The Influence of Rankings and Incentive Systems on Academic Publishing in South African Universities

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Abstract: This essay looks at the influence of ranking and incentive systems on decisions higher education institutions are making with respect to research and academic publishing. It describes and analyses how institutions within the South African higher education system have navigated their way through the contradictory forces confronting them. Characterizing these forces are, on the one hand, the country's higher education policy platform which calls for institutions to address South Africa's legacy issues of inclusion and social redress, and, on the other, the demands for institutions to maintain and grow their research profiles. The paper argues that South African institutions are struggling with this tension, as they struggle to pose, to articulate, and deliberately to respond to the question of what it means to be 'excellent'. Drawing upon institutional documents in the public domain, this paper shows how significantly this tension animates the decisions that institutions are making about their research and publication policies and practices.
Keywords: South African Universities, Academic Publishing, Rankings and Publishing, Incentive Systems and Publishing, World-class Universities.

La influencia de los rankings y sistemas de incentivos en las publicaciones académicas en las universidades de Sudáfrica.

Resumen: En este ensayo se analiza la influencia de la clasificación y sistemas de incentivos en las decisiones de las instituciones de educación superior con respecto a la investigación y las publicaciones académicas. Este trabajo describe y analiza cómo las instituciones dentro del sistema de educación superior de Sudáfrica han navegado las contradicciones que enfrentan. La caracterización de estas fuerzas son, por un lado, la plataforma política de la educación superior del país que aboga por las instituciones para hacer frente a problemas de inclusión y de reparación social, y por otro , las demandas de las instituciones para mantener y hacer crecer sus perfiles de investigación. Este trabajo sostiene que las instituciones sudafricanas están luchando con esta tensión, en su lucha por representar, articular, y deliberadamente para responder a la pregunta de lo que significa ser "excelente". Basándose en documentos institucionales de dominio público, este trabajo muestra cómo esta tensión anima las decisiones que las instituciones están haciendo acerca de sus políticas y prácticas de investigación y de publicación .
Palabras clave: universidades sudafricanas; publicaciones académicas; Tabla de Posiciones y editorial; sistemas de incentivos y editoriales; universidades de clase mundial.

A influência das classificações e sistemas de incentivos nas publicações académicas nas Universidades Sul-Africanas

Resumo: Neste trabalho são analisadas a influência das classificações e sistemas de incentivos nas decisões das instituições de ensino superior em relação à pesquisa e publicações académicas. Este artigo descreve e analisa como as instituições dentro do sistema de ensino superior na África do Sul têm navegado as contradições que enfrentam. A caracterização dessas forças são, em primeiro lugar, a plataforma política das instituições de ensino superior do país para tratar as questões de inclusão social e de reparação , e, de outro, as demandas das instituições para manter e crescer os seus perfis de investigação Este artigo argumenta que as instituições Sul-Africanas estão lutando com essa tensão, para representar, articular e para responder à pergunta sobre o que significa ser "excelente". Com base em documentos institucionais no domínio público , este artigo mostra como essa tensão incentiva decisões que as instituições estão a fazer sobre as suas políticas e práticas de pesquisa e publicação.
Palavras-chave: universidades sul-Africanas; publicações acadêmicas; editor; sistemas de incentivos editores; universidades de classe mundial.

Introduction

Few higher education systems have been subjected to as much scrutiny as that of South Africa. After the release from prison of Mr. Nelson Mandela in 1991, when it became clear that the country would move away from its racially-driven policy of apartheid, a period of intense review began about the role of the university in a transforming state. Since then the system and its stakeholders have subjected themselves to and participated in fierce debates, reviews, assessments and analyses about its size, shape, governance, funding, research priorities and its broad mission. The most influential development to come out of this scrutiny was the publication of a white paper, White Paper 3 (WP3), in 1997 by the new government. Predictably, transforming the legacy of apartheid formed the major focus of WP3's scrutiny. But the drafters of WP3 were aware of the challenge of transforming South Africa's universities within the context of a burgeoning global knowledge economy with all its attendant hazards and opportunities. The country could not simply look inward. In its introduction WP3 set out how it saw this challenge:

