't lie (Conley, 2011, p.593).

Numbers are particularly seductive in market-oriented institutions of higher education (Shore and Wright, 2015, p.430; see also Porter, 1996). Numbers seem to be suffused with an almost preternatural potency. Indeed, the power accorded to numbers in higher education has certain metaphorical parallels with the significance ascribed to the numerical in various mystical, magical practices. For instance, numbers feature prominently in the Jewish Kabbalah and in Freemasonry. Certain numbers have been entwined with the supernatural, including three, seven and nine (three times three), sometimes invoked for purposes of magic in Western culture; and then there is the ominous force of the biblical Number of the Beast. Numerology is also rooted in beliefs in the paranormal power of the numerical.

Numbers have been used as a method of divination in many cultures, including the Aztecs, Mayans, Incas and Hindus. Modern reliance on metrical data to cast light on features of market-oriented universities and to predict future events is an extension of a longstanding tradition. The Incas used a *quipu*, a knotted string, for ceremonial purposes and also for recording numerical information. Counting has been interwoven with ritual from ancient times, and may have ritual origins (see, for example, Seidenberg, 1962, pp.9, 2, 32–7). There were elaborate rituals of counting and calculation in Mayan cosmology, interconnected with the Mayan calendar. Just as the Mayan calendar shaped much Mayan spiritual practice, so the new number-centred rites of higher education determine much academic discourse and procedure.

Obsessive compulsive disorders

Numbers have been vested with such authority in diverse contexts that they feature prominently within them, as do associated counting rituals. The focus on the quantifiable and a tendency to

perceive activities and phenomena in numerical terms may stem from idiosyncratic perceptions and strange predilections, rather than practical concerns. For example, an all-consuming focus on specific numbers believed to bring good luck, along with a phobia of numbers associated with misfortune, and compulsive counting are some of the principal symptoms of OCD (obsessive compulsive disorder). Some individuals suffering from OCD claim that certain numbers hold particular significance for them. They feel compelled to count things, including their own actions, over and over again. One such person describes how she focused obsessively on the specific points allocated to her in tests and assignments, certain numbers being lucky and others unlucky: ‘It nearly broke me, as my sense of self-worth often hinged on these grades’ (Zami, 2008). Other individuals describe how their self-esteem depends on the numerical, and how the nature and direction of their lives are determined by specific numbers (Cheryl, 2016). Comparably, present-day academia is characterized by a preoccupation (that may assume inordinate, sometimes irrational proportions) with scores, ratings, ranking levels and the points bestowed on individuals, departments and institutions by internal and external assessors.

The near-obsessive absorption with the numerical, and the rituals of counting accompanying it, fulfil other functions. In universities, as in the business world, much of daily working life is dominated by numbers and notions of professional worth are based on calculable, measurable forms of assessment and systems of quantified control (Lock and Martins, 2011, p.1; see also Burrows, 2012, p.356). In higher education, this stems in part from a desire to reduce the academic milieu, with all its diversity, complexity and unpredictability, to standardized, manageable proportions: “what you cannot measure, you cannot manage” (see Fernandes, 2011). McKinsey, the business consultancy (Head, 2011), makes a similar point: ‘Anything can be counted, and anything you can count you can manage’ (cited in Yiannis, 2012, p.246). Comparably, the counting rituals of OCD are governed by a compulsion to impose order and stability on what might otherwise seem a disorderly, disturbing environment. For instance, someone (Cheryl) describes how she felt compelled to repeat various actions (including washing her hands and closing a door) a certain number of times, stating that if she did not do so ‘then the world would undoubtedly fall apart’. The proponents of neoliberalism and those with OCD have more than a little in common. The points of comparison between the fetishism of numbers in market-oriented institutions of higher education and in the perceptions of those with OCD highlight the extent to which faith in the power of numbers may be illusory and illogical. In the case of those afflicted with OCD, an all-consuming focus on numbers and counting is symptomatic of a disorder, and may in fact intensify it. In various respects, the same holds true for numbers-crazed institutions of higher education, as will become evident below.

Contradictions and contrivances

So many components of higher education, including staff, students, teaching and research, are converted to measurable, quantifiable data that it may sometimes seem as if they only really exist in the eyes of the institutional and external authorities when they take numerical form. Gudeman’s (1998, pp.1–2) observation that, in his institution, ‘some administrators know departments more by their numbers than their members’ is widely applicable.² More broadly, he describes how ‘the administrative elite at many universities seem driven to mediate human relations by numerical figures’. Even elusive, intangible concepts, including three of the key mantras in market-oriented academia (‘quality’, ‘excellence’ and ‘impact’), have been converted into quantifiable entities. Paradoxically, the more these notions have been given ostensibly clear-cut numerical form and, accordingly, the more they have been fetishized, the stranger and more unfathomable they have become.

² Although Gudeman considers this new valorization of numbers particularly in relation to the University of Minnesota, his points are applicable to numerous market-oriented universities in South Africa, the US, the UK and elsewhere.

