Humanities, Citations and Currency: Hierarchies of Value and Enabled Recolonisation

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Abstract

A comparative analysis examines the relevance of journal measurement indices for the Humanities and the Sciences. It explains how different measurements work, what they measure and their impact on the integrity of research, paradigm change and citation levels. The increasing use by university auditors of impact factors as performance management and research output indicators is critically examined with regard to implications for the humanities. The effect of this neoliberal approach on African-based academic developments is examined, as are the intellectually re-colonising effects of such systems.

Keywords: impact factors, citation, DHET incentive, publishing, South Africa, metrics

Ninety percent of academic publications are never cited (Meho 2007). Eighty-two percent of 2.5 million English-language Humanities articles published in 28 100 journals during 2014 in A (narrowly focused, theoretical) and B (wider focus, empirical, phenomena-driven), ranked journals, lack citations. The estimated figure for social science is 68%, medicine 12%, and 27% for the natural sciences. On average, 20% of all articles account for 80% of all citations, while only 0.5% of all 38 million articles cited between 1900 and 2005 garnered more than 200 citations (Hoffman 2017; Baker 2018; also see Larivière 2009).

This analysis focuses on the (i) political economy of citations in the humanities in South Africa; (ii) it reflects on the status of selected small communication African journals in examining the topic of citation and of measuring impact. Finally, (iii) the study discusses policy implications for the sector, including the rent-seeking behaviour of authors required by South African university auditors. The article shifts between international and South African situations, and defines different kinds of metrics and their relevance to the humanities.

The South African Case

The top 8 or so South African research-led universities strive for global visibility by routinely trumpeting their rankings, in research, departments and of their National Research Foundation (NRF)-rated top researchers (see Callaghan 2018a; Boshoff 2018 for a debate on rating). Amongst the outputs listed is, of course, publication, especially when appearing in specific lists recognised by the state for research incentive purposes. Research resources and measurement systems go to the core of the way that the South African university research economy is structured. This contradictory economy, increasingly of a precariat nature (Callaghan 2018), is differently managed, resourced and measured between four different ministries. These are: i) the Department of Higher Education and Training (DHET); ii) the Department of Science and Technology, where the Academy of Science for South Africa (ASSAf) is administered; iii) the Department of Arts and Culture, which manages the NRF, and iv) the Department of Trade and Industry that funds the national South African Research Chairs Initiative (SARChi). DHET

rewards work by quantity published in 'accredited' lists of journals. ASSAf recognises quality irrespective of DHET journals accreditation. The NRF rates scientists on the basis of research quality, not quantity nor *a priori* recognising DHET accredited lists (see Tomaselli 2018a). The SARChi chairs navigate all the above.

The South African research and publication value chain is based on a rent-seeking imperative. For every article published in a list of journals 'accredited' by DHET the state pays a notional sum of R120 000 to the university to which the faculty member, student or associate is affiliated (variable depending on DHET's annual budget). Multi-authorship is dealt with on a proportional basis. Some universities place the DHET publication incentive funds in a general pot to be applied for. Others top slice a portion to the author's research code, and a few, against the spirit of the system, permit their authors to bank all or a portion of the incentive as taxable income. The qualifying journals include most from the 323+ published from South Africa, plus those indexed by Clarivate Analytics, Scopus and Proquest's International Bibliography of the Social Sciences (IBSS). The benefits, contradictions and negative externalities of this unique system of authorship and reward are examined elsewhere (Muller 2017; Tomaselli 2018a; Lee and Simon 2018; Thomas 2019; Breet 2018; Woodiwiss 2012).

Here, I want to discuss how the DHET incentive system affects the Humanities in contrast to the Sciences (see also Molotja and Ralphs 2018; Mouton 2011; ASSAf 2011, 2018). The Humanities tend to be the orphans when student subsidy and DHET publication incentives are taken as indicators of value by university committees. Humanities students attract a lower state subsidy than do STEM (science, technology, engineering and mathematics) students. Globally, humanities articles take longer to write, to be peer reviewed and, if accepted, to be published. Though more in number, humanities journals are published less frequently than are science journals, and Humanities articles consume more space as they rely on argument rather than numbers or descriptions of empirical experimentation. Where a top performing scientist can publish many short articles annually, in the humanities, the figure is much lower (Mouton *et al*, 2016, slides 38-47). The half-life of publications in the humanities is 20 years; in chemistry, engineering and medicine 10 years, and computer science, life sciences and information science is 5 years (Mabe & Mulligan, 2011, 56).