Despite the negative consequences of the apartheid legacy, some higher education institutions have developed internationally competitive research and teaching capacities. Their academic expertise and infrastructure are national assets. *It would be detrimental to the national interest and the future provision of quality higher education if the valuable features and achievements of the existing system were not identified, retained and used in the restructuring process.* (My emphasis) (Department of Education, 1997, p. 5)

In this essay I analyse how institutions within the South African higher education system have navigated their way through the contradictions which confront them, of moving in tune with the urgent developmental agenda which WP3 defines, namely that of "meet(ing) the challenges of a new non-racial, non-sexist and democratic society committed to equity, justice and a better life for all" (ibid), while, simultaneously, holding in place the conditions required for the maintenance and growth of a rigorous research environment. I argue that South African institutions are struggling with this tension, as institutions struggle to pose, to articulate, and deliberately to respond to the question of what it means to be 'excellent'. Drawing upon institutional documents in the public domain, I show how significantly this tension animates the decisions that institutions confront but how they are generally struggling, intellectually, with engaging the question of what excellence means.

How are South African institutions managing the pressures from globalization while, at the same time, attending to their past? To consider this question, it is necessary to review the discussion around a contradiction expressed in the higher education system as a whole. More specifically, we must look at the major incentive measures that are in place and then turn to the institutions themselves. Here I analyse research priorities and institutional policies in relation to these developments. I focus on responses to the emergence of global ranking systems, including such systems those published by the Times Higher Education, the Quacqarelli Symonds and the Shanghai Jiao Tong University 'Academic Ranking of World Universities'. I draw on published and unpublished documents, as well as institutional reports. South Africa's institutions publish annual research reports on their major achievements. I discuss these reports to develop an understanding of what research approaches are emerging in the country, and I look critically at how the universities are approaching the questions of the rankings and incentive systems with which they are working. This review, based as it is on information from the institutions, is neither a comment on issues of institutional quality nor of directions being taken in the research that is being produced. Rather, I reflect on the broad directions that are beginning to emerge in the universities. While individual researchers have commented on the state of research for particular fields (see Lovegrove & Johnston, 2008 for Biology and Sitieni & Ochala, 2010 for Library Sciences, as examples), these tend to focus on bibliometric measurements used in these fields such as the *h*-index. The more searching question of what 'quality' actually means is not engaged.

South Africa does not have a research assessment system, such as the United Kingdom's Research Assessment Exercise. While the Council for Higher Education, through its Higher Education Quality Committee, conducts institutional audits and programme reviews and accredits programmes, the Council has neither the mandate nor the capacity to comment on the quality of research in specialised fields. For that reason, we cannot go beyond what institutions themselves make available through their published reports and their commitments. The questions are posed with the aim of showing the politics of publicness and its intelligibilities in the work which is being promoted in the South African academy. The overarching question for the South African academy, against the multi-pronged approach defined by WP 3, is what is being sacrificed as a consequence of the choices academics are making. Brown (2010) emphasizes that policy making in contexts are defined by transitions, whether they are political or economic. Agents operate at multiple levels and scales – at a high systemic level in the name of the state, at one end of the spectrum to the individual level with academics making personal choices, at the other end. Central to this complexity is the

large presence and role of the state in steering the system at a high-level and the response of individual academics to it and also to all the other arenas of influence to which they are attached, such as their disciplines. What makes South Africa so interesting, but also difficult to analyse, is the depth of cultures and practices such as academic freedom.

The State of the Debate about 'Excellence' in South Africa

South African institutions are deeply preoccupied with the issues of excellence. They are concerned about their capacity to produce PhDs, to grow and attract world-class scientists, to win research grants and, critically, to produce research which will appear in the world's best research journals. One concern is the small number of doctorates being produced in the system (see Mlambo, 2010; Samuel, 2012). While doctoral graduation rates improved dramatically after 1994, the system still only produces 1200 PhDs each year – the equivalent of Brazil's leading research university, the University of Sao Paulo. In 2009 the country had 10,499 candidates registered for the PhD and graduated 1224 (Samuel, 2012, p. 1). As compared with the output of countries with similar population, such as South Korea with its PhD output of 187 per million of the population, or countries of comparable middle-income level status, such as Brazil with 52 per million, South Africans are concerned about their output of 26 per million (Samuel, 2012:1). The value of research grants won has substantially increased since 1994 but is still modest compared to the gains that have been made in countries of a similar socio-economic status such as Mexico and Turkey. Within the system most researchers depend on government and, in 2011, the South African government allocated R2.2 billion (approximately US$200 million) for research (Turrell, 2012).