Like holiness or faith, quality traditionally stood for something intrinsic and intangible that could not be weighed or measured. Since quality cannot be easily defined, its meaning tends to be determined by its users. For instance, South African academic Sioux McKenna (2011, p.3) describes the way in which quality and other related terms emanate from and express neoliberal ideological concerns. Ian Roper (2004, p.120) remarks that, as a result of the way quality has been defined by quality assurance divisions, the concept has become closely connected ‘to utilitarian, market-based assumptions of what constitutes “goodness”’ (Wood, 2018, p.102). Quality has become entwined with neoliberal economic approaches and subjected to quantification. George Ritzer discusses the ‘calculability’ that comprises a basic element of one of the core principles underpinning the corporatization of higher education, rationalization. According to Ritzer (1999, p.82), rationalization entails:

an emphasis on things that can be calculated, counted, quantified. It often results in an emphasis on quantity, rather than quality. This leads to a sense that quality is equal to certain usually (but not always) large quantities of things.

Roger Southall and Julian Cobbing (2001, p.16) concur, concluding that, ironically, quality has come to stand for that to which it is diametrically opposed – quantity (see also Wood, 2018, pp.102–3; Wood, 2010b, p.7). Consequently, the more quality has been quantified, the more it has been drained of substance and meaning. Indeed, this ephemeral notion tends to collapse under the weight of the quantity heaped upon it.

Thus it is with ‘excellence’, one of the principal corporate mantras in contemporary academia; academia, which has been suffused with the magic of metrics. Institutional excellence, for instance, tends to be defined in quantifiable terms (see, for instance, Ozga, 2011, p.145). However, the extent to which excellence – a vague and vacuous concept – has been given fixed, numerical form renders it all the more meaningless. Essentially, present-day notions of excellence often seem to imply that institutions, faculties, departments or individuals excel at accumulating quantity, but not much else.

Some of the foremost rituals of counting in present-day academia are associated with ‘impact’, and consequently this notion has become the focal point of many numbers-related obsessions. Like quality and excellence, ‘impact’ is a nebulous concept that has been converted into an enumerable entity (see, for instance, Spence, 2019). But this attempt to give substance to the insubstantial may seem contrived, even counterfeit, as may attempts to provide evidence of impact by amassing the calculable items that determine it. Journal impact factors are based on citations, yet the latter may be generated by means of diverse forms of fabrication, manipulation and trickery, as will become evident below.

Metrics mania and fetishism

The ‘metric fetishization’ (Spence, 2019) that has taken hold in market-oriented institutions of higher education is characterized by an obsession with rankings, league tables, ratings, publications in high-status journals, citations, journal impact factors and the numbers that determine them. The fetishism of rankings (Parker and Jary, 1995, p.331) that has come to characterize many universities worldwide is a distinctive feature of this (see also Parker, 2014, p.282; Spence, 2019; Naidoo, 2018, p.613). Stefan Collini (2012, p.17), for instance, alludes to the fixation with league tables, while Dennis Tourish and Hugh Willmott (2015, pp.43, 37) discuss the rankings mania that has taken hold in business schools in the UK. They describe how many such schools and the academics within them focus so intently on league tables and the prestige associated with them that they lose sight of anything of broader social and intellectual significance. Such preoccupations permeate university environments in many countries, making themselves felt in diverse disciplines and extending through institutional hierarchies. Shore and Wright, for instance, observe that the seriousness that university managers in the UK attach to rankings is almost fanatical (2015, p.428).

Preoccupation with rankings has given rise to a fetishization of journal lists, and a cult of publication in highly ranked journals (Macdonald and Kam, 2017, p.651). Hugh Willmott (2011, p.430), for instance, compares footwear fetishism to the fetish-like importance of elite journal lists, such as the ABS (Association of Business Schools) list. In both cases, an ordinary object acquires extraordinary properties. Just as shoes become objects of sexual arousal, so the ABS list is imbued with the capacity to transform an unexceptional paper into a high-quality article. As various commentators (Macdonald and Kam, 2007, p.641) remark, journals on lists of this kind are viewed as excellent and consequently the research they contain tends to be regarded as excellent too (see also Johnson and Podsakoff, 1994). Martin Parker (2014, pp.286, 289) describes a UK business school where the publication of a paper in an ABS four-star journal was viewed as the sole criterion of academic value.³ Eventually, academic work in the school became geared towards generating calculable outputs, in terms of which publication in ABS-listed journals was prioritized. Such conditions breed vanity and an intellectual tunnel vision of the sort Parker describes. Nowadays, as Crawford Spence (2019) notes, many researchers tend to congratulate themselves (and sometimes one another) on ‘big hits’ in ‘top journals’ (see also Willmott, 2011, p.430).

Journal impact factors have become the focus of another type of cult. These items have been vested with an almost preternatural force, determining the fortunes of the journals to which they are attached and the researchers whose papers are published therein. Consequently, they have been focused upon almost compulsively, as have citations, used as a key means of gauging the quality of academic research.

Collection: H-index: 29; total citations: 2962 (2505 without self citations); citing articles: 1953 (1852 without self-citations). Average citations per item: 25.18. The most highly cited paper has received 442 citations. From Google Scholar: H-index: 35 (22 since 2012); i-10 index: 88 (53 since 2012), total citations 4377 (2398 since 2012)⁴

Like mystical objects of contemplation, citations arouse awe and apprehension, imbued as they are with the capacity to elevate or (should they be inadequate or absent) undermine.