The disadvantage of the humanities vis-à-vis the STEM disciplines globally is exacerbated when university auditors additionally superimpose metrics on publication 'output' such as the use of impact factors as indices of high value productivity. Few of the international indexes recognised by DHET for incentive qualification purposes systematically list Humanities journals. Within this system of official 'accreditation', and thus within universities, much humanities work not reflected on the agglomerated DHET list is institutionally blinded or differentially ranked in annual reports.

Local, national and even regional journals are unlikely to be incorporated by Clarivate Analytics that hosts the Web of Science. Within Clarivate are the "Core" and "Emerging Journals" collections, with only the former recognized by DHET for incentive purposes. While *Critical Arts*, for example, is listed on Clarivate's Core index, the *Journal of African Cinemas* offered 'emergent' status on Clarivate had to also seek inclusion in IBSS (and Scopus) in order to qualify in terms of DHET accreditation. When the highly read *African Communication Research*, published from East Africa, lost its IBSS status following a lull in publication, an immediate fall-off of South African authored submissions resulted, which put the journal at risk Such authors thus squandered the opportunity of addressing African scholars in the face of DHET policy which does *not* preclude publication in non-accredited' journals. The decline occurred

because such author's universities refuse to recognize their *bona fides* as such small non-South African journals do not qualify for DHET publication incentives. But more, erratically appearing journals do lose their exposure and readers.

Where a "localised public culture" (Assaf 2011, 128) is concerned, can one consider local (accredited) journals as 'small' and as having impact? The brief examples below address this question.

Small Journals and Impact

Small (legitimate) journals (in the rest of Africa) are excluded from DHET qualifying lists if they are not be indexed on Clarivate, IBSS or Scopus. Yet, these journals offer venues where much innovative work often occurs, and which significantly address local, national and regional issues. While actual quality of such articles may vary, in communication and media studies, they are also the potential conduits to wider publishing repertoires. Examples include the now defunct African Council for Communication Education's (ACCE) Africa Media Review (AMR) published from Nairobi between 1986 until 1997, and then by CODISRIA in West Africa till 2013. AMR had enormous caché within and beyond Africa. While perhaps not highly cited, AMR was high on the agenda of classroom readings and discussions at ACCE conferences. African Communication Research, initiated and first edited in 2008 by a scholar of global import, Bob White, is a product of St Augustine's University, Tanzania, and is pan-African in scope. The new but equally irrregularly appearing African Journal of Communication (AJC) could have offered its editors and authors' exposure and creating a sense of regional identity via the East African Communication Association, around and through which research collectives and disciplinary societies can form. AJC publishes once a year or less, thus its visibility is low, but its current editors secured their PhDs at the University of KwaZulu-Natal (UKZN), and are beginning to grow an emergent research and publishing culture amongst its constituents in East Africa.

Critical Arts itself started as a small, cottage-industry, composed on a golfball typewriter in my Witwatersrand University office in 1980. Ntongela Masilela, then a cultural activist in exile, identified the journal as leading the awakening of African historical cultural consciousness (2000). An earlier perceptive and serendipitous forewarning of the problems facing South Africa's attempt to negotiate white and black nationalisms was offered by a Canadian cultural studies luminary, Ioan Davies (1985/6), in his review of the first four years Critical Arts's publishing record and impact:

Critical Arts's nervousness about what stance would be appropriate to coming to terms with culture in Africa seems to be perfectly in tune with anyone's nervousness with coming to terms with Africa. As Wole Soyinka has remarked, the black nationalism and militarism of Nigeria is the twin brother of South Africa's apartheid, with the corollary that the task of creating a critical black consciousness in South Africa requires more than simply having a black South African nationalism.