Partly in response to these concerns, in 1999 the new government established a Council for Higher Education (CHE) to advise the Minister of Education on a broad range of issues relating to higher education. The focus of the CHE's work has been on affirming the quality of the universities through reviewing and accrediting them institutionally and programmatically. Concomitantly, the government developed a reward system for academics who publish in journals accredited by the Department of Higher Education and Training (DoHET). Currently institutions receive the equivalent of US$12,000 for every article published in an accredited journal. The journals have to be ISI (Institute for Scientific Information) and IBSS (International Bibliography of the Social Sciences) accredited journals. At the current time, 296 journals can be found on such an accredited list. The government also established the National Research Foundation (NRF) which has as its mandate growing a representative science and technology workforce in South Africa with the explicit aim of nurturing a world-class research environment. Aside from the funding that that the NRF provides through a competitive system of research applications, it has also developed a rating system for researchers, and created research chairs based on the Canadian model of committing funding to established researchers to help institutions and disciplines achieve their missions of producing outstanding research. The NRF seeks to have 400 such chairs in place. The rating system is a key element in the government's drive to stimulate the competitiveness of its researchers. It benchmarks the quality of South Africa's research leaders against the best in the world and ranks them in three main categories, 'A', 'B' and 'C'. An 'A' rating denotes researchers who are unequivocally recognized by their peers as leading international scholars in their fields for the high quality and impact of their recent research outputs (Http://www.nrf.co.za/files/file/NRF%20Rating%20categories-approved%20EEC%2013%2February%2013.pdf). Scholars who have substantial international visibility and reputations are accorded 'B' ratings and those who enjoy national recognition 'C' ratings. In 2013 of the 22,400 fulltime researchers in the country, 72 were accorded an 'A' rating. The great majority were located in three universities, Cape Town, Stellenbosch and Witwatersrand

(MacGregor, 2008, p. 1). Important about these policy initiatives, especially the rating system, is the significant impact they have had on influencing publication choices made by academics. They have undoubtedly steered academics seeking higher ratings to channel their outputs towards journals deemed in the South African accreditation lists to be of international standing and with high impact factors.

These innovations notwithstanding, there remains concern about the global standing of the country's universities. The country's research output has increased, it is true, with the country achieving a world ranking of 33 in the 2011 Thompson Reuters National Science Indicators data base, and improved its output from 3617 papers in 2000 to 7468 in 2010 (see Nombembe, 2012:2). However, there is concern that the country is still not sufficiently competitive globally. Of most concern is the fact that the country does not have a single university in the top 100 institutions in the world in any of the major rankings. In the recent Times Higher Education rankings the country's leading university in all the different rankings, the University of Cape Town, fell 13 places from 113 to 126 between 2012-2013 and 2013-2014 (Geach, 2013, p. 8). Reflecting this concern, new Vice-Chancellor at the University of the Witwatersrand, Adam Habib announced recently that he would be appointing 30 A-rated researchers. He said "I refuse to lead a university that is number two (second to the University of Cape Town)…. If we want to become one of the top institutions in the world we need the best researchers in the world" (Govender, 2013, p. 13).

While Habib's ambition is shared by some, there is ambivalence amongst his peers about how to deal with the concerns of the external and the internal, the global and the local. Max Price, the Vice-Chancellor at the University of Cape Town, while appreciating the high placing of his own university, drew attention to the 'dangers of the rankings'. He said "(t)he danger of ranking systems, especially where they are designed with an eye on universities in developed countries, is that they may lead to behaviours and redesign of strategy to improve the rankings rather than to do what's right for the local setting" (Price, 2010, para 4). He argued instead for a different system that would place universities in categories and to have no limits on how many institutions could be placed in these categories. Jonathan Jansen (2013, p. 15), the Rector at the University of the Free State, describes the rankings system as a 'misplaced vanity, a handful of South African universities get swallowed up in these rankings without understanding where they are why they are.' Another Vice-Chancellor, Saleem Badat (2010b, 2010c, 2010a, para 9) at Rhodes University, takes an even more critical stance and has explicitly said that the rankings have 'little intrinsic value and serve no meaningful educational or social purpose'.