The points of comparison between numbers-obsessed higher education and certain concepts of fetishism are worth considering further. The *Oxford English Dictionary* defines fetishism as ‘an excessive and irrational commitment to a particular thing’. As the following sections will show, the present-day worship of the numerical is essentially inordinate and illogical, based as it is on illusion, deception and the workings of the imagination. The idea of the fetish developed in the sixteenth and seventeenth centuries as a result of encounters between Portuguese and other European traders and the peoples in West African coastal areas. The African peoples with whom the Europeans had dealings attached value to apparently worthless objects, which they refused to exchange for costly items such as gold (Pietz, 1985, p.5; 1987, p. 23; see also Tanaka, 2011, p.134; McNally, 2012, p.201). From this perverse, inexplicable rejection of the ‘logical’ principles of the western market economy, western merchants and writers devised the concept of fetishism, denoting a superstitious reverence for items of no mercantile value (Pietz, 1987, pp.23–4; McNally, 2012, pp.201–4). Thus, Europeans viewed fetishism as an incorrigible ‘silence before the gods of the market’ (McNally, 2012, p.203). The fetishism of numbers in restructured institutions of higher education is

³ In South Africa, it is as if research outputs that do not appear in one of the accredited journals listed by the DHET (Department of Higher Education and Training) do not exist in any meaningful sense. Work that is published elsewhere is generally viewed as inferior, not meeting the standards of rigorous scholarship to which the journals in the lists are assumed to adhere. Such research is also deemed worthless in a more significant sense, for universities receive state subsidies only for publications in DHET-listed journals.

⁴ Extract from academic CV (author’s name and other details withheld).

the antithesis of this. Metaphorically speaking, the present-day cult of the quantifiable is a core component of the worship of the divinities of the market.

The concept of fetishism has various dimensions, as the origins and associations of the word ‘fetish’ suggest. In 1757, Charles De Brosses concocted the term *fétichisme* and in *Du Cult des Dieux Fétiches* (1760) described how apparently unremarkable objects could be perceived as objects of veneration and endowed with a numinous potency (Pietz, 1985, p.7; Dant, 1996, p.497; McNally, 2012, p.203). Prior to this, in the course of the interactions between Europeans and West African peoples from the sixteenth century onwards, the pidgin word *fetisso* had been employed. *Fetisso* stemmed from the Portuguese word *feitiço*, which denoted magical practice or witchcraft in the late Middle Ages. In turn, *feitiço* derived from the Latin *facticius* (or *factitius*) meaning manufactured. The adjective was also associated with artifice and fakery, as the term ‘factitious’ suggests (Pietz, 1985, p.5, 1987, pp.23–5; Tanaka, 2011, p.134; McNally, 2012, p.202). As these antecedents of the term ‘fetishism’ intimate, fetishized commodities are surrounded by an aura of enchantment. They also have meretricious aspects in that the value ascribed to them derives from surface appearances and symbolism, rather than from any intrinsic merit (Pietz, 1987, p.25).

Pietz makes a point that has bearing on this. He describes (1993, p.136) how De Brosses depicted aspects of West African religious practices as ‘the fetish worshipper’s desire-driven illusion’ (see Dant, 1996, p.497). Although colonial perceptions of this kind have often been criticized, De Brosses’s description could be applied in the modern academic context, in which the fetishism of numbers is characterized in part by a mixture of desire and delusion. Indeed, the special status accorded to the numerical, based in part on perceptions of numbers as rational, accurate and objective, is illogical and misplaced. As the following section will show, numbers can be deceptive, subjective, unstable and easily manipulated. They can also sow confusion and undermine that which they purport to upgrade.

Symbolism, semblance and subjectivity

The value ascribed to a research output hinges on metrics, rather than merit (Wood, 2010b, p.7; see also Shore and Wright, 1999, pp.566–7; Burrows, 2012, pp.356, 359). As UK academics Stuart Macdonald and Jacqueline Kam (2007, pp.640–1, 651) remark, a research output exists above all as a unit of measurement. What is published is not as important as *where* it is published and what researchers have to say is less important than the number of times their work is cited (see also Shore and Wright, 1999, p.569; Willmott, 2011, p.437; Spence, 2019). This is all too evident in the following extract from an academic CV:

Webpage (w. full publication & presentation list): [The above extract is so laden with citation-related metrics that information about the research that gave rise to them is reduced to a URL. Relegated to a website, research is sidelined, to make way for numerical data. Indeed, many university managers have become so metrics-absorbed that the research outputs that generated them may seem of lesser consequence. It is often said that deans can count, but not read \(Gallup and Svare, 2016\).](http://(URL omitted) Web of Science Citations (all indexes, excl. self-citations) 2007-2017: 231, h-index:9/ 15(Total 278, h-index 9/18): updated 2017-04-21 Google Scholar Citations 2012-2017: 553, h-index: 12 (Total: 859, h-index 15) Updated 2017-04-21.⁵</p>
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Meanwhile, many journal editors may focus so intently on the numbers that determine their journal’s position in journal rankings that they lose sight of what their journals contain. As Tourish

⁵ Extract from academic CV (author’s name and other details withheld).

and Willmott (2015, p.42) observe, when journal rankings and impact factors matter more than ideas to journal editors ‘something profoundly important can be lost’. Since top rank academic journals have been fetishized, many academics tend to be coaxed, coerced and bribed (incentivized) to publish their work in such journals, even if these are not appropriate outlets for their research (see, for example, Tourish and Willmott, 2015, p.42). Such publications, which exert a seductive allure on account of their metrical status, attract large numbers of submissions, which works to their advantage. Since the number of contributions far exceeds journal space, most submissions must be rejected. The importance attached to journal rejection rates affords prestige to a publication for what it does not contain, yet another numbers-related absurdity.