Barely ten years after Davies' comment, Nelson Mandela was being demonised by the Nigerian government for leading a boycott against that regime for the execution of Ken Saro-Wira and other dissidents from Ogoniland. As Davies concluded: "Paradoxically, South Africa, living through the hiatus of white domination and ultimate revolution, may be just the place for that thinking [what's beyond black nationalism] to take place." Indeed, *Critical Arts* was one of a number of 'small' South African journals that enabled such debate. They challenged during the 1980s the kind of blunt

censorship imposed by the University of Cape Town (UCT) on Raymond Suttner with regard to his MA thesis, submitted in 1969. UCT had refused to accept his thesis as he had cited some banned works, including by his supervisor, Jack Simons, a 'listed' member of the Communist Party then employed by the university (Caelers 2018). However, during the 1980s, the journals that pushed the political edges included *Transformation*, *Psychology in Society*, *Work in Progress, Agenda, South African Labour Bulletin*, *Africa Perspectives* and *Perspectives on Education*, amongst others. Just two of these journals are not publishing today and their authors and editors involved all contributed to the end of apartheid, often in direct ways.

The very first volume of Critical Arts was graced by future Nobel Laureates such as Nadine Gordimer and JM Coetzee. André Brink, Peter Horn and many prominent anti-apartheid scholars contributed articles to this oppositional journal, and a young writer and editorial board member, Ndjabulo Ndebele, later become a vice chancellor – at two different universities, and then Chancellor of the University of Johannesburg (see Ndebele 2017). Critical Arts neither sought accreditation, nor was offered accreditation until the early 1990s, as prior to 1990 it was reluctant to be associated with this system of regulation/reward. We all once started out young, emergent, hungry – and small. There is no reason why other small journals cannot follow suite. Critical Arts remained a 'small' journal, if punching above its weight internationally, for 25 years before it was offered systematic institutional backing through a global partnership spearheaded from the late 1990s by the NRF that included previously 'small', South African journals supported by UNISA Press and Taylor & Francis. As editor and publisher of Critical Arts, from the date of its first number, 1980, like many other editors of small local journals, I was chief cook and bottle washer: I typed, typpexed and proofed, addressed and stamped the envelopes, and some of its board members pounded the streets to local bookshops which sold thousands of copies. African Communication Research started similarly and even better capitalised journals still rely on their editors for sustainability. Academic authors are like drivers –they know how to drive (write) but they don't necessarily know how the vehicle (the publication value chain) is manufactured and serviced. Just producing – and then sustaining – a journal becomes a lifelong activity that enables growth of a critical intellectual mass.

The UNISA Press / Taylor & Francis / Medpharm / National Inquiry Services Centre (NiSC) collaborative model would be assumed by ASSAf to be 'commercial' and therefore of concern in terms of its open access (OA) potential. This partnership arose as a developmental project in the mid-1990s initiated by the NRF and UNISA Press, with Carfax, the small British predecessor to T&F. Fifty South African journals were elevated onto the international scene while retaining their DHET accreditation. In this objective the collaboration was successful across a range of journals and disciplines. This venture has supported its local editors via its annual training and editors' fora. Linked to these training sessions has been a cascading effect on other 'small' local journals on whose boards such editors serve.

The extra capital and expertise injected by the co-publishing model has occurred notwithstanding DHET policy that sidesteps financial support for journals while ironically using them as cash cows feeding massive financial incentives to universities, but not the journals themselves. DHET's reluctance to capitalise the South African journals occurs partly because there are too many journals relative to the size of the national scholarly base; and there sometimes are too many journals per discipline, and because amalgamation is not occurring. As the second ASSAf report (2018:129) thus cautiously concludes, "economies-of-scale publishing houses are potentially major players in the rejuvenation of an over-large and somewhat static local journal publishing system". The report, is conscious of deleterious consequences of

commercialisation, but mainly with regard to some South African publishers that exponentially expanded publication to leverage article processing charges that milk the DHET incentive (ASSAf 2018, 120-122). Rent-seeking and misconduct has *not* occurred with regard to the international journals' publishers working with local tiles either through UNISA Press or bilaterally.