Price believes that having world-class universities will benefits South Africa as a whole, and that the message 'going out to the world,… is that the country has a higher education system that is globally competitive' (Price, 2010, para 12). Both Jansen and Badat take the view that there are important national questions that ranking systems tend to discourage academics from addressing. Jansen (2013, p. 15) asks,

(w)hat is more important? That you produce lots of research in science journals that is cited by your peers in Norway and Boston? Or that the knowledge you produced through research in your school of engineering solved problems of annual flooding in the squatter housing of Khayelitsha and Kwa Mashu?[1] Or that the applied research produced through your school of education actually made an impact on turning around disadvantaged schools in Orange Farm or Zwelitsha?

For Badat (2010, p. 4) the problem is more fundamental and argues, that "to define the university enterprise by these specific outputs, and to (support)… it only through metrics that

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[1] These are, in South African parlance, either the 'townships' of the apartheid era for people designated as 'African', or the informal settlements established by poor people themselves.

measure them, is to misunderstand the nature of the enterprise and its potential to deliver social benefit."

These different approaches notwithstanding, it is clear, that the new emphasis on rankings and anxieties about what quality means have come to influence how institutions have managed themselves and the habits and attitudes they wish to see among their members of staff. While there is a persistent critique of the ranking systems in the approaches being taken by the institutions, they have, nonetheless, begun to model their research and publication practices around the emerging regime for quality suggested in the rankings frameworks.

Emergent Practices in the Institutions

Scholars who assess how academics and their institutions have responded to the new globalizing conditions draw attention to their tensions. Meyer, Bushney and Ukpere (2011, p. 6570) have commented that South Africans are struggling to adapt to globalization. Tijssen (2012, p. 291) has suggested that the new globalizing conditions, including the contradictory requirements that they expand their enrolments and simultaneously increase their publication output, lead to a breakdown of "norms of collegiality which dominated their working experience in the past. Freedom to teach in their preferred areas of research has been eroded as academics are expected to align courses with national frameworks and goals of market relevance." Eve Gray, a South African blogger and critic of the emphasis on ISI journals and impact factor issues, has argued that local scholars are being silenced. This is because of "the dominance of journals at the expense of other forms of publication; the almost universal adoption of the ISI and its Impact Factor as the basis for recognition and reward: and most insidious of all, the marginalization of great swathes of global research through the implementation of this commercialized ranking system" (Gray, 2012: para 3). As indicated before, institutions receive a subsidy of approximately US$12,000 for every article published in accredited journals.[2] This has led to a preference for publication in what are perceived to be high impact international journals. At the same time, however, high-level role-players such as the Academy for Science in South Africa (ASSAf) have given a great deal of attention to the question of how local journals can be given increased international visibility and standing. A new initiative of ASSAf has been to work with their counterparts in Brazil, India and China. This initiative promote the availability of the major journal publishing house Taylor and Francis' Open Access portal to scholarly journals in these countries (Personal Communication, Na-iem Dollie, Commissioning Editor, Unisa Press, 19/08/2013). An additional player in these developments are the academic presses themselves, which are seeking ways to prevent what appears to be the imminent financial implosion of their enterprises in the face of the new and easy availability of overseas electronic material. As academic Keith Breckinridge (2013, p. 1) comments "the current weakness of the university presses undeniably threatens the project of scholarly renewal in this country and our region."

Reviewing the research reports of nine of the 23 universities in the country and focussing on six in the discussion below, it is very evident that virtually every single institution is grappling with the issues of having to operate in a global arena while remaining vigilant and responsive to their home

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[2] There is not a standard practice in institutions for how this subsidy is used. In some institutions a large portion of it is paid directly to the author/s. At institutions such as the University of Cape Town, the subsidy is used to support the building of a research fund to which all researchers have the opportunity of applying as individuals. This application process is competitive and success depends on publication track records. The differing way in which institutions manage the subsidy has not appeared to be a definitive factor in determining where individual faculty members choose to be employed.