The disproportionate significance now ascribed to the numerical in higher education has given rise to other paradoxes. These stem especially from the notion that numbers are fixed, factual and impartial, providing certainty and clarity in the midst of the abstractions of academia. Yet value – that which numbers denote – lies at the heart of the fetishism of numbers in higher education. As David McNally (2012, pp.126–7) observes, although capitalism foregrounds material objects, it fetishizes the immaterial, the invisible, indefinable notion of value. Value is a collective fiction of a kind, based on semblance and symbolism rather than substance. Marx (1976, p.128), for instance, alludes to the ‘phantom-like objectivity’ with which notions of value are imbued (see also McNally, 2012, pp.206–7). Consequently, the value ascribed to a specific item is subjective and provisional, based as it is on the way it circulates within what Arjun Appadurai (1986, p.4) depicts as ‘different regimes of value in space and time’. Commodity fetishism, which Mondher Kilani terms ‘the central myth of capitalist culture’ (1983; cited in Lindstrom, 1993, p.9), is a case in point.

When items become commodified, what they symbolize – prosperity, achievement, prestige – become associated with those who possess them (see Baudrillard, 1981, pp.91–3; Otto, 2004, pp.210–11). Jean Baudrillard (1981, pp.91–2) describes how designer brand names act as ‘force dispensers’ of status and privilege in many societies, symbolically bestowing these qualities on the owners of the commodities they adorn. Thus, the brand name signifying value is fetishized (see Dant, 1996, p.504), and if this emblem were to be detached from the commodity and placed outside a consumer capitalist context, the glamour surrounding it would dissipate, as would the aura of elitism and affluence surrounding its owner. Accordingly, a top rank journal, with a 10+ impact factor and a Gucci handbag are comparable in various respects. Both the journal and the handbag would be unexceptional without the impact factor and the Gucci emblem, and in the absence of a metrics-fixated, consumerist environment.

Discrepancies, paradoxes and absurdities

The overriding significance attached to that which can be easily measured and enumerated has become both symptom and cause of absurdity in the numbers-crazed university (Tourish and Willmott (2015, pp.5, 51). Common sense is abandoned in an uncritical focus on measurement (see also Spence, 2019; Collini, 2012, p.159). Those who fetishize specific objects or practices are, in a sense, in the grip of something beyond themselves. Driven by these forces, they may come to lack independent volition and their critical capacities may be held in abeyance (see Pietz, 1987, p.23). Spence (2019), for instance, alludes to ‘the suspension of analysis’ that often characterizes ranking systems.

The illogicalities and inanities that stem from an obsessive focus on the quantifiable take a variety of forms. For example, while researchers are encouraged to publish papers in journals with a limited readership (Parker and Jary, 1995, p.335), outputs that are less easily measurable but often more significant, such as books and book chapters, have declined in importance. Outputs that can play key roles in advancing academic research but are not regarded as measurable, such as book reviews, referees’ reports for journals and mentoring advice for young researchers are in a similar

category (see Macdonald and Kam, 2007, p.643; Parker, 2014, p.285). The following extract from a CV is indicative of the way in which this state of affairs can shape research priorities:

115 peer-reviewed articles, 5 book chapters. From Web Of Science Core Collection: H-index: 29; total citations: 2962 (2505 without self citations).⁶

The CV emphasizes the number of articles published and related citations. However, there are few book chapters (which are harder to quantify) and the author's list of publications includes no books. If they were subjected to the rituals of counting, many works of great scholars and writers would look insubstantial. For instance, Franz Kafka produced only two books, one incomplete novel, and a few short stories and parables. And Ludwig Wittgenstein, as Roy Wilky reminds us, produced 'only two short books in the whole of his career' (cited in Anthony, 1994, p.58; see also Parker and Jary, 1995, p.336).

While appearances carry weight in a numbers-obsessed academia, what lies below the surface may be disregarded. Metrics 'may provide us with distorted knowledge – knowledge that seems solid but is actually deceptive' (Muller, 2018, p.3). Many metrical emblems of prestige and achievement – publications in top-rank journals, citations and high-status impact factors – seem much more solid than they really are. Numerous commentators have noted that an increase in the number of papers in prestigious journals is linked with a decrease in the quality of such papers, accompanied sometimes by a decline in the journals themselves (see Berg and Seeber, 2016; Spence, 2019). For instance, Simon Marginson reports the number of 'world leading' 4* and 'internationally excellent' 3* research outputs produced in the UK increasing to 72% by 2014. Yet, it appears that, as more work is published in quality journals, the less it has to offer (Marginson, 2014; see also Spence, 2019). As Mats Alvesson, Gabriel Yiannis and Roland Paulsen (2017, pp.2, 4) conclude, there is 'so much noise, so little to say' (see also Willmott, 2011, p.435; Muller, 2018, p.79). Such research tends to be numbers-driven, fuelled primarily by the desire to rack up publications, preferably in top-rank journals, and then to accrue lots of citations. Small wonder, then, that the preoccupation with metrics has generated a proliferation of publications which 'are both uninteresting and unread' (Muller, 2018, p.79).