The added value offered by such partnerships include sophisticated metrics and marketing campaigns available through the co-publishing model that globally promote: i) individual articles; ii) journals; and iii) which aggregate like-with-like articles. The ASSAf conclusions elide the 'commercial' sector as being something of a troublesome 'add-on' to be countered by eventually drawing all South African accredited journals into the state-supported Science Electronic Library Online (SciELO) despite its relative lack of resources. The report also states that with regard to subscriptions pricing that "high level negotiation with the multi-national mega-publishers of commercial journals needs to be taken forward with determination, either by the appropriate government department or by a consortium of institutions at their highest level" (p. 139). Arising from the prior partnership, Taylor & Francis has long offered local pricing of South African journals throughout Africa.

So the questions are, how does a new journal publishing from Africa not only get started, but indexed? How does a community of writers grow with a journal? How does a journal grow a field? How does it serve that field in the face of performance management policies that fail to acknowledge editorial and developmental work that facilitates the entry of scholars from the margins, and that retains the confidence and intellectual investment of the field's global luminaries?

Like with escalating subscription costs the conundrum of the small (African) humanities journal also needs resolution by DHET in consultation with universities (and their faculty) and editors. My first challenge to research auditors is that universities at least list in their annual reports publications that are not accredited rather than separating them into 'accredited' and non-accredited (or other), a sort of publishing apartheid. Such separation a priori assumes that the DHET lists of qualifying journals are de facto more reputable than those not recognised by this government department (ASSAf 2011: 127). Secondly, such work should be recognised in performance management KPIs without prejudice. A solution is to include the Modern Languages Association (MLA) list. MLA was one of the first to recognise Critical Arts when it was a small journal and enabled a global presence for it. By denying recognition for small humanities journals:

the emphasis on publishing in journals listed on databases such as ISI can become detrimental to the indigenous publishing industry in many African countries. South Africa is an exception because it has specifically tried to counter this by introducing a list of journals that meet strict quality criteria, but are not listed on ISI or IBSS for one or another reason. But most African countries confer more 'points' on their researchers for publishing in established international journals than in their own, local journals. This creates a hierarchy of value, and leads to a perception of lower value of the local journals, even if objectively this is not the case. (le Roux 2006, p. 57)

The next section deals with citations and their low incidence in the Humanities.

The Citation Game

Some disciplines can score highly due to the nature of their epistemologies and other disciplines score lowly because the publications (scores) accrue more slowly. In the humanities under-citing often occurs unlike in social science where authors map the topic when introducing their studies.

Under-citing may also occur because of prior conflict, competition, historical amnesia, or restrictions on length, and inexperience. Debating a once-off paper published by an MA student in a small erratically appearing local journal lacks citation currency and reputational gravitas. Thus, does even top notch work not get cited; including the journals in which the work is published. Referees, too, may lack historical consciousness of the discipline. Only social theory seems to be exempt from epistemological amnesia, for its theoretical writings often build on the ideas of past major theorists (Gans 1992, 701). However, when secondary authors start new paragraphs with the names of sources, this makes for cumbersome writing and laboured reading. Source-led writing mutes the strength of the argument as the authors cited, not the argument, become the object of the sentence – this is citation currency at work (see ASSAf 2018, 121). This kind citation behaviour does not constitute cartel-like practice, but it is a habit in much humanities writing that privileges certain in-crowd epistemological constituencies to the exclusion of others, who are kept to the margins. Thus do metrics help to centre in-groups.

Metrics and Imagined Value

Metrics are the neoliberal measuring devices of imagined value that discriminate on the basis of immediacy and other factors. Metrics rarely recognise the latent longevity of intrinsic value such as occurs amongst publications in the humanities that are still citing Aristotle, Plato, Confucius and other early scholars. Measurement formulae are indicative of highly competitive societies where information and knowledge exhibit a rapid half-life, in which national policy is hurriedly and often opportunistically implemented between national elections. Echoing Le Roux (2006), Alan Lee and Carol Simon (2018) observe that the trend to ranking of articles as is now done at some universities risks intellectual recolonization. The overlay of financially weighted national incentive schemes will further disadvantage local journals by effectively leaving them with the 'leftovers' (Gibbs 1995). That is, ranking encourages publication of local research in high impact factor journals based overseas.