fronts. Important about the research reports is that none of the institutions presents itself as standing outside of this tension. They all embrace the tension. They all speak of their responsibility to produce knowledge which is socially and contextually useful, but remain aware of the simultaneous need to publish in journals which will increase their international visibility. This is an important observation to make. What does distinguish them is how they have supported and steered their research thrusts. Three categories of response can be distinguished. The first, at one end of the spectrum, is from institutions which sit firmly in the tension but make clear that they wish to prioritise their visibility in the international rankings. These institutions prioritize their place in the global rankings. The second category of response is from institutions that seek to balance the local and the global. They are sensitive to rankings but make clear their interest in remaining contextually relevant. The third, at the opposite end to the first, consists of institutions which acknowledge the importance of peer recognition on a global scale but which seek to emphasize the South African context in which they are working and so bring a distinct local focus to their decision-making. How these institutions have profiled their priorities is what I consider below.

Institutions which sit in the first category have an explicit emphasis in their public documents on seeking much more international visibility. If being 'world class' means inclusion in the lists of the world's top 100 universities, this is where they want to be to. In its publication *Vuvuzela* (Caboz, 2012, para 1) the University of the Witwatersrand announced its intention to compete for a 'top 100 spot'. Interestingly, in its Mission and Vision Statement it indicated that it would seek to become a top 100 university through "amplify(ing) our generation and dissemination of groundbreaking knowledge in niche areas" (University of the Witwatersrand, n.d. para 6). The University, for example, emphasized in its 2011 Research report that its newly established Directorate for Research Development would focus on five priorities, namely

- Skills Enhancement- developing non-technical skills
- Knowledge Transfer- through one-on-one mentoring and coaching engagements between experienced and emerging researchers
- Recognition- recognising achievements in the realm of research
- Exploiting Networks- linking researchers with appropriate funders, and
- Removing Barriers- assisting to remove or reduce (internal) hindrances to research. (Drennan, 2013, p.9).

The University of Johannesburg has gone further, and sought to align its research strategy around the prioritization of its international research standing. It is aware of its contextual obligations, such as addressing questions of social justice, but has placed its major focus on breaking into the international arena. Its Vice-Chancellor, Ihron Rensberg (2011, p. 5) said in his preface to his institution's research report that "(w)e will use citation data to further concentrate on publication in first class, high impact journals…. We will help create individual websites for rated scholars; participate in international committees; form or participate in global research consortia…." Citing the success of their steering processes at the University in demonstrating their increased output of articles in international publications, Rensberg continued, "(w)e have achieved success in the unrelentingly competitive international research arena, with 64.5% of our publications in international journals." Their performance for 2011 is presented in the table below.

Table 1
University of Johannesburg Outputs, 2008-2011

	SA Journals	ISI Combined Journals	IBSS Journals
2008	39.1	50.7	9.7
2009	37.8	53.4	8.8
2010	35.5	55.7	8.8
2011	29.1	59.8	11.1

Source: University of Johannesburg, 2011, p. 13

　　　　Institutions at the other end of the spectrum, in the third category, present themselves with much more emphasis on the local context. The Rector at Stellenbosch University makes the point that in the period under review, the University again proved to be a place of the highest academic excellence and at the same time a place of societal relevance – across a variety of fields, often in an interdisciplinary way. Apart from local acknowledgement, recognition also came from abroad, confirming our stature as a significant global player. In the Leiden Ranking 2011/2012, SU was included for the first time among the world's top 400 research universities. However, all these accolades would be meaningless if our research did not make a difference to the lives of the people of our country and continent. This is the aim of SU's science-for-society approach under the institution's HOPE project (a campaign initiated by the Rector). (Botman, 2011, p. 2)

　　　　Expressing intense awareness of the polarity between the global and the local is the Vice-Chancellor at the University of the Free State who has sought, as a deliberate commitment to orientating his institution towards a new awareness of the importance of research, commented that One of the common mistakes often made in South Africa is to fall into the trap of binary thinking: we work with absolute choices, the one or the other. Nowhere is this tendency more prevalent than in the often polemical debates on excellence versus diversity. You either recruit world-class professors or you provide opportunities for disadvantaged young scholars to enter the profession. Your research is either placed in the leading journals in the world, or you concern yourself with local relevance and publish in native journals. In its worst articulation diversity threatens excellence. (Jansen, 2011, p. 9)