A great deal of the research generated by 'the pursuit of mindless measurement' is remarkable primarily for its tedious uniformity (Tourish and Willmott, 2015, p.1). Hugh Willmott (2011, pp.430–8) notes the incentive in UK academia to work on established, conventional subjects, since such work is more likely to be favoured by top-rank journals (see also Macdonald and Kam, 2007, pp. 645, 647; Wilsdon *et al.*, 2015, p.85). Tourish and Willmott (2015, pp. 37, 41) make a similar point about the effect of the journal ranking lists in the *ABS Guide*, with its formulaic method of assessing the calibre of papers and journals. They maintain that the *Guide*, which has become influential in the UK and elsewhere, has encouraged the production of dull, homogeneous work, designed to conform to standardized notions of excellence.

For journal list fetishists, the pleasure of scholarship does not reside as much in undertaking the research as in moulding and squeezing it into a form – in terms of style and content – that we anticipate will render it acceptable to publication in the targeted top ranked journal. (Willmott, 2011, p.438)

Such predilections are by no means restricted to business schools, or even to the UK. Numerous research outputs in diverse disciplines in the US, South Africa and elsewhere are similarly bland, 'well-crafted' as Spence (2019) ironically puts it to win the approval of journal editors by complying with the academic orthodoxies endorsed by editors and those who may cite the papers (Spence, 2019; see also Macdonald and Kam: 2007, pp.647–8). Grant income metrics have

⁶ Extract from academic CV (author's name and other details withheld).

produced similar consequences. Pressure on researchers to acquire external funding has encouraged the production of short-term, superficial studies, often undertaken by large collaborative projects, which reinforce mainstream perspectives. Such work tends to accord with journal editors' ideological preferences and so is publishable. It therefore meets funding requirements. As one UK grant holder remarked of the system, 'It forces you to publish, and it forces you to play safe' (Grove, 2017, pp.128–9, 199; Gallup and Svare, 2016).

Fakery, fraud, game-playing and greed

Although many unremarkable and uninteresting academic papers are published, they may nonetheless accrue a substantial number of citations. Thus, the impact factor of the journals publishing this lacklustre work rises. This happens through academic game-playing, fraudulent behaviour that is encouraged – and widely exonerated – by reliance on numbers. The Latin term *facticus* (from which 'fetish' derives) can denote a counterfeit item constructed in a deliberate attempt to deceive (Pietz, 1985, p.5; 1987, pp.23–5; McNally, 2012, pp.201–2). In contemporary academia, metrical data are distorted by various forms of fabrication and manipulation. As South African academic Damian Ruth (2001, p.97) asks: 'Do we reward quality or the ability to "play the game"?'⁷ Citations, upon which academic reputations, institutional status and journal rankings depend, are a case in point. There is much at stake. As an academic colleague in the UK remarked, 'those doing well out of a particular game tend to be reluctant to challenge its rules (or even the point of the game at all)'.⁸

Impressive citation counts may be manufactured by various ploys, as numerous commentators note. There is, for instance, self-citation, and the advantages of multiple authorship are numerous. If co-authors all repeatedly cite their joint paper, the number of citations of the paper soars, exercising 'a massive impact on the impact factor' (Macdonald and Kam, 2007, p.645; see also Parker and Jary, 1995, p.329). Citations may also be inflated through mutual favours: one researcher cites the work of another, who cites the work of the first researcher in return. Citations may also stem from a range of other non-academic factors, including self-interest and individual whim (Lindgren, 2011, p.8; see also Burrows, 2012, p.361). Some academics submit their work to renowned international journals only to have editors bring to their attention the advantages of citing more papers from the journals to which they have submitted. Chief among these advantages is the publication of the submitted papers.⁹ This is 'coercive citation', which has no purpose other than boosting a journal's impact factor and hence the value of the journal to editors, publishers and authors.

The more citation counts and consequently journal impact factors draw on counterfeit statistics, the more untrustworthy these become, a consideration that carries little weight in a metrics-crazed milieu. It is of no interest to those eager to exploit a system that lends itself so easily to exploitation. Those skilled in such matters may readily acquire not only sizeable citation counts, but also lengthy publication lists (Shore and Wright, 2015; see also Lawrence, 2007, pp.583–5). There are direct returns to this behaviour, but also indirect return in terms of the boost to individual reputation afforded by amassing metrical tokens, fuelling what Collini (2016) calls 'ludicrous posturing and self-aggrandizing'. For instance, an academic at another South African university sent the following e-mail to the vice-chancellor and other senior managerial staff in 2018:

In 2017, I set a publication record (also my all-time best at that point) of 50 published/ accepted papers in this university in only one year. This year, I broke that record with 54 publications, all in

⁷ Ruth alludes specifically to performance appraisals, although his comment is also applicable to other metrics-governed areas of higher education.

⁸ E-mail correspondence with UK academic (name withheld), October 2015.