In cases of author-pays OA models (e.g. *PLoS One*), South Africa incurs a double whammy of not only exporting its research, but of also paying dearly for the privilege to do so. Local research and management organisations, and even government, can easily track articles they publish. By contrast, articles published overseas can be lost in what amounts to academic point scoring (Lee 2018: 14).

Articles in journals anywhere might languish for years un-valorised before their intrinsic value is recognised by subsequent generations of scholars who find significance in older work. Corporate publishers who aggregate similar studies mined through time constantly refresh them. Similarly, for historians in any discipline, intrinsic value never decays, but actually increases over time. As marketing and currency devices, metrics are causing academics to engage in short-term thinking and fast-'n-dirty publishing (see Bauerlein et al 2010) rather than doing longer-term blue-sky research from which really applicable scientific and social benefit might eventually occur. Intensive discussions held at ASSAf-organised National Scholarly Editors' Forums have questioned the blind use of impact factors. To now link the ranking of publication and performance incentives to such a metric would be to massively privilege certain sciences and encourage citation cartels, which would be the only way scholars could increase their citation rates in the comparatively slow publication cycle that differentiates the humanities from the very fast science publication cycle. The legitimate publishing systems cannot absorb the total annual outputs of submissions. This is why the predatory sector has grown so exponentially since 2012 (see Mouton and Valentine 2018).

So, what are metrics and what do they actually measure?

Metrics

Quantitative measures include impact factors, eigen factors, h-indexes, cited half-life, audience factor, influence weight indicator, weighted PageRank indicator, and the SNIP journal impact factor, amongst many others. The emphases of these metrics, however, largely excludes 'who reads', how articles are read, for what purposes, and with what learning and student impact. Statistical fluctuations occur, depending on article volumes (Ware and Mabe 2015: 61). The body of literature far too voluminous to cite here has compared these indices, shown up inconsistencies, and suggested a myriad alternatives. Most metrics are based on citations as the single variable. But metrics cannot, for example, fully account for journals that are highly read by practitioners that exert a high professional impact (such as in pharmacy, law and regional planning) but which may have low citation rates. These measures also ignore the readworthiness of publications; and with the exception of Google Scholar they disallow citations in MA and PhD theses and other 'unpublished' formats. Thus, DHET (with university research committees acting as initial gatekeepers), often reject books authored by academics that do not replicate archaic formats thought to signify scholarly work (see Tomaselli 2016) though sometimes such unconventional work is recognized nevertheless as scholarly (see Butler-Adam 2015). Such studies are thereby eliminated from institutional annual reports, measurement indices and reward mechanisms.

Like with the DHET incentive that rewards quantity rather than significance, South African academics are now being pressed to write to be cited. The target or consumer of publications, the reader, simply does not exist in these kinds of measurements. The reader is assumed by university performance management spreadsheets to be the person who cites one's work, rather than also the interested reader who does not cite it, but who uses in the classroom, in a court case, policy making, in professional practice or who talks about it in a radio programme, a blog or a newspaper. These are the constituencies that ASSAf (2018, 125-6) considers vital in the broader research chain, but which university auditors totally ignore as reader intensity does not correlate with citation impact. Research universities are now applying metrics (but only of DHET 'accredited' journals) as part of their new globalizing strategies, but also to manage and discourage submissions to 'low citation' journals and those not on the DHET accredited list. In the South African institutional lexicon, 'accreditation' is synonymous with 'reputable', though as the ASSAf quantitative studies conducted by the Centre for Evaluation, Science and Technology (CREST) indicate, the two are not necessarily contiguous. Journals not accredited are not included, no matter their actual reputations or impact on their respective disciplines. Citation counts emerged as a means to enable libraries to make purchasing choices on journal subscriptions (West, 2010: 51). Now, they are being opportunistically repurposed to distinguish 'reputable' (i.e. high citation DHET accredited titles) from low citation 'less reputable' (non-DHET accredited) journals. How 'reputable' is quantified differs depending on the index applied by the academic auditor. The term, 'reputable', is drawn from a 2017 UKZN circular that made this distinction (see Lee and Simon 2018).