　　　　Standing between these two positions, in the second category, are a few institutions where the balance between the local and the global is trod carefully. At the University of KwaZulu-Natal Vice-Chancellor Makgoba has sought to emphasize the interconnectedness between research excellence and national identity: "(u)niversities have three traditional core missions: research, teaching and learning, and meaningful community engagement. At university, research informs and drives all three. Firstly, research is paramount for new knowledge production, knowledge identity, knowledge dissemination and knowledge interpretation…. Community engagement is based on research ideas that are more often solution-orientated" (Makgoba, 2011, p. 2). Price, his counterpart at the University of Cape Town, makes a similar comment: "(i)t is the responsibility of the University of Cape Town to ensure that our research and innovation creates new information and pushes the boundaries of knowledge, for the development and transformation of society and the safeguarding of the planet" (Price, 2012, p. 5).

　　　　The institutions' projections of themselves allow us to place them in one of three overlapping positions. At the same time, it is important for us to understand how they deploy their institutional resources and how their staff members respond, particularly where staff publish their research outputs. It cannot be said categorically that institutions in the first category are shifting resources out of local and context relevant research. But in their research emphasis they support either greater diffusiveness in their research emphases or a deliberate preference for initiatives with a

less local focus. At the University of the Witwatersrand, nine research priorities have been identified without an apparent strategic emphasis. Similarly at the University of Johannesburg, 22 research centres have been prioritized in a wide range of disciplines and fields, seven of which have a direct socio-economic focus and the rest angled to varying degrees to socially-responsive kinds of questions (University of Johannesburg, 2011, p. 15). The university thus steers staff to publish in international journals.

Institutions straddling the international and local divide have a much more self-conscious research strategy. The University of Cape Town has, for example, while displaying the same diffuse spectrum of research foci as the other institutions, has deliberately channelled financial and institutional resources towards four interdisciplinary initiatives aimed at national needs. "One of the challenges in realising our ambitions", said Price (2012, p. 6), "is to be optimally placed while still solving local problems." The University of KwaZulu-Natal made a decision to develop focal areas for its research investment: "(t)he University of KwaZulu-Natal has identified a number of research focus areas which it believes are critical to supporting its vision, not only as a notable centre of African scholarship in South Africa, but as an integral player in the global partnership embodied in the Millennium Development Goals, which seek to restore a sense of meaningful development to some of the world's poorest countries" (University of KwaZulu-Natal, 2011, p. 7).

For academics in both of the institutions in this category, pressure to publish in high-impact journals remains intense. At the University of Cape Town, almost 90% of the journal output for the 2012 year, as seen in the table below, was placed in international publications (University of Cape Town, 2012, p. 11).
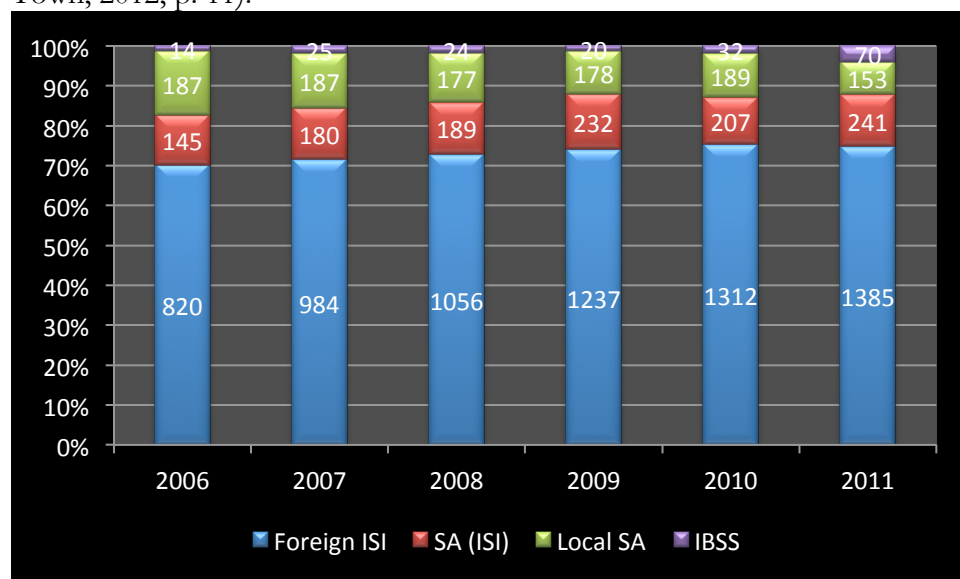
Figure 1. UCT Output (Papers) by Journal Index and year (2006 – 2011)
Source: Mouton, 2013, p. 25