⁹ These observations derive from discussions with colleagues (names withheld) at various universities in South Africa and elsewhere, March–April 2018.

accredited journals (see attached). It is not yet the end of 2018 and with 13 other articles in advanced stages of review, I am optimistic that we will hit 62 publications in accredited journals before the end of the year.¹⁰

Publishing to be counted rather than to be read has encouraged the proliferation of predatory journals.¹¹ These publish papers, irrespective of quality, in return for payment from their authors, an arrangement easily confused with the article processing charges made for open access publication by reputable academic publishers. But predatory journals go out of their way to disguise themselves as reputable journals and may be defended to the hilt by authors who have published with them and by the universities employing these authors (Beall, 2017). Universities receiving government payments for publications in journals have gone out of their way to defend predatory journals and prevent their identification. There are now thousands of these predatory journals, their behaviour undermining academic scholarship. Such behaviour would have little impact were it not complemented by an academic publishing industry content to produce the metrics by which academic performance is measured and rewarded in higher education. There are areas of higher education beyond research in which metrics obscure or belie the data on which they are based. Michael Shattock (2018, p.2), for instance, examines the ways in which this distortion affects university teaching. Far from being transparent, impartial and truthful, numbers may conceal more than they reveal, reinforce imbalances and inequities, consolidate the status quo and serve the interests of the elite.

Privilege, power and marginalization

There are various reasons for this state of affairs. First, university metrics are standardized, eliding the differences between institutions, the specific dynamics of their socio-economic and political contexts, and the ways in which such factors shape their performance. In South Africa, for instance, there are striking contrasts between historically advantaged institutions (HAIs), historically white institutions, such the University of Cape Town, the University of the Witwatersrand, Rhodes University and the University of Stellenbosch, and many of the historically disadvantaged institutions (HDIs), historically black institutions, including the University of Limpopo, the University of Venda and the University of Fort Hare. The HAIs, some of which are highly ranked and cater particularly for the educational and economic elite, and the HDIs, which draw most of their students from low-income urban areas and economically deprived rural regions, are still characterized by contrasting status and infrastructure, and very different financial and material resources. Similar imbalances manifest themselves elsewhere. In the UK, there are marked distinctions between the Russell Group of universities, centres of status and privilege, which receive two-thirds of the country's research funding, and the vast majority of universities, relegated to subordinate positions in the national institutional hierarchy (Wood, 2018, p.9).

However, when subjected to numbers-based systems of evaluation, such diversity and discrepancies are decontextualized (Merry, 2011, pp.583, 586). In consequence, a heterogeneous array of universities in South Africa and worldwide, affluent and economically deprived alike, in metropolises and remote rural areas, with diverse histories, organizational identities and functions, are compelled to compete as if they are all on the same level playing field (see, for instance, Ordorika, 2009, p.74; Gladwell, 2011, pp.3–6; Pusser and Marginson, 2013, pp.553–4, 562). Contestation of this kind operates in the interests of wealthy, powerful and prestigious institutions, reinforcing economic and racial disparities. This is borne out in South African higher education, as Andrew Nash (2006, p.6) contends. Instead of remedying the imbalances imposed by apartheid on higher education, reliance on quantitative methods of appraisal furthers Robert Merton's Matthew effect. In the Gospel according to Matthew, more is bestowed upon those who have in abundance, while those who are lacking are

¹⁰ E-mail forwarded by individuals (names withheld) at another South African university, October 2018.

¹¹ Many identified in Jeffrey Beall's list of predatory journals (Anon., 2020).

stripped of what little they have (Merton, 1988, pp.608–9; see also Macdonald and Kam, 2007, p.650). In South Africa, underperforming universities are inevitably those upon which the burden of the past rests most heavily, historically disadvantaged institutions, attended particularly by black students from economically deprived areas (Wood, 2018, pp.183–4; Maluleke, 2011, p.29).

Rankings and league tables, which play key roles in the lives of universities, benefit relatively affluent institutions and the educational elite. When quantifiable features such as faculty–student ratios, research funding, resources and revenue, student satisfaction, reputation, research productivity, graduate employability and student retention and completion rates are calculated, privileged universities organized to provide proof of performance in these areas score much better than less fortunate institutions (Wood, 2018, p.183; see also Pusser and Marginson, 2013; Shattock, 2018; and Gladwell, 2011). Retention and completion rates often tend to reflect privilege (Shattock, 2018, p.21). For instance, many South African students from economically disadvantaged backgrounds may be ill-equipped for university studies, and thus more liable to drop out than those from families which can afford to provide a good education.

Graduate employability statistics are similarly economically slanted, detached as they are from their socio-economic context. In South Africa, for instance, the high student unemployment rate is more indicative of the country's economic predicament than any shortcomings in its institutions of higher education. Prior to the Covid-19 pandemic, unemployment was approximately 40%, but now it is far higher. Graduates, from prestigious and cash-strapped institutions alike, battle to find employment. However, graduates from universities in low-income areas struggle particularly hard (see Sikhakhane, 2016, p.11; Chang, 2010, p.184; Elliott and Atkinson, 2007, pp.78–9; Giroux, 2007, pp.109–10).¹²

Attempts to measure student satisfaction are comparably flawed, especially since various stratagems are often employed to buy the good opinion of students. Universities worldwide see their students as customers being sold the university product (see Ritzer, 1996). Those able to offer their students the best recreational opportunities and facilities, congenial and comfortable living conditions and easy access to elaborate, expensive technological resources score highly in terms of measured student satisfaction.