The Main Metrics

Here are the main indices that are currently in vogue:

Journal Immediacy Index (JII): calculates the number of times articles have been cited in the same year of publication. This Index is useful to disciplines whose journals are published monthly or on a continuous 'online first' basis, where studies are more of an incremental nature than offering deep philosophical reflection that characterise the Humanities. JII reveals which journals are publishing "hot" (Clarivate's term) current or cutting edge articles, that attract immediate citation. This particular index goes with the flow and with breaking trends. This Index is thus unsuitable for the Humanities. Online-first articles are not recognised by DHET for publication incentive purposes until bundled into a volume number and associated page ranges. This archaic rule needs reformation to recognise the future of scientific publishing as continuous runs that might eventually see the end of discrete volume numbers.

Journal Impact Factor (JIF): Average number of times articles from the journal published in the past two years have been cited in Clarivate Analytics Journal Citation Reports (JCR) year. The JCR is accessed from Clarivate's Core Collections (Garfield 2007). JIF calculates the outbound cited references from any of the five journal and proceedings indexes in Clarivate's Science Citation Index Expanded (SCIE); Social Sciences Citation Index (SSCI); Arts & Humanities Citation Index; Conference Proceedings Citation Index, Science edition; Conference Proceedings Citation Index, Social Science and Humanities edition. Again, this Index (as used by university auditors) disadvantages small local, national and regional humanities journals (if indexed) that may publish only once or twice a year and which do not have an 'online-first' presence or marketing capacity.

Cited half-life: Number of total cites received by the journal in the JCR edition year regardless of when the articles were published. This index is only available if the journal has been cited more than 100 times in the JCR edition year and is measured in terms of years and fractions of years, quantifying current interest. Articles degrade over time unless they are updated in new republished versions of the same article or repurposed as book chapters, aggregated, marketed and kept alive by their authors. Such revitalising work is done by the corporate publishers in the cross-referencing way that their web sites are designed and in their re-marketing of articles across journals lifespans.

The Scimago Journal Rank (SJR) indicator quartile measures the influence and prestige of journals that accounts for both the number of citations received by a journal and the importance or prestige of the journals from which such citations come. Higher SJR values indicate greater journal prestige (see Lee and Simon 2018 for a critique of SJR as being applied to graded financial incentives involving preferential weighting of high impact journals by UKZN when internal distribution of DHET incentives are allocated).

Eigenfactor: measures a journal's total importance according to citations. This factor can also be used in combination with the **h-index** to evaluate the work of individual scientists. An author-level metric, the h-index measures both the productivity and *citation* impact of an author's publications, based on the researcher's most cited articles and the number of citations that they have attracted in other publications. The Eigenfactor takes into account the source of citations when ranking the influential nodes in the many global citation and scholarly networks. More generally, Eigenfactor extracts the structural information of networks in order to measure information flow (West. 2010, P. 2). *Again, tangential for Humanities*.

Altmetric Score: Altmetric tracks a range of sources that collate thousands of daily conversations about scholarly content. The Altmetric Attention Score for a research output provides an indicator of the amount of attention that it has received. A single output may live online in multiple websites. Short items on published work in *The Conversation*, for example, if trawled by the Score, would attract a score, as journalism, news and blogs are included. This score is relevant to the humanities and across the board as 96% of articles first published in the South African edition of *The Conversation* are reproduced or cited in the media, thus: i) exposing academic work to the general public, ii) significantly socially valorising it, and iii) making it useful.

Metrics measuring journal impact cannot be simply equated across different subject areas as these exemplify different behaviours and citation rates. Review articles, for example, attract more citations irrespective of their quality, while quality work may remain uncited but highly read and applied in practice. Citation cartels and/or self-dealings networks within journals bundles owned by the same publisher have been found to occur within research networks when opportunistic transactional arrangements increase visibility (Davis 2018). The sophistication of a specific article cannot be necessarily judged by the journal in which it is published. Finally, quantitative measures of impact used in the sciences, medicine and social sciences do not translate to Arts and Humanities journals.