Significantly, at UCT, as the table produced by Mouton (2013: 27) below suggests, there is a distinct preference for publishing in high impact journals in the STEM fields. In the social sciences and law, there remains a strong representation in local journals.
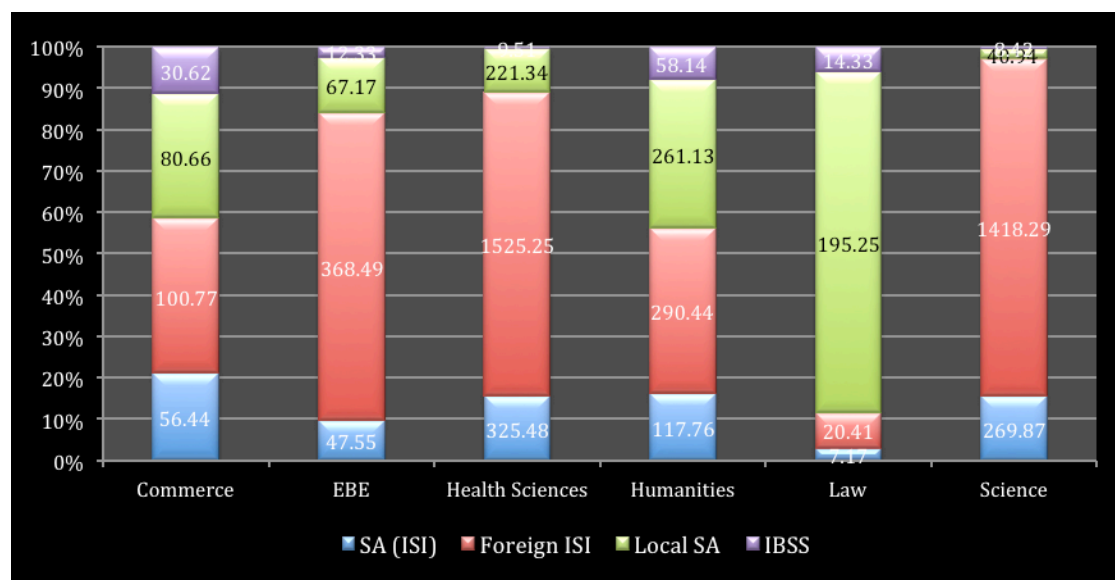
Figure 2. UCT Output per Disciplinary Field
Source: Mouton, 2013: 27

The institutions located at the context-sensitive end of the research spectrum, importantly, have structured their research strategies explicitly around commitments to the local environment. The University of the Free State, for example, adopted a new five-year strategy to position the University "as a leading university in priority areas, contributing to (i) national growth, (ii) regional advancement and (iii) global excellence (University of the Free State, 2011, p. 16). Stellenbosch University has similarly committed itself to a strategy through its HOPE project of focusing on crucial issues such as poverty, housing, market performance, child and maternal health, HIV and TB, gender equality and substance abuse (Botman, 2011, p. 2).

Alongside of the sensitivity to the local, there is anxiety about perceptions of the quality of local journals. The Academy of Science of South Africa released the findings of its study into where academics were choosing to place their work and, as Mouton (2012, p. 67) says,
In 2005 the Academy of Science of South Africa released a highly influential report on the state of scientific journals in the country. The report showed, amongst others, that the quality of some of the local journals leaves much to be desired. This prompted the Academy to initiate a system of regular journal reviews in order to improve the (perceived) quality of these journals. One of the results of this study was to highlight the importance of publication in the best international journals.