Affluence and elitism affect university metrics in other respects. Reputation scores tend to be based on assessments carried out by top-level personnel at other universities (Gladwell, 2011, pp.10–11). Reputation may frequently hinge on rankings, since many university presidents may know little or nothing about the many universities they are required to assess. Thus, the reputation score they confer on a specific institution may depend on its ranking status. In a strange sort of circularity, then, scores accorded for reputation may be determined by rankings, which are shaped in part by reputation scores. Consequently, as Pusser and Marginson (2013) note, rankings may often be measures of institutional prestige, wealth and power, reflecting predetermined university hierarchies (see also Gladwell, 2016, p. 6).

Commodities and control

Numbers may not be what they seem, shaped as they often are by prejudices, trickery, manipulation and diverse omissions and inaccuracies. Conversion of everything (even people and abstract, intangible concepts) to calculable, measurable data is symptomatic of the cult of the calculable. While many of those who fetishize numbers are intellectually equipped to perceive the shortcomings of university metrics, they view the numerical as a higher power presiding over higher education and subordinate themselves to it – just as the fetish-worshipper becomes subjugated to the fetishized object, irrespective of its form and substance.

¹² For instance, several years ago unemployed university graduates staged a protest outside Fort Hare university, an HDI in an economically embattled area, drawing attention to the fact that their society seemed to have little use for their knowledge and skills (Wood, 2018, pp.64–5).

Paradoxically, then, universities and those within them become dominated by that which they generate – the numbers upon which survival and future prospects depend. Marx discusses how, as the worker becomes separated from the product of her labour, the product comes to hold sway over the producer: ‘These things, far from being under their control, in fact control them’ (Marx, 1976, pp.164–8). Similarly, McNally (2012, p.37) describes how ‘people become subordinated to things and powers of their own making’. Commodities may seem to possess a numinous power comparable with that attributed to spiritual forces:

In order, therefore, to find an analogy, we must have recourse to the mist-enveloped realms of the religious world. In that world, productions of the human brain appear as independent beings endowed with life and entering into relations both with one another and the human race. So it is in the world of commodities and the products of men’s hands. (Marx, 1976, p.65)

There are certain metaphorical points of comparison between the mist-enveloped realms of the religious world, in which mystical forces preside over the lives of those whose perceptions brought them into being, and higher education. Marx depicts the products of human labour as independent entities, influencing human beings, including those that produced them, and shaping the nature and directions of their lives in various respects. Similarly, a fetish affects the context within which it is valued and the lives of its devotees, directing their actions and moulding their beliefs (Pietz, 1987, p.43; Dant, 1996, p.2). This is very much the case in numbers-obsessed academia.

For instance, Burrows (2012, pp.361–2) maintains that the journal impact factor has been so highly valorized that many academics, administrators, journal editors and publishers ‘cannot help but reorient their actions towards it’. He also describes how the citations-based h-index, used to measure the quality of individual research, exercises a comparable effect on many academics, reshaping their notions of the significance of their own publications and those of others. Their research aims and objectives may be similarly realigned. The desire to publish in top-rank journals has come to determine the nature and direction of much research, so much so that other areas of academic work suffer in consequence. The all-absorbing focus on rankings and league tables has constricted the vision and intellectual concerns of journal editors and academic publishers. In their craving for citations, academics and university managers lose sight of research output, focusing instead on the number of citations which, like so many barnacles, may adhere to it.

Metrics have governed not only the nature and direction of individuals’ professional lives, but also their personal relationships and their sense of self-worth. The self-esteem of many university employees has come to be based on how many metrical tokens of prowess and prestige they accrue (Shore and Wright, 2015, p.429). Many university employees become so caught up in the fetishization of numbers that they perceive the value of their colleagues and the success of their schools, departments and institutions in terms of numerical units of measurement (Wood, 2018, pp.134–5). Numerical forms of assessment foster perceptions of this kind, while also encouraging tensions and rivalry and giving rise to new institutional and interpersonal hierarchies:

The new audit norms focus on adherence to selective performance indicators to produce a quantifiable score that is then used as the basis for pitting department against department and institution against institution. Thus a pecking order is created between those departments ranked as 3, 4, and 5* . . . Increasingly that ranking system is also being applied informally to individuals, thus creating new ways of conceptualizing colleagues as, for example, ‘a 3b’, or a ‘5’ researcher. (Shore and Wright, 1999, p.569)

The numbers don’t add up

For both Marx and Freud, fetishism entails ascribing qualities to items they do not actually possess (see also Dant, 1996, p.495). Early Western notions of West African fetishism emphasized what was perceived as an irrational and deluded reverence for material items of no mercantile worth. In 1744, William Smith (1744, p.6) had this to say about the peoples in Guinea and their belief systems:

[E]very one of them have [sic] some Trifle or other, to which they pay a particular Respect, or Kind of Adoration, believing it can defend them from all Danger's [sic]: Some have a Lion's Tail; some a Bird's Feather, some a Pebble, a Bit of Rag, a Dog's Leg; or, in short, any thing they fancy: And this they call their Fittish, which Word only signifies the Thing worshipped, but sometimes a Spell, Charm or Inchantment.