Cautions for South African Universities

These above mentioned cautions, are not being taken on board by South African university research offices. Rather, they are using the brute force of time-sensitive impact factors that favour the STEM disciplines. ASSAf's Consensus Study (2011, 15) Key Finding 4 also seems to equate "international status and standing" solely with journals indexed by Clarivate. The report discounts "local journals" and publications not indexed by Clarivate. The question not asked, is why is the humanities presence in all these international indexes so low? ASSAf does observe that social scientists are increasingly publishing in Clarivate-indexed journals and that the inclusion of both social science and humanities journals is growing within this index (2011: 105). The ASSAf Panel also acknowledges the chronic under-funding of the Humanities in relation to the STEM disciplines (see also Molotja and Ralphs 2018).

The ASSAf Panel's (2011, 59-61) recommendations on raising the Humanities profile, and thus funding through rewarding of publication output, is as follows:

- If Humanities outputs could be raised above those of other fields, then the Humanities would receive larger shares of the output funding components of government block grants.
- Amending weightings in the DHET funding grid will not generate additional funding for the humanities since the formula is simply a distributive mechanism that divides available funding; i.e., any increase in the amount received by the Humanities would involve decreases in research funding of other fields.
- To identify subfields which require strategic interventions (African Languages would be an obvious example). Changing the funding grid weightings of the identified subfields would not effect a resolution. Successful interventions would require the allocation of

specific amounts of earmarked funding to these subfields as occurs via the NRF and its allocation to the study of Indigenous Knowledge Systems.

Some questions arise out of these broad-spectrum ASSAf proposals. First, the DHET qualifying indexes consider only English-language publications. Second, South African universities are going in the *opposite* direction to that suggested by ASSAf by preferentially weighting journals with high impact factors against thematic "subfield" orientations, thus condemning to perpetual orphan status humanities articles published in low citation disciplines and journals not indexed by Clarivate. Third, universities' current internal DHET distributive policies thereby would weight the STEM disciplines higher. This imbalance could result in qualifying humanities articles, in fact, subsidising the sciences because the funds for high impact STEM articles that appear more frequently would need to be internally redistributed from the 'lower performing' journals to the higher performing ones. To clarify, as the Humanities improves performance, because they are encumbered with lower impact factors and more regional and local foci, they would not necessarily benefit from the current system unless DHET ring fences such subfield humanities allocations to preclude them from cross-subsiding the sciences.

South African humanities research, as measured in peer-reviewed articles, between 1990 and 2004 constituted 37% of all scientific output - equivalent to the natural sciences. These respective distributions thus comprised two 'publication cultures': i) humanities and social science scholars publish predominantly in local journals since such scholarship is embedded in the South African social and cultural context. In contrast, ii) authors in the natural and health sciences publish predominantly in international titles. By 2018 the breakdown had shifted: humanities and arts totalled 17%, social science 21%, STEM disciplines at 42%, and health sciences at 20% (ASSAf 2018. 67). Growing international collaboration is resulting in increased 'visibility' of South African humanities scholarship. But, the DHET subsidy allocation may inadvertently penalise high-citation collaboratively authored publications in the sciences (Harley 2016).

By way of comparison, 82% of monographs emanate from the humanities, recognised in a 2015 *Government Gazette* which elevated books as qualifying at a higher level for subsidy. Books attract more citations in the Humanities than do articles. Most crucially, ASSAf found that humanities benefit more from the DHET scheme as there are many more journals in these fields (compared to the numbers of journals in the natural and health sciences) included in the DHET list of accredited journals (2011, 80).

The journals weighting is vitiated by the fact that few South African humanities journals are listed on any of the associated qualifying indexes. Thus, very few sport impact factors and of those that do, almost none are comparable to STEM journals. The ASSAf Panel (2011: 128) thus concluded that the Humanities:

have stagnated inside 'a localised publication culture' in which three quarters of all articles appear in local, mostly non-ISI journals. The Humanities contribute only 4% of total article output to ISI-indexed journals, and the Social Sciences 11%; for comparison, the Natural and Agricultural Sciences contribute 53% of total South African article output in SI-journals (2011: 128).