The significance of this assessment of the quality of local journals is evident in the preference given in most institutions to non-South African ISI and IBSS accredited journals. Staff from historically English-speaking institutions such as the Universities of Cape Town, Witwatersrand and KwaZulu-Natal, have a strong preference for international journals. Historically Afrikaans-speaking universities, such as Pretoria and Stellenbosch publish heavily in local journals. The patterns in these shifts are suggested in the two tables below. While not strictly comparable, both in the sense that the first is reflected in absolute numbers and the second in proportions, they show a shift towards foreign journals. Reporting the results of a small survey of 32 academics in Information Science and Computer Science into open access publishing, De Beer (2005, p. 103) found that 69% of her subjects chose to place their contributions in approved journals because that gave them a greater chance of securing promotion and research funding. The table below shows trends in the 1991 to 2000 period. While there had been, as Mouton (2003) shows in the table below

a decline in the periods 1996 to 2000 of published outputs in accredited (ISI and IBSS) journals, the table thereafter indicates a much greater move towards accredited journals.

Table 2

Total Output In Accredited Journals (1991-2000)

Year	Publication units
1991	5,187
1992	5,406
1993	5,316
1994	5,636
1995	5,500
1996	5,662
1997	5,614
1998	5,162
1999	5,042
2000	5,513

Source: Mouton, 2003

University[13]	%ISI-articles (non-SA journals)	%ISI-articles(SA journals)	Total ISI-share for most recent year	%non-ISI SA journals	%IBSS-journals[14]	Total article equivalents recorded[15]
UCT	67.2%	12.3%	83%	15.0%	1.4%	17 204
Wits	56.9%	12.9%		26.5%	3.6%	16 352
UKZN	53.8%	13.9%		30.5%	1.8%	12 804
SU	40.4%	9.6%		50.0%	N/A	13 740
UP	39.1%	14.5%		44.9%	1.4%	14 967
UFS	34.0%	13.8%		56.7%	1.1%	6 304
RU	33.8%	15.0%		51.2%	N/A	3 103
UWC	33.0%	9.0%		52.0%	6.0%	1 588
NWU	32.4%	7.0%		57.7%	2.8%	5 542
UNISA	13.0%	4.0%		80.0%	3.0%	6 878
NMMU	12.5%	39.7%		45.4%	2.5%	2 527
DUT	64.8%	10.7%		20.2%	4.3%	347
TUT	46.3%	12.1%		30.7%	10.9%	486
UFH	42.6%	14.7%		37.6%	5.2%	639

Figure 3. Percentage Distribution of ISI and Non-ISI articles by university
Source: CREST, 2010, p. 18

Conclusions

How have the new ranking systems and the incentive approaches used by the National Research Foundation affected the character of South African scholarship? To make sense of this question, we must first recognise how engaged are many of the stakeholders with respect to the challenges they face. There is a deep awareness in the country's leading institutions of their nestedness in a web of overlapping contexts and an acknowledgement of how much they have to be taking deliberate steps to manage their missions and activities within this nestedness. At all levels of the system, from government to the institutions and academics themselves, there is an awareness and a sustained debate about the imbricated meaning of "excellence." It is clear that institutions and their academics are thinking about the weakness of the scholarly avenues and journals immediately open to them, and so making decisions about where they should place their work. While this has led, in some institutions, to a concerted effort to steer academics in an international direction without an apparent consideration of the implications of where this pressure might lead, there is in most institutions a persistent sensitivity to the need for academics to attend to problematiques available in their own local spaces. An interesting sociological feature of this dynamic in the universities is the focus it has come to place on the individual scholar and how he or she charts a trajectory for his or her career. It is possible scholars to develop their profiles through publishing in the 'right' while never making a commitment to the country's development agenda. The argument can of course be made that the protection of academic freedom depends on the preservation of the right of the individual scholars to choose their own focus. But there is real difficulty facing those who develop and implement policy in crafting reward and incentive systems that nurture the conditions for the achievement of both rigour and relevance.

It will take a detailed analysis of the articles per field and discipline to make an authoritative analysis of the substance of the work South African scholars are doing, and to comment on issues of quality and relevance. It is significant that to date the country has not been subsumed into the global discourse in an unconditional way. Key South African intellectuals, including activist-scholar vice-chancellors and rectors are posing the question of what "excellence" means. They recognise how much South Africa has been gifted an opportunity to address the fundamental question of the future of the university in a resource-challenged environment. In the shadow of the global north and the rankings regimes, they are seeking to work out how the goal of excellence can be defined in ways that acknowledge the contribution of systems such as their own, and how the contextual realities to which they are steering their scholars can be recognised as part of a more expansive and inclusive understanding of excellence. It is in this still inchoate environment that the significance of the South African approach to excellence presents itself.

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