One has only to substitute such terms as *citations*, *impact factors*, *rankings*, *ratings* and *publications in quality journals* for the bird and animal body parts and the other items in the extract to cast new light on numbers-crazed higher education.

Freud (1927) describes a fetish as that which lacks independent significance, but derives its importance from the way in which it symbolizes or acts as a substitute for something else, be it physical or imaginary. Thus, the fetish represents a 'spurious, surrogate object of desire' (Apter, 1991, p.4). Freud's point has a certain resonance in higher education, where the marginalization of academics has been a corollary of the marketization of academia. In this milieu, the fetishistic reverence for numbers serves as a substitute of a kind. Indeed, it stems from a sense of disempowerment, intertwined with a yearning for that which bestows status and privilege, however short-lived and illusory.

The traditional cores of academic life, teaching and research, have been increasingly downgraded, distorted and displaced, becoming subordinate to metrics (Greene *et al.*, 1996, p.1). Much of the passion many academics once felt for their work has been extinguished by metrics. This is a feature of fetishism which involves repudiating or repressing key aspects of the human experience, such as religion, sexuality and human labour (Tanaka, 2011, p.134).

The fetishist may inhabit a dream world in which the fetish may be so all-absorbing that his or her lived experience, with all its shortcomings and predicaments, may seem of little consequence (Tanaka, 2011, pp.140, 142). Commodity fetishism reaches its zenith when the commodity is accorded such a pre-eminent position that it 'is all one sees: the world one sees is its world' (Debord, 1983, pp.36, 42). In numbers-driven higher education, the all-consuming focus on metrics distracts many university employees' attention from other issues. These include the precarious nature of academic employment, institutional imbalances and inequities, and the consolidation of control in market-oriented universities by a managerial elite. Inevitably, the fetishization of a specific commodity entails self-deception and the deception of others (see Debord, 1983, p.2).

The ascendancy of numerical, statistical information in market-oriented universities tends to be justified on the grounds that it is a reliable form of assessment, designed to improve university performance. This is redolent of principles underlying early nineteenth-century statistics which was 'very much a *moral* science, insisting on the perfectibility or "improvement" of society on the basis of accurate measurement of its raw materials' (Pels, 2003, p.248). Similarly, the notion that the evaluation and scrutiny of metrical data can 'reform' or 'modernize' higher education underpins the process of innovation in many restructured universities (see, for instance, Peters, 1992, p.126; Orr, 1997, p.61).

Statistical discourse which draws conclusions from facts and figures becomes charged with a magic of a kind in that it is believed to offer exceptional insights into present events and cast light on future developments. Statistics have become vested with a mystical authority, comparable with that attributed to an occult practitioner. Adapting Marx's depiction of commodity production, Mark Maguire alludes to 'the magic and necromancy inherent in rendering into numbers' (2015, p.434). Describing the growing reliance on statistics in nineteenth-century Western society, Geschiere (2003, p.177) notes that:

both statistics and its nineteenth century counterpart, spiritualism, were basically about acquiring an extravisionary capacity – a 'supervision', as Pels calls it. Indeed, in many respects, statistics have become the modern language of divination. Like the language of the *nganga* [occult practitioner], statistics have acquired a sacrosanct status, although this status is open to different interpretations and very hard to verify.

And yet, much may elude quantification. As Gladwell remarks, 'it can be surprisingly hard to measure the variable you want to measure – even in cases where that variable seems perfectly

objective' (Gladwell, 2011, p.6). Statistical data can be haphazard and misleading. For instance, the South African unemployment rate is around 30%, according to official statistics. However, as indicated above, unemployment has been estimated to be over 40%. The official figures are an extrapolation from tax returns (which only those above a certain income level are required to submit) and census data. These tend to be full of lacunae, partly on account of the shifting population in informal settlements, and because many of those in little-known villages and far-flung rural areas may be beyond the reach of census takers. Many other statistics (public opinion polls, rape figures, Covid-19 infections, suicide data and so on) are also unreliable.

How good are these numbers? . . . The short answer is that the numbers are poor. This is not just a matter of technical accuracy. The arbitrariness of the quantification process produces observations with very large errors and levels of uncertainty. The numbers game has taken on a dangerously misleading air of accuracy, and the resulting numbers are used to make critical decisions that allocate scarce resources. (Jerven, 2013, p.xi)

Much the same might be said of numbers-obsessed higher education, in which measures of academic performance have become indicators of academic worth in a system that is palpably flawed. Fetishism instils unquestioning support for the system, especially among those skilled or powerful enough historically to work the system to their own advantage.

In conclusion, then, the proponents of neoliberal ideological trends and their acolytes in contemporary higher education have certain features in common with the adherents of various spiritual and occult persuasions. All these groupings, whether economic, educational or esoteric, attach profound importance to numbers, believing that they can speak deeper, more significant truths than those contained in words. Yet, the numerical is as subjective and subject to diverse interpretations as the verbal. The authority now accorded to numbers in contemporary higher education draws, in various respects, on mystically charged perceptions, myth-making and a misplaced faith in the magic of metrics.

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