The Panel then speculated that the likely reasons for this 'localised publishing culture'

had to do with the non-competitive character of humanities publishing. Creeping evidence indicated an incestuous relationship between authors and journals repeated publication in the same journal source, where in some cases the authors also appear on the editorial boards of the same journal in the local market' (ASSAf 2011, 128).

As I have argued elsewhere, the lower barriers of entry coupled with the distorting effects of the DHET publication incentive is what encourages rent-seeking by both universities and authors (Tomaselli 2018a). While the ASSAf criticism of incestuousness certainly applies in identifiable specific instances as CREST data has revealed, innovative humanities journals actually facilitate paradigm shift, for which theme issues in which guest editors publish are perfectly positioned. This function is not measurable and does not feature in ASSAf journals evaluations which tend to focus on the operations of individual titles. Quality and impact are not the ASSAf panel's prime concern, and where they are, the Panels' evaluations are mostly impressionistic.

Inventive journals are not just neutral platforms and infrastructures unconnected from their editorial boards. They also function as conceptual pacesetters, shaping entire fields and leading the way, facilitated by their editors and their boards over medium-to-long periods (see, e.g., Hall 2010). The argument offered by the 2018 ASSAf report admonishes editors when publishing in their 'own' journals, but permits their presence in the anthology book format. Greater nuance is needed here for many journals shape fields rather than just represent or reproduce them, or aim to milk the DHET publication incentive. In such cases journal editors actually do read the submissions, assess reviewer reports and they do interpret for authors' ways of addressing these, especially where reports might vary greatly. In my own experience as an author, many editors now simply act as postmasters, dumping hugely divergent reviews onto the author, and merely suggesting that these be 'addressed' in a revision. Such authors are thus faced with not quite knowing how to respond as no or little editorial guidance is offered in such instances.

In Conclusion

Goodhart's Law states that when a measure becomes a target, it ceases to be a good measure. In other words, it stops truly reflecting the original variable, but increasingly measures the effectiveness of the organisation or individual at maximising the measure, and in doing so may also change behaviour in undesirable ways (see Ware and Mabe 2015: 61). With regard to DHET incentives, systematic rent-seeking has been one such outcome. Plagiarism is another (Thomas, 2019), as is an atomistic concern with individual bricks (articles) rather than edifices (disciplines) (Forscher 1963; Lee and Simon 2018). Trendiness, immediacy and what is 'hot' is to be rewarded rather than what is of epistemological significance, whether cited or not.

South African research auditors often confuse measures with targets. If metrics are to be applied to measuring performance management, then universities should develop a much more nuanced index. A Composite Impact Factor could be tailored to different fields that acknowledge cycle, disciplinary and procedural differences, teaching and community service, and so on. Such a factor might be very complicated and costly to administer, however.

Most crucially, as Clarivate Analytics itself argues: using impact factors alone in assessing the usefulness of a journal is ill-advised. Impact factors constitute but one variable within many phenomena that influence citation rates. Informed peer review and measurement are two sides of

the same coin. Many factors influence a journal's impact and its ranking in journal lists, not the least of which is the inclusion of review articles or letters. This is illustrated in a study of the leading medical journals published in the *Annals of Internal Medicine*. Review articles generally are cited more frequently than are research articles because they are surrogates for earlier literature, especially in journals that discourage extensive bibliographies. Often, the first-ranked journal in the subject category listings will be a review journal. For example, under biochemistry, the journal topping the list is *Annual Review of Biochemistry* with an impact factor of 35.5 in 1992.

Metrics are not going to save the planet. Science and scientists – if allowed to do deep science which includes the humanities – will be the key to delaying or even preventing self-imposed human extinction, but only if the policy makers are actually listening (see Beiter 2019). For humanities scholars, learning to negotiate and navigate citation measurement systems is crucial, for the STEM disciplines will always be the benchmark for academic auditors.

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